TRANSMITTALS TO AGENCIES FOR COMMENTS ON DEVELOPMENT PROJECTS WITH THE CITY OF MERIDIAN

To ensure that your comments and recommendations will be considered by the Meridian Planning and Zoning Commission please submit your comments and recommendations to cityclerk@meridiancity.org

To: Attention C.Jay Coles, City Clerk **By: June 1, 2018**

Transmittal Date: 5-4-2018 File No: H-2018-0043 AZ, PP

Hearing Date: June 6, 2018

REQUEST: An Annexation and Zoning of 60.55 Acres of Land (7.07 to R-8 and 53.47 to R-2) to the R-2 And R-8 Zoning Districts and a Preliminary Plat Consisting of 59 Single Family Residential Lots and 10 Common Lots on Approximately 53.47 Acres in the Proposed R-2 and R-8 Zoning Districts for Keep Subdivision

By: Jack L Hammond

Location of Property or Project: SE Corner of E Lake Hazel Rd and S. Eagle Rd

Planning and Zoning Commission	Meridian School District
Tammy de Weerd, Mayor	Meridian Post Office
City Council	Ada County Highway District
Sanitary Services	Ada County Development Services
Building Department	Central District Health
Fire Department	COMPASS
Police Department	Nampa Meridian Irrigation District
City Attorney	Settlers Irrigation District
City Public Works	Idaho Power Company
City Planner	Century Link
Parks Department	Intermountain Gas Co.
Economic Development	Idaho Transportation Department
New York Irrigation District	Ada County Associate Land Records
Boise Project Board of Control – Tim Paige	Downtown Projects
Community Development	Meridian Development Corporation
Valley Transit	Historical Preservation Commission
	South of RR/SW Meridian
	NW Pipeline
	Boise-Kuna Irrigation District

Hearing Date: June 6, 2018

File No.(s): H-2018-0043

Project Name: Keep Subdivision AZ, PP

Request: Annexation and zoning of 60.55 acres of land (7.07 to R-8 and 53.47 to R-2) to the R-2 and R-8 zoning districts by Jack L. Hammond.

Request: Preliminary plat consisting of 59 single family residential lots, and 10 common lots on approximately 53.47 acres in the proposed R-2 and R-8 zoning districts.

Location: The site is located on the south east corner of E. Lake Hazel Road and S. Eagle Road in the NE ¼ of Section 5, Township 2N., Range 1E.

MERIDIAN IDAHO

Planning Division

DEVELOPMENT REVIEW APPLICATION

STAFF USE ONLY:
Project name: Keep Subdivision
File number(s) H-2018-0043
Assigned Planner: Josh Beach Related files:

Type of Review Requested (check all that apply)

- ☐ Accessory Use
- ☐ Administrative Design Review
- ☐ Alternative Compliance
- ☒ Annexation and Zoning
- ☐ Certificate of Zoning Compliance
- ☐ City Council Review
- ☐ Comprehensive Plan Map Amendment
- ☐ Comprehensive Plan Text Amendment
- ☐ Conditional Use Permit
- ☐ Conditional Use Modification
  Director/Commission (circle one)
- ☐ Development Agreement Modification
- ☐ Final Plat
- ☐ Final Plat Modification
- ☐ Planned Unit Development
- ☒ Preliminary Plat
- ☐ Private Street
- ☐ Property Boundary Adjustment
- ☐ Rezone
- ☐ Short Plat
- ☐ Time Extension:
  Director/ Commission/Council (circle one)
- ☐ UDC Text Amendment
- ☐ Vacation:
  Director/ Council (circle one)
- ☐ Variance
- ☐ Other

Applicant Information

Applicant name: Jack L. Hammond Phone: 208-869-7380
Applicant address: 3728 E. Vantage Pt. Ln. Email: hammondjackl@gmail.com
City: Meridian State: Id Zip: 83642

Applicant's interest in property: ☒ Own ☐ Rent ☐ Optioned ☐ Other
Owner name: Same JHP, LLC & LDS Church Phone: Same
Owner address: Same Email: Same
City: Same State: Zip:

Agent/Contact name (e.g., architect, engineer, developer, representative):
Firm name: Jarron Langston Phone: 208-724-6239
Agent address: 9563 W. Harness Dr. Email: jarronlangston@gmail.com
City: Boise State: Id Zip: 83709

Primary contact is: ☐ Applicant ☐ Owner ☒ Agent/Contact

Subject Property Information

Location/street address: S. Eagle Road Township, range, section: 2N 1E 05
Assessor's parcel number(s): S1405110470 Total acreage: 53.5 Zoning district: RUT

Parcel Verification Letter shows only 48.134 Acres (County) EAST

Project/subdivision name: Keep

General description of proposed project/request: 59 lot single family subdivision on 53.5 acres. Min. lot size = 0.51 Ac.

Proposed zoning district(s): R-2 for Sub division and R-8 for Church.

Acres of each zone proposed: 53.5 + 6.7

Type of use proposed (check all that apply):

☒ Residential ☐ Office ☐ Commercial ☐ Employment ☐ Industrial ☐ Other _____

Who will own & maintain the pressurized irrigation system in this development? HOA

Which irrigation district does this property lie within? New York

Primary irrigation source: Farr Lateral Secondary: Single Point Connection

Square footage of landscaped areas to be irrigated (if primary or secondary point of connection is City water): 124000 I

Residential Project Summary (if applicable)

Number of residential units: 59 Number of building lots: 59

Number of common lots: 10 Number of other lots: 0

Proposed number of dwelling units (for multi-family developments only):

1 bedroom: _____ 2–3 bedrooms: _____ 4 or more bedrooms: 59

Minimum square footage of structure (excl. garage): 1600 Maximum building height: 35'

Minimum property size (s.f): 22120 Average property size (s.f.): 31600

Gross density (Per UDC 11-1A-1): 1.1 Net density (Per UDC 11-1A-1): 1.4

Acreage of qualified open space: 5.66 Percentage of qualified open space: 10.6

Type and calculations of qualified open space provided in acres (Per UDC 11-3G-3B): 5.7 - Includes all landscape lots except along arterials, but includes parkways.

Amenities provided with this development (if applicable): Bike enclosure + gazebo located on lots 5, blk 5.

Type of dwelling(s) proposed: ☐ Single-family Detached ☒ Single-family Attached ☐ Townhouse

☐ Duplex ☐ Multi-family ☐ Vertically Integrated ☐ Other _____

Non-residential Project Summary (if applicable)

Number of building lots: _____ Common lots: _____ Other lots: _____

Gross floor area proposed: _____ Existing (if applicable): _____

Hours of operation (days and hours): _____ Building height: _____

Total number of parking spaces provided: _____ Number of compact spaces provided: _____

Authorization

Print applicant name: JACKIE L HAMMOND

Applicant signature: _____ Date: 4-13-18

PRELIMINARY PLAT SUBMITTAL

For

KEEP SUBDIVISION

Formerly known as Mountain View Estates

NARRATIVE:

This project consists of platting 59 single family lots on 53.5 acres and annexing 60.6 acres and is located in the NE 1/4 of Section 5, T2N, R1 E, BM. The average lot size is over one half acre. The minimum lot size is 22,120 square feet. There are ten common lots. Two are common landscape islands at the entrance on Lake Hazel Road and Eagle Road, four are common lots along the frontage of Lake Hazel Road and Eagle Road, one is a common lot for the amenities, one is for the sewer line from the Pemberley Lane cul-de-sac to Eagle Road, and one is a common lot for the emergency access between Bennet Ct. and Bingley Drive, and one lot is an irrigation lateral. All common lots, except lot 1 block 5, will be owned and maintained by the Home Owners Association.

This project includes annexing and rezoning the subdivision property and annexing the church property (approximately 7 acres) where the existing church is located. The church parcel is Tax Parcel S1405110465. (See Exhibit "B") The zoning designation for the church will be R-8 and R-2 for the subdivision.

We are proposing to construct a 32' street section (Including a 2' ribbon curb), and a 5' sidewalk on each side, offset from the street by 17'.

We are proposing to build about 1700' of sewer main in Eagle Road north of Lake Hazel Road and tie into the sewer line in The Turf Farm Subdivision. This connection to the Turf Farm Subdivision will be temporary. This trunk line in Eagle Road will eventually tie into the sewer trunk line being constructed in the Sky Mesa development west of Eagle Road. When the trunk line is completed, and this connection is made, the connection to Turf Farm will be abandoned.

Each residential lot in this subdivision will be connected to city sewer and water at the time of platting of the Keep Subdivision.

All other aspects of platting will be improved as is in any other subdivision within the city limits of Meridian, except as outlined below.

Farr Lateral:

The city has requested that the Farr Lateral be piped and used as an amenity or linear open space. However, the New York Irrigation District and the Boise Project Board of Control have stated that the Farr Lateral cannot be used by the public for anything but it's intended use, water delivery for irrigation purposes. Therefore, we are requesting a waiver (per UDC 11-3A-6B-3a & b) of the requirement to turn the Farr Lateral into an amenity. Instead, we are requesting permission to install a closed vision fence between the Farr Lateral easement from the adjacent lots. This will also enhance public safety.

Amenities:

A bike enclosure and gazebo were added as the two amenities for the subdivision and will be located on a common lot (lot 5 block 5) on Bingley Drive.

Bennet Court: The length of the cul-de-sac is approximately 593'. Because this length exceeds code, an emergency vehicle access was added between the cul-de-sac and Bingley Drive to mitigate the length of the cul-de-sac.

The following will be done and/or complied with:

1. This developer intends to comply with all requirements and provisions of the UDC, except as detailed above. However, the developer is increasing the building setback to at least 30' on the front and back, and to at least 10' on the sides. The setbacks will be detailed in the C, C, and R's for this subdivision.
2. The Engineer, Surveyor, and Landscape Architect of Record of this subdivisions will conform with acceptable engineering, surveying and landscape architectural practices and local standards.
3. Development Agreement.
4. The Street Name Evaluation Letter.
5. According to Christy Little at ACHD, a traffic study is not needed.

COMPASS LAND SURVEYING PLLC

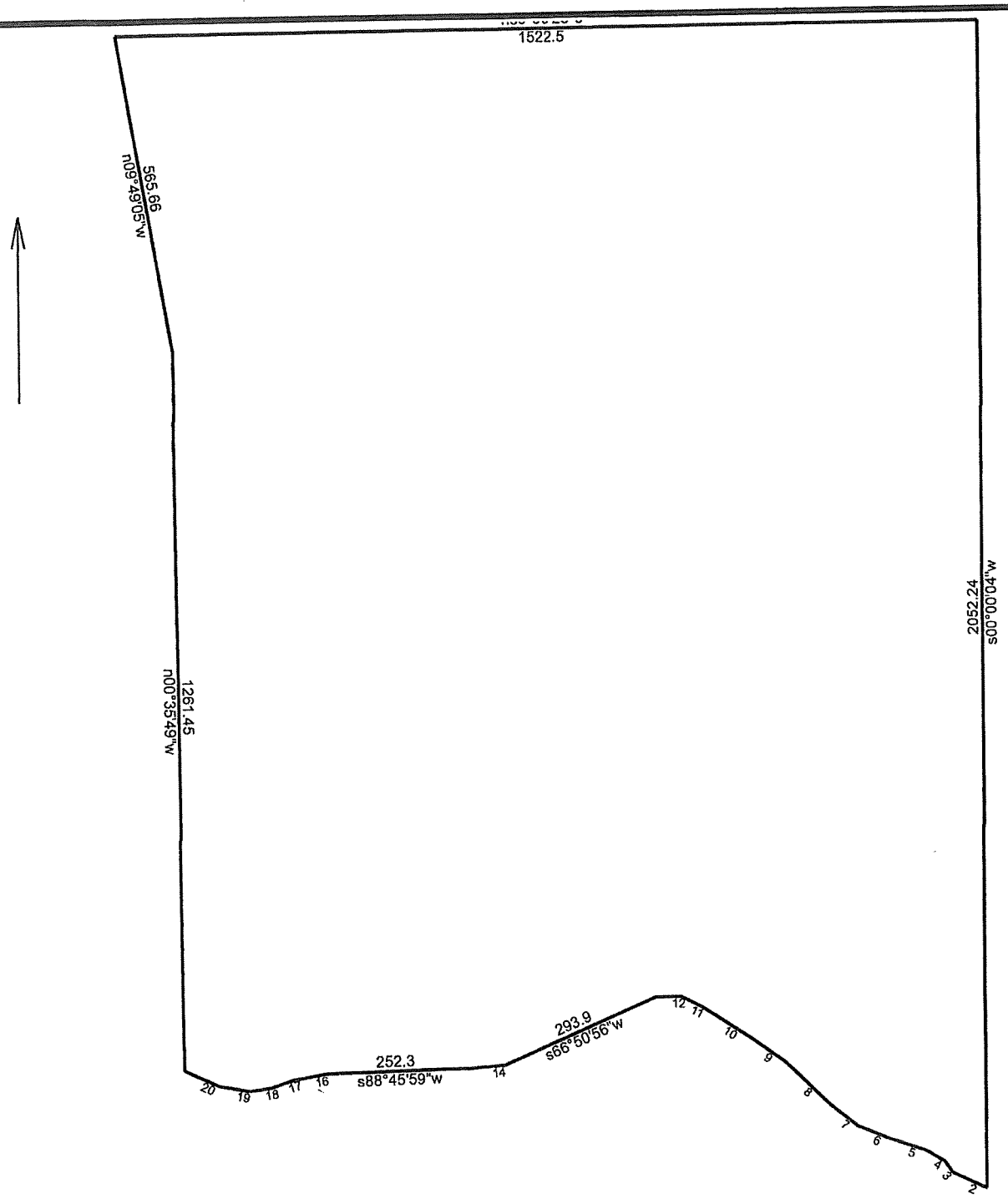
Jarron Langston
Date: 12/06/17
Job No.: 7017

EXHIBIT "A"
ANNEXATION DESCRIPTION

The following Describes a Parcel of Land being a portion of NE1/4 of Section 5, Township 2 North, Range 1 East, Boise Meridian, Ada County Idaho, and more particularly described as follows:

BEGINNING at a found Aluminum Cap Marking the Northeast Corner of said Section 5; From which, the East 1/4 Corner of said Section 5 bears, South 00°00'04" West, a distance of 2678.12 feet which is being Monumented with a found Aluminum Cap;
Thence along the Easterly Boundary Line of the NE 1/4 of said Section 5, South 00°00'04" West, a distance of 2052.24 feet to a found Aluminum Cap on the centerline of the Farr Lateral;
Thence leaving said Easterly Boundary Line, and along the centerline of the Farr Lateral the following courses and distances:
Thence, North 65°02'54" West, a distance of 67.34 feet to a point;
Thence, North 34°01'44" West, a distance of 23.50 feet to a point;
Thence, North 59°06'47" West, a distance of 37.90 feet to point;
Thence, North 71°10'02" West, a distance of 70.30 feet to a point;
Thence, North 67°33'19" West, a distance of 59.81 feet to a point;
Thence, North 51°31'51" West, a distance of 59.66 feet to a point;
Thence, North 46°15'46" West, a distance of 113.98 feet to a point;
Thence, North 53°56'30" West, a distance of 74.43 feet to a point;
Thence, North 56°25'31" West, a distance of 97.78 feet to a point;
Thence, North 62°48'43" West, a distance of 39.89 feet to a point;
Thence, North 89°30'40" West, a distance of 44.88 feet to a point;
Thence, South 66°50'56" West, a distance of 293.90 feet to a point;
Thence, South 85°25'33" West, a distance of 60.03 feet to a point;
Thence, South 88°45'59" West, a distance of 252.30 feet to a point;
Thence, South 80°32'19" West, a distance of 58.56 feet to a point;
Thence, South 71°15'00" West, a distance of 41.47 feet to a point;
Thence, South 82°24'55" West, a distance of 39.29 feet to a set point;
Thence, North 79°45'52" West, a distance of 55.80 feet to a point;
Thence, North 65°00'53" West, a distance of 66.24 feet to a point; From said point, a found 5/8 inch diameter Iron Pin with Plastic Cap "PLS 14221" which is Witnessing said point bears, North 00°35'49" West a distance of 47.75 feet;
Thence leaving said centerline, North 00°35'49" West, a distance of 1261.45 feet to a found 1/2 inch diameter Iron Pin with "No Cap";
Thence, North 09°49'05" West, a distance of 565.66 feet to a point on the Northerly Boundary Line of the NE1/4 of said Section 5;
Thence along the Northerly Boundary Line of the NE1/4 of said Section 5, North 89°50'28" East, a distance of 1522.50 feet to the **POINT OF BEGINNING:**
The above Described Parcel of Land contains 60.55 Acres, more or less.

623 11th Ave. South, Nampa, ID 83651 ◦ T. (208) 442-0115 ◦ C. (208) 608-2510 ◦ rgray.cls@gmail.com



7017 ANNEXATION DESCRIPTION

12/6/2017

Scale: 1 inch= 271 feet | File:

Tract 1: 60.5508 Acres, Closure: n00.0000e 0.00 ft. (1/999999), Perimeter=6959 ft.

01 s00.0004w 2052.24
02 n65.0254w 67.34
03 n34.0144w 23.5
04 n59.0647w 37.9
05 n71.1002w 70.3
06 n67.3319w 59.81
07 n51.3151w 59.66
08 n46.1546w 113.98
09 n53.5630w 74.43
10 n56.2531w 97.78
11 n62.4843w 39.89
12 n89.3040w 44.88
13 s66.5056w 293.9
14 s85.2533w 60.03
15 s88.4559w 252.3
16 s80.3219w 58.56
17 s71.1500w 41.47
18 s82.2455w 39.29
19 n79.4552w 55.8
20 n65.0053w 66.24
21 n00.3549w 1261.45
22 n09.4905w 565.66
23 n89.5028e 1522.5

PROFESSIONAL LAND SURVEYOR
LICENSED
12/6/17
8251
STATE OF IDAHO
LAWRENCE H. KOERNER

COMPASS LAND SURVEYING PLLC

Jarron Langston
Rev. Date: 04/26/18
Job No.: 7017

EXHIBIT "A" R-8
CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS
ANNEXATION DESCRIPTION

The following Describes a Parcel of Land being a portion of NE1/4 of Section 5, Township 2 North, Range 1 East, Boise Meridian, Ada County Idaho, and more particularly described as follows:

COMMENCING at a found Aluminum Cap Marking the Northeast Corner of said Section 5; From which, the East 1/4 Corner of said Section 5 bears, South 00°00'04" West, a distance of 2678.12 feet which is being Monumented with a found Aluminum Cap; Thence along the Easterly Boundary Line of the NE 1/4 of said Section 5, South 00°00'04" West, a distance of 585.38 feet to the **POINT OF BEGINNING:**

Thence leaving said Easterly Boundary Line, North 89°59'56" West, a distance of 642.10 feet to a point;

Thence, South 00°00'04" West, a distance of 480.00 feet to a point;

Thence, South 89°59'56" East, a distance of 642.09 feet to a point on the Easterly Boundary Line of the NE 1/4 of said Section 5;

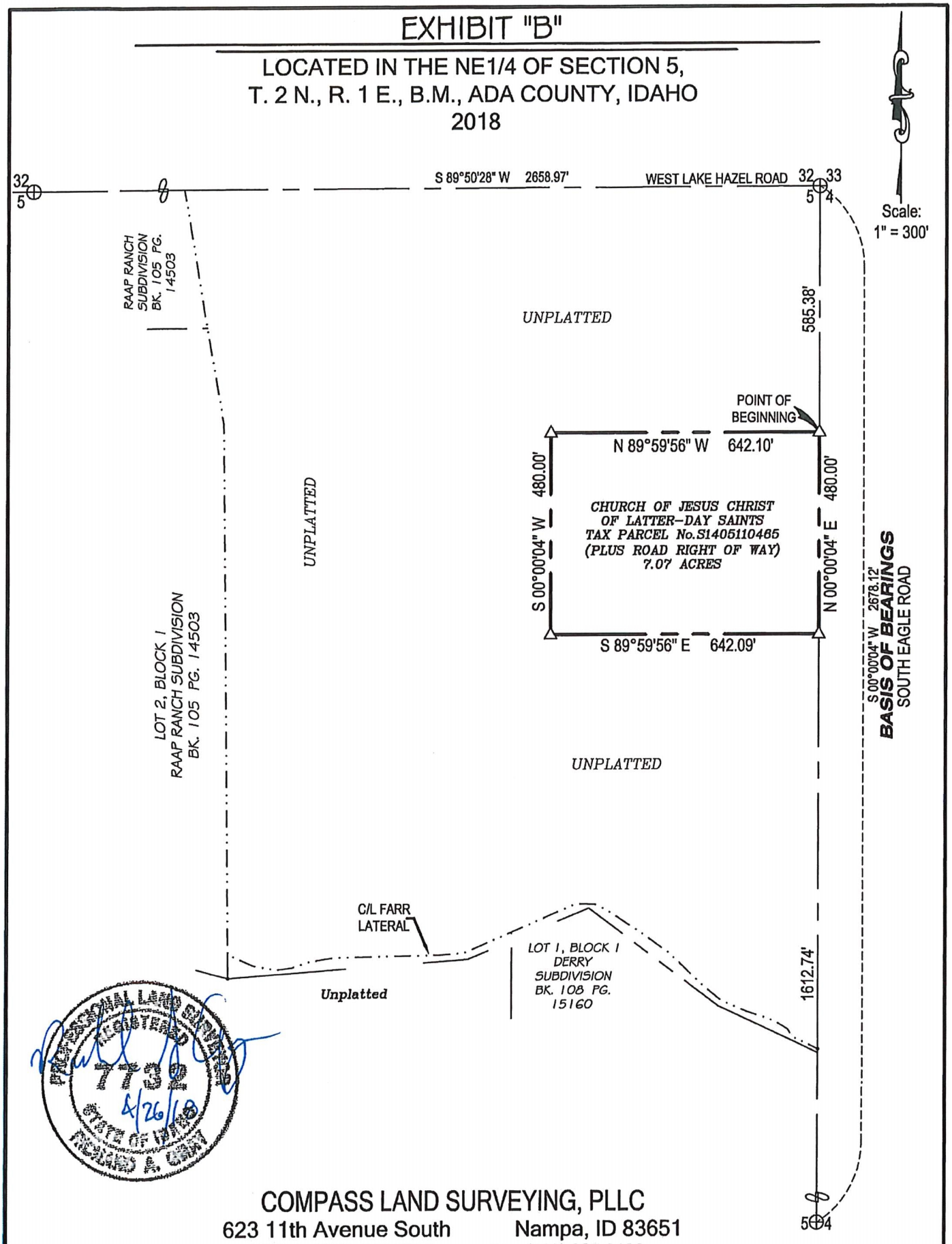
Thence along said Easterly Boundary Line, North 00°00'04" East, a distance of 480.00 feet to the **POINT OF BEGINNING:**

The above Described Parcel of Land contains 7.07 Acres, more or less.

623 11th Ave. South, Nampa, ID 83651 • T. (208) 442-0115 • C. (208) 608-2510 • rgray.cls@gmail.com

EXHIBIT "B"

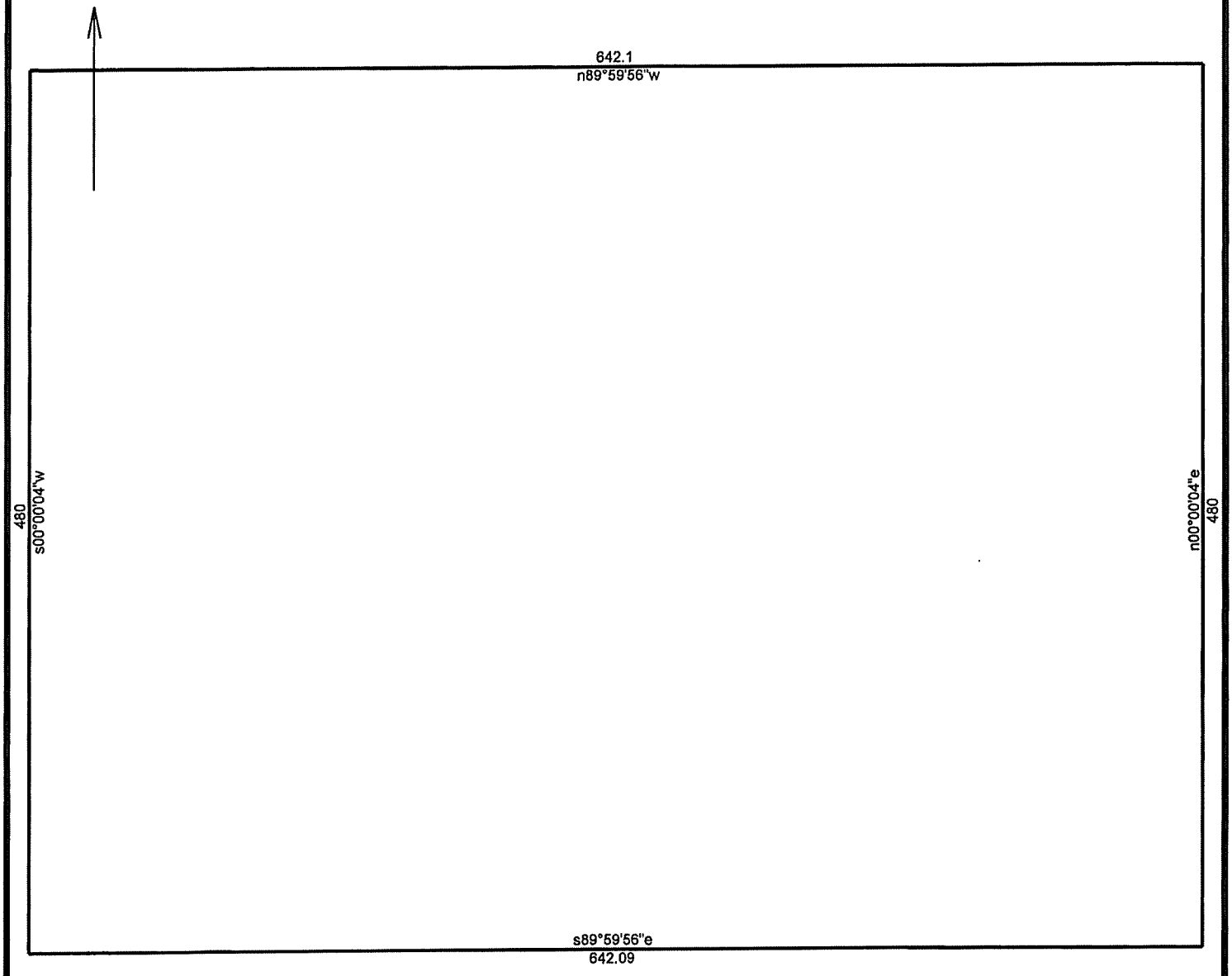
LOCATED IN THE NE1/4 OF SECTION 5, T. 2 N., R. 1 E., B.M., ADA COUNTY, IDAHO 2018



PROFESSIONAL LAND SURVEYOR REGISTERED 7730 STATE OF IDAHO RICHARD R. LIENT 4/26/18

COMPASS LAND SURVEYING, PLLC
623 11th Avenue South Nampa, ID 83651
Office: (208) 442-0115 Fax: (208) 327-2106

JN 7017



Church Annexation

4/26/2018

Scale: 1 inch= 83 feet

File:

Tract 1: 7.0754 Acres (308206 Sq. Feet), Closure: s89.5956e 0.01 ft. (1/224397), Perimeter=2244 ft.

01 n89.5956w 642.1
02 s00.0004w 480
03 s89.5956e 642.09
04 n00.0004e 480

COMPASS LAND SURVEYING PLLC

Jarron Langston
Date: 04/27/118
Job No.: 7017

EXHIBIT "A" R-2
ANNEXATION DESCRIPTION

The following Describes a Parcel of Land being a portion of NE1/4 of Section 5, Township 2 North, Range 1 East, Boise Meridian, Ada County Idaho, and more particularly described as follows:

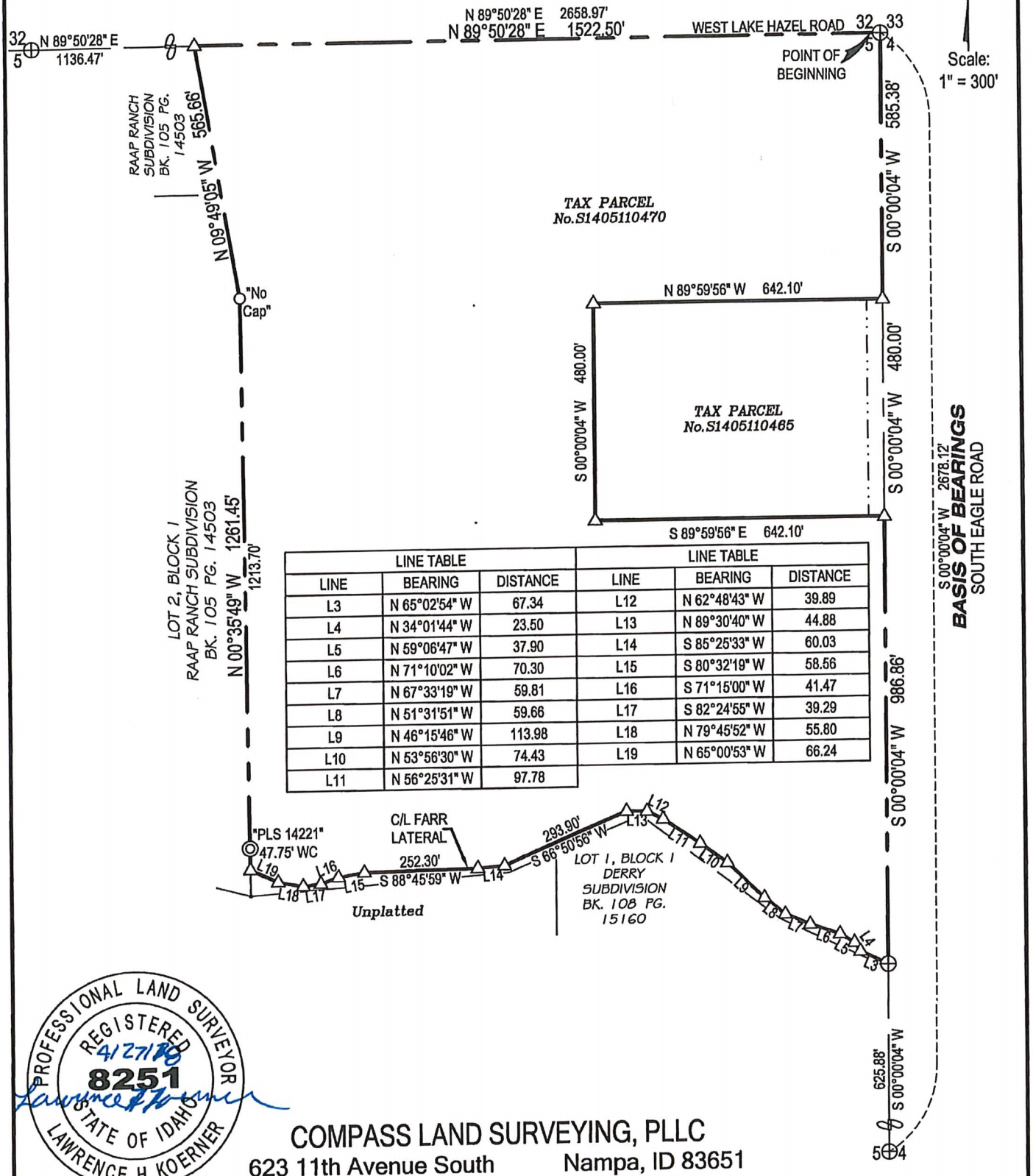
BEGINNING at a found Aluminum Cap Marking the Northeast Corner of said Section 5; From which, the East 1/4 Corner of said Section 5 bears, South 00°00'04" West, a distance of 2678.12 feet which is being Monumented with a found Aluminum Cap;
Thence along the Easterly Boundary Line of the NE 1/4 of said Section 5, South 00°00'04" West, a distance of 585.38 feet to a point;
Thence leaving said Easterly Boundary Line, North 89°59'56" West, a distance of 642.10 feet to a point;
Thence, South 00°00'04" West, a distance of 480.00 feet to a point;
Thence, South 89°59'56" East, a distance of 642.10 feet to a point on the Easterly Boundary Line of the NE 1/4 of said Section 5;
Thence along said Easterly Boundary Line, South 00°00'04" West, a distance of 986.86 feet to a found Aluminum Cap on the centerline of the Farr Lateral;
Thence leaving said Easterly Boundary Line, and along the centerline of the Farr Lateral the following courses and distances:
Thence, North 65°02'54" West, a distance of 67.34 feet to a point;
Thence, North 34°01'44" West, a distance of 23.50 feet to a point;
Thence, North 59°06'47" West, a distance of 37.90 feet to point;
Thence, North 71°10'02" West, a distance of 70.30 feet to a point;
Thence, North 67°33'19" West, a distance of 59.81 feet to a point;
Thence, North 51°31'51" West, a distance of 59.66 feet to a point;
Thence, North 46°15'46" West, a distance of 113.98 feet to a point;
Thence, North 53°56'30" West, a distance of 74.43 feet to a point;
Thence, North 56°25'31" West, a distance of 97.78 feet to a point;
Thence, North 62°48'43" West, a distance of 39.89 feet to a point;
Thence, North 89°30'40" West, a distance of 44.88 feet to a point;
Thence, South 66°50'56" West, a distance of 293.90 feet to a point;
Thence, South 85°25'33" West, a distance of 60.03 feet to a point;
Thence, South 88°45'59" West, a distance of 252.30 feet to a point;
Thence, South 80°32'19" West, a distance of 58.56 feet to a point;
Thence, South 71°15'00" West, a distance of 41.47 feet to a point;
Thence, South 82°24'55" West, a distance of 39.29 feet to a point;
Thence, North 79°45'52" West, a distance of 55.80 feet to a point;
Thence, North 65°00'53" West, a distance of 66.24 feet to a point; From said point, a found 5/8 inch diameter Iron Pin with Plastic Cap "PLS 14221" which is Witnessing said point bears, North 00°35'49" West a distance of 47.75 feet;
Thence leaving said centerline, North 00°35'49" West, a distance of 1261.45 feet to a found 1/2 inch diameter Iron Pin with "No Cap";
Thence, North 09°49'05" West, a distance of 565.66 feet to a point on the Northerly Boundary Line of the NE1/4 of said Section 5;
Thence along the Northerly Boundary Line of the NE1/4 of said Section 5, North 89°50'28" East, a distance of 1522.50 feet to the **POINT OF BEGINNING:**
The above Described Parcel of Land contains 53.47 Acres, more or less.

PROFESSIONAL LAND SURVEYOR
LICENSED
4/27/20
8251
STATE OF IDAHO
LAWRENCE H. KOERNER
Lawrence H Koerner

623 11th Ave. South, Nampa, ID 83651 ◦ T. (208) 442-0115 ◦ C. (208) 608-2510 ◦ rgray.cls@gmail.com

EXHIBIT "B"

LOCATED IN THE NE1/4 OF SECTION 5, T. 2 N., R. 1 E., B.M., ADA COUNTY, IDAHO 2017

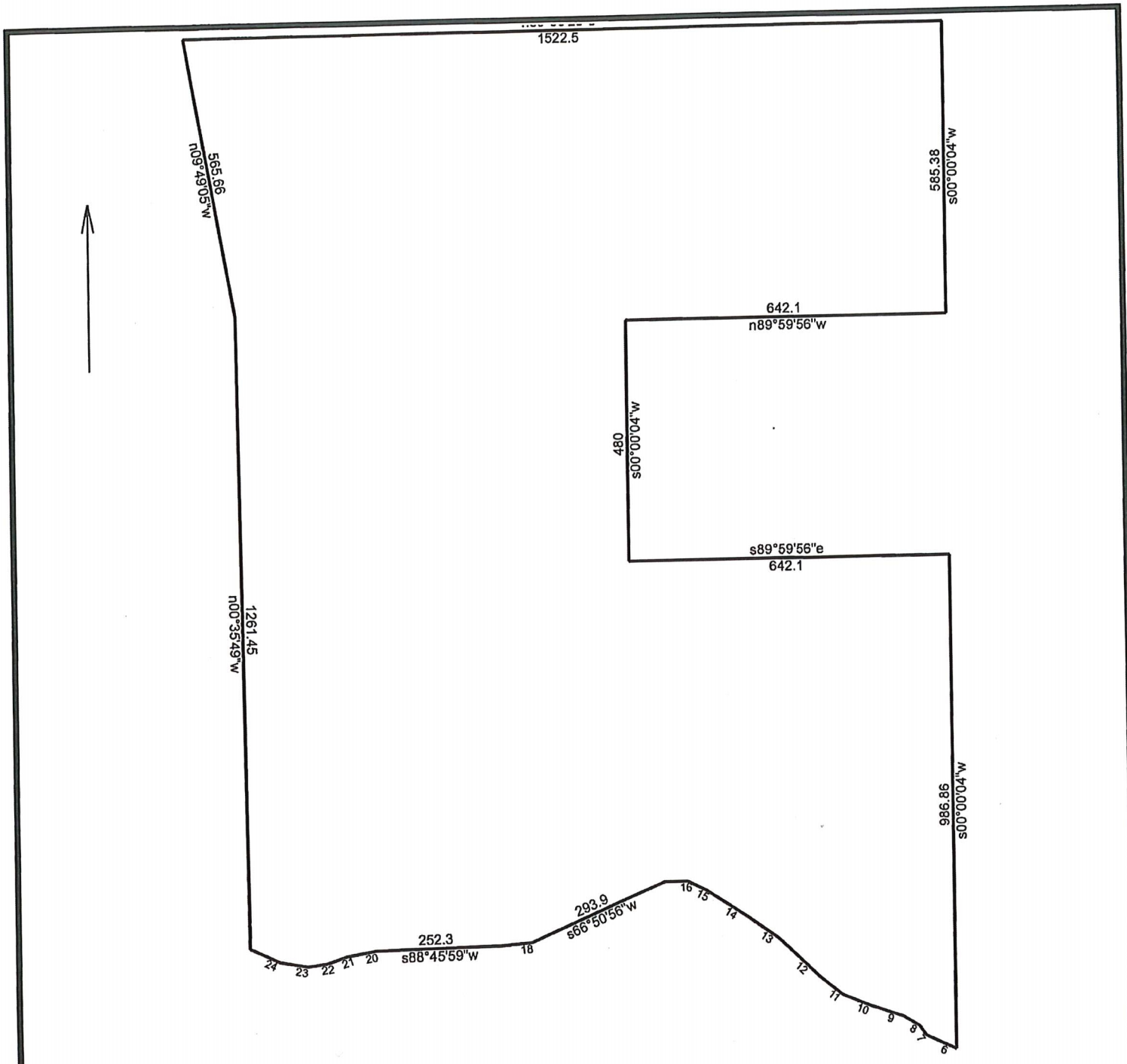


LINE TABLE			LINE TABLE		
LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L3	N 65°02'54" W	67.34	L12	N 62°48'43" W	39.89
L4	N 34°01'44" W	23.50	L13	N 89°30'40" W	44.88
L5	N 59°06'47" W	37.90	L14	S 85°25'33" W	60.03
L6	N 71°10'02" W	70.30	L15	S 80°32'19" W	58.56
L7	N 67°33'19" W	59.81	L16	S 71°15'00" W	41.47
L8	N 51°31'51" W	59.66	L17	S 82°24'55" W	39.29
L9	N 46°15'46" W	113.98	L18	N 79°45'52" W	55.80
L10	N 53°56'30" W	74.43	L19	N 65°00'53" W	66.24
L11	N 56°25'31" W	97.78			

PROFESSIONAL LAND SURVEYOR
REGISTERED
4/27/18
8251
STATE OF IDAHO
LAWRENCE H. KOERNER

COMPASS LAND SURVEYING, PLLC
623 11th Avenue South Nampa, ID 83651
Office: (208) 442-0115 Fax: (208) 327-2106

JN 7017



7017-KEEP SUBDIVISION ANNEXATION DESCRIPTION

4/27/2018

Scale: 1 inch= 278 feet

File:

Tract 1: 53.4753 Acres, Closure: n00.0000e 0.00 ft. (1/999999), Perimeter=8243 ft.

01 s00.0004w 585.38
02 n89.5956w 642.1
03 s00.0004w 480
04 s89.5956e 642.1
05 s00.0004w 986.86
06 n65.0254w 67.34
07 n34.0144w 23.5
08 n59.0647w 37.9
09 n71.1002w 70.3
10 n67.3319w 59.81
11 n51.3151w 59.66
12 n46.1546w 113.98
13 n53.5630w 74.43
14 n56.2531w 97.78
15 n62.4843w 39.89
16 n89.3040w 44.88
17 s66.5056w 293.9
18 s85.2533w 60.03
19 s88.4559w 252.3
20 s80.3219w 58.56
21 s71.1500w 41.47
22 s82.2455w 39.29
23 n79.4552w 55.8
24 n65.0053w 66.24
25 n00.3549w 1261.45
26 n09.4905w 565.66
27 n89.5028e 1522.5

PROFESSIONAL LAND SURVEYOR
LICENSED
4/27/18
8251
STATE OF IDAHO
LAWRENCE M. KOSANKE

COMPASS LAND SURVEYING PLLC

Jarron Langston
Date: 10/16/2017
Job No.: 7017

Subdivision

PARCEL "A"
DESCRIPTION

The following Describes a Parcel of Land being a portion of NE1/4 of Section 5, Township 2 North, Range 1 East, Boise Meridian, Ada County Idaho, and more particularly described as follows:

BEGINNING at a found Aluminum Cap Marking the Northeast Corner of said Section 5; From which, the East 1/4 Corner of said Section 5 bears, South 00°00'04" West, a distance of 2678.12 feet which is being Monumented with a found Aluminum Cap;

Thence along the Easterly Boundary Line of the NE 1/4 of said Section 5, South 00°00'04" West, a distance of 585.38 feet to a set 5/8 inch diameter Iron Pin with Plastic Cap "CLS PLS 7732";

Thence leaving said Easterly Boundary Line, North 89°59'56" West a distance of 642.10 feet to a set 5/8 inch diameter Iron Pin with Plastic Cap "CLS PLS 7732";

Thence, South 00°00'04" West a distance of 480.00 feet to a set 5/8 inch diameter Iron Pin with Plastic Cap "CLS PLS 7732";

Thence, South 89°59'56" East a distance of 642.09 feet to a set 5/8 inch diameter Iron Pin with Plastic Cap "CLS PLS 7732" on the Easterly Boundary Line of the NE 1/4 of said Section 5;

Thence along the Easterly Boundary Line of the NE 1/4 of said Section 5, South 00°00'04" West a distance of 986.86 feet to a found Aluminum Cap on the centerline of the Farr Lateral;

Thence leaving said Easterly Boundary Line, and along the centerline of the Farr Lateral the following courses and distances:

Thence, North 65°02'54" West a distance of 67.34 feet to a point;
Thence, North 34°01'44" West a distance of 23.50 feet to a point;
Thence, North 59°06'47" West a distance of 37.90 feet to point;
Thence, North 71°10'02" West a distance of 70.30 feet to a point;
Thence, North 67°33'19" West a distance of 59.81 feet to a point;
Thence, North 51°31'51" West a distance of 59.66 feet to a point;
Thence, North 46°15'46" West a distance of 113.98 feet to a point;
Thence, North 53°56'30" West a distance of 74.43 feet to a point;
Thence, North 56°25'31" West a distance of 97.78 feet to a point;
Thence, North 62°48'43" West a distance of 39.89 feet to a point;
Thence, North 89°30'40" West a distance of 44.88 feet to a point;
Thence, South 66°50'56" West a distance of 293.90 feet to a point;
Thence, South 85°25'33" West a distance of 60.03 feet to a point;
Thence, South 88°45'59" West a distance of 252.30 feet to a point;
Thence, South 80°32'19" West a distance of 58.56 feet to a point;
Thence, South 71°15'00" West a distance of 41.47 feet to a point;
Thence, South 82°24'55" West a distance of 39.29 feet to a set point;
Thence, North 79°45'52" West a distance of 55.80 feet to a point;
Thence, North 65°00'53" West a distance of 66.24 feet to a point. From said point, a found 5/8 inch diameter Iron Pin with Plastic Cap "PLS 14221" which is Witnessing said point bears, North 00°35'49" West a distance of 47.75 feet;

Thence leaving said centerline, North 00°35'49" West a distance of 1261.45 feet to a found 1/2 inch diameter Iron Pin with "No Cap":

Thence, North 09°49'05" West a distance of 565.66 feet to a point on the Northerly Boundary Line of the NE1/4 of said Section 5

Thence along the Northerly Boundary Line of the NE1/4 of said Section 5, North 89°50'28" East. 1522.50 feet to the **POINT OF BEGINNING:**

The above Described Parcel of Land contains 53.47 Acres, more or less.

623 11th Ave. South, Nampa, ID 83651 • T. (208) 442-0115 • C. (208) 608-2510 • rgray.cls@gmail.com

ADA COUNTY RECORDER Christopher D. Rich
BOISE IDAHO Pgs=3 LISA BATT
FIDELITY NATIONAL TITLE - BOISE

2017-072329
08/04/2017 12:41 PM
$15.00

Fidelity National Title

Escrow No.: 34601704013-PA

WARRANTY DEED

FOR VALUE RECEIVED

McKay Family Investments, LLC, as to its 83.3333% interest and William Dean McKay, a married man as his sole and separate property as to his 16.6667% Interest

GRANTOR(S), does(do) hereby GRANT, BARGAIN, SELL AND CONVEY unto:

JHP, LLC, an Idaho Limited Liability Company

GRANTEE(S), whose current address is: **3728 E Vantage Pointe Lane, Meridian, ID 83642**

the following described real property in Ada County, Idaho, more particularly described as follows, to wit:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

TO HAVE AND TO HOLD the said premises, with their appurtenances unto the said heirs and assigns forever. And the said Grantor(s) does(do) hereby covenant to and with the said Grantee(s), that Grantor(s) is/are the owner(s) in fee simple of said premises; that said premises are free from all encumbrances EXCEPT those to which this conveyance is expressly made subject and those made, suffered or done by the Grantee(s); and subject to reservations, restrictions, dedications, easements, rights of way and agreements, (if any) of record, and general taxes and assessments, (including irrigation and utility assessments, if any) for the current year, which are not yet due and payable, and that Grantor(s) will warrant and defend the same from all lawful claims whatsoever.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Effective this 3rd day of Aug, 2017.

McKay Family Investments, LLC

BY: W D McKay
William D. McKay
Member

W D McKay
William Dean McKay

EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): S1405110470

Beginning at the Northeast corner of Section 5 in Township. 2 North, Range 1 East Boise Meridian, in Ada County, State of Idaho, thence
South along the Section line between Sections 4 and 5, 2061.84 feet to an iron pin; thence

North 65°00' West, 264.00 feet to a point; thence

North 52°55' West, 387.05 feet to a point; thence

South 67°37' West, 315.48 feet to a point; thence

South 85°45' West, 573.54 feet to an iron pin; thence

North 0°35' West, 1320.0 feet to a point; thence

North 9°42' West, 563.64 feet to an iron pin on the North boundary of said Section 5; thence

North 89°44' East, 1518.0 feet to the POINT OF BEGINNING.

Excepting Therefrom:

A portion of the Northeast 1/4 of the Northeast 1/4 of Section 5, Township 2 North, Range 1 East of the Boise Meridian described as follows:

Commencing at the Northeast corner of Section 5, Township 2 North, Range 1 East of the Boise Meridian and running thence
South 585.38 feet along the East line of said Section to the POINT OF BEGINNING: thence
West 908.00 feet; thence
South 480.00 feet; thence
East 908.00 feet to said East line; thence
North 480.00 feet to the POINT OF BEGINNING.

ADA COUNTY RECORDER Christopher D. Rich
BOISE IDAHO Pgs=9 LISA BATT
FIDELITY NATIONAL TITLE - BOISE

2017-072333
08/04/2017 12:41 PM
$45.00

RECORDATION REQUESTED BY:
Capital Educators Federal Credit Union
MBL Department
275 S Stratford Drive
Meridian, ID 83642

WHEN RECORDED MAIL TO:
Capital Educators Federal Credit Union
MBL Department
275 S Stratford Drive
Meridian, ID 83642

SEND TAX NOTICES TO:
Capital Educators Federal Credit Union
MBL Department
275 S Stratford Drive
Meridian, ID 83642

3460170401 3-PA

SPACE ABOVE THIS LINE IS FOR RECORDER'S USE ONLY

DEED OF TRUST

THIS DEED OF TRUST is dated August 4, 2017, among JHP LLC, an Idaho Limited Liability Company, whose address is 3728 E Vantage Pointe Lane, Meridian, ID 83642 ("Grantor"); Capital Educators Federal Credit Union, whose address is MBL Department, 275 S Stratford Drive, Meridian, ID 83642 (referred to below sometimes as "Lender" and sometimes as "Beneficiary"); and FIDELITY NATIONAL TITLE COMPANY of IDAHO, whose address is 485 E RIVERSIDE DR., SUITE 200, EAGLE, ID 83616 (referred to below as "Trustee").

CONVEYANCE AND GRANT. For valuable consideration, Grantor does hereby irrevocably grant, bargain, sell and convey in trust, with power of sale, to Trustee for the benefit of Lender as Beneficiary, all of Grantor's right, title, and interest in and to the following described real property, together with all existing or subsequently erected or affixed buildings, improvements and fixtures; all easements, rights of way, and appurtenances; all water, water rights and ditch rights (including stock in utilities with ditch or irrigation rights); and all other rights, royalties, and profits relating to the real property, including without limitation all minerals, oil, gas, geothermal and similar matters, **(the "Real Property") located in Ada County, State of Idaho:**

See EXHIBIT "A", which is attached to this Deed of Trust and made a part of this Deed of Trust as if fully set forth herein.

The Real Property or its address is commonly known as S Eagle Rd, Meridian, ID 83642. The Real Property tax identification number is S1405110470.

CROSS-COLLATERALIZATION. In addition to the Note, this Deed of Trust secures all obligations, debts and liabilities, plus interest thereon, of Grantor to Lender, or any one or more of them, as well as all claims by Lender against Grantor or any one or more of them, whether now existing or hereafter arising, whether related or unrelated to the purpose of the Note, whether voluntary or otherwise, whether due or not due, direct or indirect, determined or undetermined, absolute or contingent, liquidated or unliquidated, whether Grantor may be liable individually or jointly with others, whether obligated as guarantor, surety, accommodation party or otherwise, and whether recovery upon such amounts may be or hereafter may become barred by any statute of limitations, and whether the obligation to repay such amounts may be or hereafter may become otherwise unenforceable.

Grantor presently assigns to Lender (also known as Beneficiary in this Deed of Trust) all of Grantor's right, title, and interest in and to all present and future leases of the Property and all Rents from the Property. In addition, Grantor grants to Lender a Uniform Commercial Code security interest in the Personal Property and Rents.

THIS DEED OF TRUST, INCLUDING THE ASSIGNMENT OF RENTS AND THE SECURITY INTEREST IN THE RENTS AND PERSONAL PROPERTY, IS GIVEN TO SECURE (A) PAYMENT OF THE INDEBTEDNESS AND (B) PERFORMANCE OF ANY AND ALL OBLIGATIONS UNDER THE NOTE, THE RELATED DOCUMENTS, AND THIS DEED OF TRUST. THIS DEED OF TRUST IS GIVEN AND ACCEPTED ON THE FOLLOWING TERMS:

PAYMENT AND PERFORMANCE. Except as otherwise provided in this Deed of Trust, Grantor shall pay to Lender all amounts secured by this Deed of Trust as they become due, and shall strictly and in a timely manner perform all of Grantor's obligations under the Note, this Deed of Trust, and the Related Documents.

POSSESSION AND MAINTENANCE OF THE PROPERTY. Grantor agrees that Grantor's possession and use of the Property shall be governed by the following provisions:

Possession and Use. Until the occurrence of an Event of Default, Grantor may (1) remain in possession and control of the Property; (2) use, operate or manage the Property; and (3) collect the Rents from the Property. The following provisions relate to the use of the Property or to other limitations on the Property. THE REAL PROPERTY IS NOT MORE THAN EIGHTY (80) ACRES AND IS NOT PRINCIPALLY USED FOR THE AGRICULTURAL PRODUCTION OF CROPS, LIVESTOCK, DAIRY OR AQUATIC GOODS, OR IS NOT MORE THAN FORTY (40) ACRES REGARDLESS OF USE, OR IS LOCATED WITHIN AN INCORPORATED CITY OR VILLAGE.

Duty to Maintain. Grantor shall maintain the Property in tenantable condition and promptly perform all repairs, replacements, and maintenance necessary to preserve its value.

Compliance With Environmental Laws. Grantor represents and warrants to Lender that: (1) During the period of Grantor's ownership of the Property, there has been no use, generation, manufacture, storage, treatment, disposal, release or threatened release of any Hazardous Substance by any person on, under, about or from the Property; (2) Grantor has no knowledge of, or reason to believe that there has been, except as previously disclosed to and acknowledged by Lender in writing, (a) any breach or violation of any Environmental Laws,

(b) any use, generation, manufacture, storage, treatment, disposal, release or threatened release of any Hazardous Substance on, under, about or from the Property by any prior owners or occupants of the Property, or (c) any actual or threatened litigation or claims of any kind by any person relating to such matters; and (3) Except as previously disclosed to and acknowledged by Lender in writing, (a) neither Grantor nor any tenant, contractor, agent or other authorized user of the Property shall use, generate, manufacture, store, treat, dispose of or release any Hazardous Substance on, under, about or from the Property; and (b) any such activity shall be conducted in compliance with all applicable federal, state, and local laws, regulations and ordinances, including without limitation all Environmental Laws. Grantor authorizes Lender and its agents to enter upon the Property to make such inspections and tests, at Grantor's expense, as Lender may deem appropriate to determine compliance of the Property with this section of the Deed of Trust. Any inspections or tests made by Lender shall be for Lender's purposes only and shall not be construed to create any responsibility or liability on the part of Lender to Grantor or to any other person. The representations and warranties contained herein are based on Grantor's due diligence in investigating the Property for Hazardous Substances. Grantor hereby (1) releases and waives any future claims against Lender for indemnity or contribution in the event Grantor becomes liable for cleanup or other costs under any such laws; and (2) agrees to indemnify, defend, and hold harmless Lender against any and all claims, losses, liabilities, damages, penalties, and expenses which Lender may directly or indirectly sustain or suffer resulting from a breach of this section of the Deed of Trust or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release occurring prior to Grantor's ownership or interest in the Property, whether or not the same was or should have been known to Grantor. The provisions of this section of the Deed of Trust, including the obligation to indemnify and defend, shall survive the payment of the Indebtedness and the satisfaction and reconveyance of the lien of this Deed of Trust and shall not be affected by Lender's acquisition of any interest in the Property, whether by foreclosure or otherwise.

Nuisance, Waste. Grantor shall not cause, conduct or permit any nuisance nor commit, permit, or suffer any stripping of or waste on or to the Property or any portion of the Property. Without limiting the generality of the foregoing, Grantor will not remove, or grant to any other party the right to remove, any timber, minerals (including oil and gas), coal, clay, scoria, soil, gravel or rock products without Lender's prior written consent.

Removal of Improvements. Grantor shall not demolish or remove any Improvements from the Real Property without Lender's prior written consent. As a condition to the removal of any Improvements, Lender may require Grantor to make arrangements satisfactory to Lender to replace such Improvements with Improvements of at least equal value.

Lender's Right to Enter. Lender and Lender's agents and representatives may enter upon the Real Property at all reasonable times to attend to Lender's interests and to inspect the Real Property for purposes of Grantor's compliance with the terms and conditions of this Deed of Trust.

Compliance with Governmental Requirements. Grantor shall promptly comply with all laws, ordinances, and regulations, now or hereafter in effect, of all governmental authorities applicable to the use or occupancy of the Property, including without limitation, the Americans With Disabilities Act. Grantor may contest in good faith any such law, ordinance, or regulation and withhold compliance during any proceeding, including appropriate appeals, so long as Grantor has notified Lender in writing prior to doing so and so long as, in Lender's sole opinion, Lender's interests in the Property are not jeopardized. Lender may require Grantor to post adequate security or a surety bond, reasonably satisfactory to Lender, to protect Lender's interest.

Duty to Protect. Grantor agrees neither to abandon or leave unattended the Property. Grantor shall do all other acts, in addition to those acts set forth above in this section, which from the character and use of the Property are reasonably necessary to protect and preserve the Property.

DUE ON SALE - CONSENT BY LENDER. Lender may, at Lender's option, declare immediately due and payable all sums secured by this Deed of Trust upon the sale or transfer, without Lender's prior written consent, of all or any part of the Real Property, or any interest in the Real Property. A "sale or transfer" means the conveyance of Real Property or any right, title or interest in the Real Property; whether legal, beneficial or equitable; whether voluntary or involuntary; whether by outright sale, deed, installment sale contract, land contract, contract for deed, leasehold interest with a term greater than three (3) years, lease-option contract, or by sale, assignment, or transfer of any beneficial interest in or to any land trust holding title to the Real Property, or by any other method of conveyance of an interest in the Real Property. However, this option shall not be exercised by Lender if such exercise is prohibited by federal law or by Idaho law.

TAXES AND LIENS. The following provisions relating to the taxes and liens on the Property are part of this Deed of Trust:

Payment. Grantor shall pay when due (and in all events prior to delinquency) all taxes, special taxes, assessments, charges (including water and sewer), fines and impositions levied against or on account of the Property, and shall pay when due all claims for work done on or for services rendered or material furnished to the Property. Grantor shall maintain the Property free of all liens having priority over or equal to the interest of Lender under this Deed of Trust, except for the lien of taxes and assessments not due and except as otherwise provided in this Deed of Trust.

Right to Contest. Grantor may withhold payment of any tax, assessment, or claim in connection with a good faith dispute over the obligation to pay, so long as Lender's interest in the Property is not jeopardized. If a lien arises or is filed as a result of nonpayment, Grantor shall within fifteen (15) days after the lien arises or, if a lien is filed, within fifteen (15) days after Grantor has notice of the filing, secure the discharge of the lien, or if requested by Lender, deposit with Lender cash or a sufficient corporate surety bond or other security satisfactory to Lender in an amount sufficient to discharge the lien plus any costs and reasonable attorneys' fees, or other charges that could accrue as a result of a foreclosure or sale under the lien. In any contest, Grantor shall defend itself and Lender and shall satisfy any adverse judgment before enforcement against the Property. Grantor shall name Lender as an additional obligee under any surety bond furnished in the contest proceedings.

Evidence of Payment. Grantor shall upon demand furnish to Lender satisfactory evidence of payment of the taxes or assessments and shall authorize the appropriate governmental official to deliver to Lender at any time a written statement of the taxes and assessments against the Property.

Notice of Construction. Grantor shall notify Lender at least fifteen (15) days before any work is commenced, any services are furnished, or any materials are supplied to the Property, if any mechanic's lien, materialmen's lien, or other lien could be asserted on account of the work, services, or materials. Grantor will upon request of Lender furnish to Lender advance assurances satisfactory to Lender that Grantor can and will pay the cost of such improvements.

PROPERTY DAMAGE INSURANCE. The following provisions relating to insuring the Property are a part of this Deed of Trust.

Maintenance of Insurance. Grantor shall procure and maintain policies of fire insurance with standard extended coverage endorsements on a fair value basis for the full insurable value covering all Improvements on the Real Property in an amount sufficient to avoid application of

any coinsurance clause, and with a standard mortgagee clause in favor of Lender. Grantor shall also procure and maintain comprehensive general liability insurance in such coverage amounts as Lender may request with Trustee and Lender being named as additional insureds in such liability insurance policies. Additionally, Grantor shall maintain such other insurance, including but not limited to hazard, business interruption, and boiler insurance, as Lender may reasonably require. Policies shall be written in form, amounts, coverages and basis reasonably acceptable to Lender and issued by a company or companies reasonably acceptable to Lender. Grantor, upon request of Lender, will deliver to Lender from time to time the policies or certificates of insurance in form satisfactory to Lender, including stipulations that coverages will not be cancelled or diminished without at least ten (10) days prior written notice to Lender. Each insurance policy also shall include an endorsement providing that coverage in favor of Lender will not be impaired in any way by any act, omission or default of Grantor or any other person. Should the Real Property be located in an area designated by the Administrator of the Federal Emergency Management Agency as a special flood hazard area, Grantor agrees to obtain and maintain Federal Flood Insurance, if available, for the full unpaid principal balance of the loan and any prior liens on the property securing the loan, up to the maximum policy limits set under the National Flood Insurance Program, or as otherwise required by Lender, and to maintain such insurance for the term of the loan.

Application of Proceeds. Grantor shall promptly notify Lender of any loss or damage to the Property if the estimated cost of repair or replacement exceeds $5,000.00. Lender may make proof of loss if Grantor fails to do so within fifteen (15) days of the casualty. Whether or not Lender's security is impaired, Lender may, at Lender's election, receive and retain the proceeds of any insurance and apply the proceeds to the reduction of the Indebtedness, payment of any lien affecting the Property, or the restoration and repair of the Property. If Lender elects to apply the proceeds to restoration and repair, Grantor shall repair or replace the damaged or destroyed Improvements in a manner satisfactory to Lender. Lender shall, upon satisfactory proof of such expenditure, pay or reimburse Grantor from the proceeds for the reasonable cost of repair or restoration if Grantor is not in default under this Deed of Trust. Any proceeds which have not been disbursed within 180 days after their receipt and which Lender has not committed to the repair or restoration of the Property shall be used first to pay any amount owing to Lender under this Deed of Trust, then to pay accrued interest, and the remainder, if any, shall be applied to the principal balance of the Indebtedness. If Lender holds any proceeds after payment in full of the Indebtedness, such proceeds shall be paid to Grantor as Grantor's interests may appear.

Grantor's Report on Insurance. Upon request of Lender, however not more than once a year, Grantor shall furnish to Lender a report on each existing policy of insurance showing: (1) the name of the insurer; (2) the risks insured; (3) the amount of the policy; (4) the property insured, the then current replacement value of such property, and the manner of determining that value; and (5) the expiration date of the policy. Grantor shall, upon request of Lender, have an independent appraiser satisfactory to Lender determine the cash value replacement cost of the Property.

LENDER'S EXPENDITURES. If any action or proceeding is commenced that would materially affect Lender's interest in the Property or if Grantor fails to comply with any provision of this Deed of Trust or any Related Documents, including but not limited to Grantor's failure to discharge or pay when due any amounts Grantor is required to discharge or pay under this Deed of Trust or any Related Documents, Lender on Grantor's behalf may (but shall not be obligated to) take any action that Lender deems appropriate, including but not limited to discharging or paying all taxes, liens, security interests, encumbrances and other claims, at any time levied or placed on the Property and paying all costs for insuring, maintaining and preserving the Property. All such expenditures incurred or paid by Lender for such purposes will then bear interest at the rate charged under the Note from the date incurred or paid by Lender to the date of repayment by Grantor. All such expenses will become a part of the Indebtedness and, at Lender's option, will (A) be payable on demand; (B) be added to the balance of the Note and be apportioned among and be payable with any installment payments to become due during either (1) the term of any applicable insurance policy; or (2) the remaining term of the Note; or (C) be treated as a balloon payment which will be due and payable at the Note's maturity. The Deed of Trust also will secure payment of these amounts. Such right shall be in addition to all other rights and remedies to which Lender may be entitled upon Default.

WARRANTY; DEFENSE OF TITLE. The following provisions relating to ownership of the Property are a part of this Deed of Trust:

Title. Grantor warrants that: (a) Grantor holds good and marketable title of record to the Property in fee simple, free and clear of all liens and encumbrances other than those set forth in the Real Property description or in any title insurance policy, title report, or final title opinion issued in favor of, and accepted by, Lender in connection with this Deed of Trust, and (b) Grantor has the full right, power, and authority to execute and deliver this Deed of Trust to Lender.

Defense of Title. Subject to the exception in the paragraph above, Grantor warrants and will forever defend the title to the Property against the lawful claims of all persons. In the event any action or proceeding is commenced that questions Grantor's title or the interest of Trustee or Lender under this Deed of Trust, Grantor shall defend the action at Grantor's expense. Grantor may be the nominal party in such proceeding, but Lender shall be entitled to participate in the proceeding and to be represented in the proceeding by counsel of Lender's own choice, and Grantor will deliver, or cause to be delivered, to Lender such instruments as Lender may request from time to time to permit such participation.

Compliance With Laws. Grantor warrants that the Property and Grantor's use of the Property complies with all existing applicable laws, ordinances, and regulations of governmental authorities.

Survival of Representations and Warranties. All representations, warranties, and agreements made by Grantor in this Deed of Trust shall survive the execution and delivery of this Deed of Trust, shall be continuing in nature, and shall remain in full force and effect until such time as Grantor's Indebtedness shall be paid in full.

CONDEMNATION. The following provisions relating to condemnation proceedings are a part of this Deed of Trust:

Proceedings. If any proceeding in condemnation is filed, Grantor shall promptly notify Lender in writing, and Grantor shall promptly take such steps as may be necessary to defend the action and obtain the award. Grantor may be the nominal party in such proceeding, but Lender shall be entitled to participate in the proceeding and to be represented in the proceeding by counsel of its own choice, and Grantor will deliver or cause to be delivered to Lender such instruments and documentation as may be requested by Lender from time to time to permit such participation.

Application of Net Proceeds. If all or any part of the Property is condemned by eminent domain proceedings or by any proceeding or purchase in lieu of condemnation, Lender may at its election require that all or any portion of the net proceeds of the award be applied to the Indebtedness or the repair or restoration of the Property. The net proceeds of the award shall mean the award after payment of all reasonable costs, expenses, and attorneys' fees incurred by Trustee or Lender in connection with the condemnation.

IMPOSITION OF TAXES, FEES AND CHARGES BY GOVERNMENTAL AUTHORITIES. The following provisions relating to governmental taxes, fees and charges are a part of this Deed of Trust:

Current Taxes, Fees and Charges. Upon request by Lender, Grantor shall execute such documents in addition to this Deed of Trust and take whatever other action is requested by Lender to perfect and continue Lender's lien on the Real Property. Grantor shall reimburse Lender for all taxes, as described below, together with all expenses incurred in recording, perfecting or continuing this Deed of Trust, including without limitation all taxes, fees, documentary stamps, and other charges for recording or registering this Deed of Trust.

Taxes. The following shall constitute taxes to which this section applies: (1) a specific tax upon this type of Deed of Trust or upon all or any part of the Indebtedness secured by this Deed of Trust; (2) a specific tax on Grantor which Grantor is authorized or required to deduct from payments on the Indebtedness secured by this type of Deed of Trust; (3) a tax on this type of Deed of Trust chargeable against the Lender or the holder of the Note; and (4) a specific tax on all or any portion of the Indebtedness or on payments of principal and interest made by Grantor.

Subsequent Taxes. If any tax to which this section applies is enacted subsequent to the date of this Deed of Trust, this event shall have the same effect as an Event of Default, and Lender may exercise any or all of its available remedies for an Event of Default as provided below unless Grantor either (1) pays the tax before it becomes delinquent, or (2) contests the tax as provided above in the Taxes and Liens section and deposits with Lender cash or a sufficient corporate surety bond or other security satisfactory to Lender.

SECURITY AGREEMENT; FINANCING STATEMENTS. The following provisions relating to this Deed of Trust as a security agreement are a part of this Deed of Trust:

Security Agreement. This instrument shall constitute a Security Agreement to the extent any of the Property constitutes fixtures, and Lender shall have all of the rights of a secured party under the Uniform Commercial Code as amended from time to time.

Security Interest. Upon request by Lender, Grantor shall take whatever action is requested by Lender to perfect and continue Lender's security interest in the Rents and Personal Property. In addition to recording this Deed of Trust in the real property records, Lender may, at any time and without further authorization from Grantor, file executed counterparts, copies or reproductions of this Deed of Trust as a financing statement. Grantor shall reimburse Lender for all expenses incurred in perfecting or continuing this security interest. Upon default, Grantor shall not remove, sever or detach the Personal Property from the Property. Upon default, Grantor shall assemble any Personal Property not affixed to the Property in a manner and at a place reasonably convenient to Grantor and Lender and make it available to Lender within three (3) days after receipt of written demand from Lender to the extent permitted by applicable law.

Addresses. The mailing addresses of Grantor (debtor) and Lender (secured party) from which information concerning the security interest granted by this Deed of Trust may be obtained (each as required by the Uniform Commercial Code) are as stated on the first page of this Deed of Trust.

FURTHER ASSURANCES; ATTORNEY-IN-FACT. The following provisions relating to further assurances and attorney-in-fact are a part of this Deed of Trust:

Further Assurances. At any time, and from time to time, upon request of Lender, Grantor will make, execute and deliver, or will cause to be made, executed or delivered, to Lender or to Lender's designee, and when requested by Lender, cause to be filed, recorded, refiled, or rerecorded, as the case may be, at such times and in such offices and places as Lender may deem appropriate, any and all such mortgages, deeds of trust, security deeds, security agreements, financing statements, continuation statements, instruments of further assurance, certificates, and other documents as may, in the sole opinion of Lender, be necessary or desirable in order to effectuate, complete, perfect, continue, or preserve (1) Grantor's obligations under the Note, this Deed of Trust, and the Related Documents, and (2) the liens and security interests created by this Deed of Trust as first and prior liens on the Property, whether now owned or hereafter acquired by Grantor. Unless prohibited by law or Lender agrees to the contrary in writing, Grantor shall reimburse Lender for all costs and expenses incurred in connection with the matters referred to in this paragraph.

Attorney-in-Fact. If Grantor fails to do any of the things referred to in the preceding paragraph, Lender may do so for and in the name of Grantor and at Grantor's expense. For such purposes, Grantor hereby irrevocably appoints Lender as Grantor's attorney-in-fact for the purpose of making, executing, delivering, filing, recording, and doing all other things as may be necessary or desirable, in Lender's sole opinion, to accomplish the matters referred to in the preceding paragraph.

FULL PERFORMANCE. If Grantor pays all the Indebtedness when due, and otherwise performs all the obligations imposed upon Grantor under this Deed of Trust, Lender shall execute and deliver to Trustee a request for full reconveyance and shall execute and deliver to Grantor suitable statements of termination of any financing statement on file evidencing Lender's security interest in the Rents and the Personal Property. Any reconveyance fee required by law shall be paid by Grantor, if permitted by applicable law.

EVENTS OF DEFAULT. Each of the following, at Lender's option, shall constitute an Event of Default under this Deed of Trust:

Payment Default. Grantor fails to make any payment when due under the Indebtedness.

Other Defaults. Grantor fails to comply with or to perform any other term, obligation, covenant or condition contained in this Deed of Trust or in any of the Related Documents or to comply with or to perform any term, obligation, covenant or condition contained in any other agreement between Lender and Grantor.

Compliance Default. Failure to comply with any other term, obligation, covenant or condition contained in this Deed of Trust, the Note or in any of the Related Documents.

Default on Other Payments. Failure of Grantor within the time required by this Deed of Trust to make any payment for taxes or insurance, or any other payment necessary to prevent filing of or to effect discharge of any lien.

Default in Favor of Third Parties. Should Grantor default under any loan, extension of credit, security agreement, purchase or sales agreement, or any other agreement, in favor of any other creditor or person that may materially affect any of Grantor's property or Grantor's ability to repay the Indebtedness or Grantor's ability to perform Grantor's obligations under this Deed of Trust or any of the Related Documents.

False Statements. Any warranty, representation or statement made or furnished to Lender by Grantor or on Grantor's behalf under this Deed of Trust or the Related Documents is false or misleading in any material respect, either now or at the time made or furnished or becomes false or misleading at any time thereafter.

Defective Collateralization. This Deed of Trust or any of the Related Documents ceases to be in full force and effect (including failure of any collateral document to create a valid and perfected security interest or lien) at any time and for any reason.

Death or Insolvency. The dissolution of Grantor's (regardless of whether election to continue is made), any member withdraws from the

limited liability company, or any other termination of Grantor's existence as a going business or the death of any member, the insolvency of Grantor, the appointment of a receiver for any part of Grantor's property, any assignment for the benefit of creditors, any type of creditor workout, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Grantor.

Creditor or Forfeiture Proceedings. Commencement of foreclosure or forfeiture proceedings, whether by judicial proceeding, self-help, repossession or any other method, by any creditor of Grantor or by any governmental agency against any property securing the Indebtedness. This includes a garnishment of any of Grantor's accounts, including deposit accounts, with Lender. However, this Event of Default shall not apply if there is a good faith dispute by Grantor as to the validity or reasonableness of the claim which is the basis of the creditor or forfeiture proceeding and if Grantor gives Lender written notice of the creditor or forfeiture proceeding and deposits with Lender monies or a surety bond for the creditor or forfeiture proceeding, in an amount determined by Lender, in its sole discretion, as being an adequate reserve or bond for the dispute.

Breach of Other Agreement. Any breach by Grantor under the terms of any other agreement between Grantor and Lender that is not remedied within any grace period provided therein, including without limitation any agreement concerning any indebtedness or other obligation of Grantor to Lender, whether existing now or later.

Events Affecting Guarantor. Any of the preceding events occurs with respect to any Guarantor of any of the Indebtedness or any Guarantor dies or becomes incompetent, or revokes or disputes the validity of, or liability under, any Guaranty of the Indebtedness.

Adverse Change. A material adverse change occurs in Grantor's financial condition, or Lender believes the prospect of payment or performance of the Indebtedness is impaired.

Right to Cure. If any default, other than a default in payment, is curable and if Grantor has not been given a notice of a breach of the same provision of this Deed of Trust within the preceding twelve (12) months, it may be cured if Grantor, after Lender sends written notice to Grantor demanding cure of such default: (1) cures the default within fifteen (15) days; or (2) if the cure requires more than fifteen (15) days, immediately initiates steps which Lender deems in Lender's sole discretion to be sufficient to cure the default and thereafter continues and completes all reasonable and necessary steps sufficient to produce compliance as soon as reasonably practical.

RIGHTS AND REMEDIES ON DEFAULT. If an Event of Default occurs under this Deed of Trust, at any time thereafter, Trustee or Lender may exercise any one or more of the following rights and remedies:

Notice of Default. In the Event of Default Lender shall execute or cause the Trustee to execute a written notice of such default and of Lender's election to cause the Property to be sold to satisfy the Indebtedness, and shall cause such notice to be recorded in the office of the recorder of each county wherein the Real Property, or any part thereof, is situated.

Election of Remedies. Election by Lender to pursue any remedy shall not exclude pursuit of any other remedy, and an election to make expenditures or to take action to perform an obligation of Grantor under this Deed of Trust, after Grantor's failure to perform, shall not affect Lender's right to declare a default and exercise its remedies.

Accelerate Indebtedness. Lender shall have the right at its option without notice to Grantor to declare the entire Indebtedness immediately due and payable, including any prepayment penalty which Grantor would be required to pay.

Foreclosure. With respect to all or any part of the Real Property, the Trustee shall have the right to foreclose by notice and sale, and Lender shall have the right to foreclose by judicial foreclosure, in either case in accordance with and to the full extent provided by applicable law.

UCC Remedies. With respect to all or any part of the Personal Property, Lender shall have all the rights and remedies of a secured party under the Uniform Commercial Code.

Collect Rents. Lender shall have the right, without notice to Grantor to take possession of and manage the Property and collect the Rents, including amounts past due and unpaid, and apply the net proceeds, over and above Lender's costs, against the Indebtedness. In furtherance of this right, Lender may require any tenant or other user of the Property to make payments of rent or use fees directly to Lender. If the Rents are collected by Lender, then Grantor irrevocably designates Lender as Grantor's attorney-in-fact to endorse instruments received in payment thereof in the name of Grantor and to negotiate the same and collect the proceeds. Payments by tenants or other users to Lender in response to Lender's demand shall satisfy the obligations for which the payments are made, whether or not any proper grounds for the demand existed. Lender may exercise its rights under this subparagraph either in person, by agent, or through a receiver.

Appoint Receiver. Lender shall have the right to have a receiver appointed to take possession of all or any part of the Property, with the power to protect and preserve the Property, to operate the Property preceding foreclosure or sale, and to collect the Rents from the Property and apply the proceeds, over and above the cost of the receivership, against the Indebtedness. The receiver may serve without bond if permitted by law. Lender's right to the appointment of a receiver shall exist whether or not the apparent value of the Property exceeds the Indebtedness by a substantial amount. Employment by Lender shall not disqualify a person from serving as a receiver.

Tenancy at Sufferance. If Grantor remains in possession of the Property after the Property is sold as provided above or Lender otherwise becomes entitled to possession of the Property upon default of Grantor, Grantor shall become a tenant at sufferance of Lender or the purchaser of the Property and shall, at Lender's option, either (1) pay a reasonable rental for the use of the Property, or (2) vacate the Property immediately upon the demand of Lender.

Other Remedies. Trustee or Lender shall have any other right or remedy provided in this Deed of Trust or the Note or available at law or in equity.

Notice of Sale. Lender shall give Grantor reasonable notice of the time and place of any public sale of the Personal Property or of the time after which any private sale or other intended disposition of the Personal Property is to be made. Reasonable notice shall mean notice given at least ten (10) days before the time of the sale or disposition. Any sale of the Personal Property may be made in conjunction with any sale of the Real Property.

Sale of the Property. To the extent permitted by applicable law, Grantor hereby waives any and all rights to have the Property marshalled. In exercising its rights and remedies, the Trustee or Lender shall be free to sell all or any part of the Property together or separately, in one sale or by separate sales. Lender shall be entitled to bid at any public sale on all or any portion of the Property. Notice of sale having been given as then required by law, and not less than the time required by law having elapsed, Trustee, without demand on Grantor, shall sell the property at the time and place fixed by it in the notice of sale at public auction to the highest bidder for cash in lawful money of the United States, payable at time of sale. Trustee shall deliver to the purchaser his or her deed conveying the Property so sold, but without

any covenant or warranty express or implied. The recitals in such deed of any matters or facts shall be conclusive proof of the truthfulness of such matters or facts. After deducting all costs, fees and expenses of Trustee and of this Trust, including cost of evidence of title and reasonable attorneys' fees, including those in connection with the sale, Trustee shall apply proceeds of sale to payment of (a) all sums expended under this Deed of Trust, not then repaid with interest thereon as provided in this Deed of Trust; (b) all Indebtedness secured hereby; and (c) the remainder, if any, to the person or persons legally entitled thereto.

Attorneys' Fees; Expenses. If Lender institutes any suit or action to enforce any of the terms of this Deed of Trust, Lender shall be entitled to recover such sum as the court may adjudge reasonable as attorneys' fees at trial and upon any appeal. Whether or not any court action is involved, and to the extent not prohibited by law, all reasonable expenses Lender incurs that in Lender's opinion are necessary at any time for the protection of its interest or the enforcement of its rights shall become a part of the Indebtedness payable on demand and shall bear interest at the Note rate from the date of the expenditure until repaid. Expenses covered by this paragraph include, without limitation, however subject to any limits under applicable law, Lender's reasonable attorneys' fees and Lender's legal expenses whether or not there is a lawsuit, including reasonable attorneys' fees and expenses for bankruptcy proceedings (including efforts to modify or vacate any automatic stay or injunction), appeals, and any anticipated post-judgment collection services, the cost of searching records, obtaining title reports (including foreclosure reports), surveyors' reports, and appraisal fees, title insurance, and fees for the Trustee, to the extent permitted by applicable law. Grantor also will pay any court costs, in addition to all other sums provided by law.

Rights of Trustee. Trustee shall have all of the rights and duties of Lender as set forth in this section.

POWERS AND OBLIGATIONS OF TRUSTEE. The following provisions relating to the powers and obligations of Trustee are part of this Deed of Trust:

Powers of Trustee. In addition to all powers of Trustee arising as a matter of law, Trustee shall have the power to take the following actions with respect to the Property upon the written request of Lender and Grantor: (a) join in preparing and filing a map or plat of the Real Property, including the dedication of streets or other rights to the public; (b) join in granting any easement or creating any restriction on the Real Property; and (c) join in any subordination or other agreement affecting this Deed of Trust or the interest of Lender under this Deed of Trust.

Obligations to Notify. Trustee shall not be obligated to notify any other party of a pending sale under any other trust deed or lien, or of any action or proceeding in which Grantor, Lender, or Trustee shall be a party, unless the action or proceeding is brought by Trustee.

Trustee. Trustee shall meet all qualifications required for Trustee under applicable law. In addition to the rights and remedies set forth above, with respect to all or any part of the Property, the Trustee shall have the right to foreclose by notice and sale, and Lender shall have the right to foreclose by judicial foreclosure, in either case in accordance with and to the full extent provided by applicable law.

Successor Trustee. Lender, at Lender's option, may from time to time appoint a successor Trustee to any Trustee appointed under this Deed of Trust by an instrument executed and acknowledged by Lender and recorded in the office of the recorder of Ada County, State of Idaho. The instrument shall contain, in addition to all other matters required by state law, the names of the original Lender, Trustee, and Grantor, the book and page where this Deed of Trust is recorded, and the name and address of the successor trustee, and the instrument shall be executed and acknowledged by Lender or its successors in interest. The successor trustee, without conveyance of the Property, shall succeed to all the title, power, and duties conferred upon the Trustee in this Deed of Trust and by applicable law. This procedure for substitution of Trustee shall govern to the exclusion of all other provisions for substitution.

NOTICES. Any notice required to be given under this Deed of Trust, including without limitation any notice of default and any notice of sale shall be given in writing, and shall be effective when actually delivered, when actually received by telefacsimile (unless otherwise required by law), when deposited with a nationally recognized overnight courier, or, if mailed, when deposited in the United States mail, as first class, certified or registered mail postage prepaid, directed to the addresses shown near the beginning of this Deed of Trust. All copies of notices of foreclosure from the holder of any lien which has priority over this Deed of Trust shall be sent to Lender's address, as shown near the beginning of this Deed of Trust. Any party may change its address for notices under this Deed of Trust by giving formal written notice to the other parties, specifying that the purpose of the notice is to change the party's address. For notice purposes, Grantor agrees to keep Lender informed at all times of Grantor's current address. Unless otherwise provided or required by law, if there is more than one Grantor, any notice given by Lender to any Grantor is deemed to be notice given to all Grantors.

MISCELLANEOUS PROVISIONS. The following miscellaneous provisions are a part of this Deed of Trust:

Amendments. This Deed of Trust, together with any Related Documents, constitutes the entire understanding and agreement of the parties as to the matters set forth in this Deed of Trust. No alteration of or amendment to this Deed of Trust shall be effective unless given in writing and signed by the party or parties sought to be charged or bound by the alteration or amendment.

Annual Reports. If the Property is used for purposes other than Grantor's residence, Grantor shall furnish to Lender, upon request, a certified statement of net operating income received from the Property during Grantor's previous fiscal year in such form and detail as Lender shall require. "Net operating income" shall mean all cash receipts from the Property less all cash expenditures made in connection with the operation of the Property.

Caption Headings. Caption headings in this Deed of Trust are for convenience purposes only and are not to be used to interpret or define the provisions of this Deed of Trust.

Merger. There shall be no merger of the interest or estate created by this Deed of Trust with any other interest or estate in the Property at any time held by or for the benefit of Lender in any capacity, without the written consent of Lender.

Governing Law. This Deed of Trust will be governed by federal law applicable to Lender and, to the extent not preempted by federal law, the laws of the State of Idaho without regard to its conflicts of law provisions. This Deed of Trust has been accepted by Lender in the State of Idaho.

Choice of Venue. If there is a lawsuit, Grantor agrees upon Lender's request to submit to the jurisdiction of the courts of Ada County, State of Idaho.

No Waiver by Lender. Lender shall not be deemed to have waived any rights under this Deed of Trust unless such waiver is given in writing and signed by Lender. No delay or omission on the part of Lender in exercising any right shall operate as a waiver of such right or any other right. A waiver by Lender of a provision of this Deed of Trust shall not prejudice or constitute a waiver of Lender's right otherwise to demand strict compliance with that provision or any other provision of this Deed of Trust. No prior waiver by Lender, nor any course of dealing between Lender and Grantor, shall constitute a waiver of any of Lender's rights or of any of Grantor's obligations as to any future

transactions. Whenever the consent of Lender is required under this Deed of Trust, the granting of such consent by Lender in any instance shall not constitute continuing consent to subsequent instances where such consent is required and in all cases such consent may be granted or withheld in the sole discretion of Lender.

Severability. If a court of competent jurisdiction finds any provision of this Deed of Trust to be illegal, invalid, or unenforceable as to any circumstance, that finding shall not make the offending provision illegal, invalid, or unenforceable as to any other circumstance. If feasible, the offending provision shall be considered modified so that it becomes legal, valid and enforceable. If the offending provision cannot be so modified, it shall be considered deleted from this Deed of Trust. Unless otherwise required by law, the illegality, invalidity, or unenforceability of any provision of this Deed of Trust shall not affect the legality, validity or enforceability of any other provision of this Deed of Trust.

Successors and Assigns. Subject to any limitations stated in this Deed of Trust on transfer of Grantor's interest, this Deed of Trust shall be binding upon and inure to the benefit of the parties, their successors and assigns. If ownership of the Property becomes vested in a person other than Grantor, Lender, without notice to Grantor, may deal with Grantor's successors with reference to this Deed of Trust and the Indebtedness by way of forbearance or extension without releasing Grantor from the obligations of this Deed of Trust or liability under the Indebtedness.

Time is of the Essence. Time is of the essence in the performance of this Deed of Trust.

Waive Jury. All parties to this Deed of Trust hereby waive the right to any jury trial in any action, proceeding, or counterclaim brought by any party against any other party.

Waiver of Homestead Exemption. Grantor hereby releases and waives all rights and benefits of the homestead exemption laws of the State of Idaho as to all Indebtedness secured by this Deed of Trust.

DEFINITIONS. The following capitalized words and terms shall have the following meanings when used in this Deed of Trust. Unless specifically stated to the contrary, all references to dollar amounts shall mean amounts in lawful money of the United States of America. Words and terms used in the singular shall include the plural, and the plural shall include the singular, as the context may require. Words and terms not otherwise defined in this Deed of Trust shall have the meanings attributed to such terms in the Uniform Commercial Code:

Beneficiary. The word "Beneficiary" means Capital Educators Federal Credit Union, and its successors and assigns.

Borrower. The word "Borrower" means JHP LLC and includes all co-signers and co-makers signing the Note and all their successors and assigns.

Deed of Trust. The words "Deed of Trust" mean this Deed of Trust among Grantor, Lender, and Trustee, and includes without limitation all assignment and security interest provisions relating to the Personal Property and Rents.

Default. The word "Default" means the Default set forth in this Deed of Trust in the section titled "Default".

Environmental Laws. The words "Environmental Laws" mean any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment, including without limitation the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. Section 9601, et seq. ("CERCLA"), the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499 ("SARA"), the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901, et seq., or other applicable state or federal laws, rules, or regulations adopted pursuant thereto.

Event of Default. The words "Event of Default" mean any of the events of default set forth in this Deed of Trust in the events of default section of this Deed of Trust.

Grantor. The word "Grantor" means JHP LLC.

Guarantor. The word "Guarantor" means any guarantor, surety, or accommodation party of any or all of the Indebtedness.

Guaranty. The word "Guaranty" means the guaranty from Guarantor to Lender, including without limitation a guaranty of all or part of the Note.

Hazardous Substances. The words "Hazardous Substances" mean materials that, because of their quantity, concentration or physical, chemical or infectious characteristics, may cause or pose a present or potential hazard to human health or the environment when improperly used, treated, stored, disposed of, generated, manufactured, transported or otherwise handled. The words "Hazardous Substances" are used in their very broadest sense and include without limitation any and all hazardous or toxic substances, materials or waste as defined by or listed under the Environmental Laws. The term "Hazardous Substances" also includes, without limitation, petroleum and petroleum by-products or any fraction thereof and asbestos.

Improvements. The word "Improvements" means all existing and future improvements, buildings, structures, mobile homes affixed on the Real Property, facilities, additions, replacements and other construction on the Real Property.

Indebtedness. The word "Indebtedness" means all principal, interest, and other amounts, costs and expenses payable under the Note or Related Documents, together with all renewals of, extensions of, modifications of, consolidations of and substitutions for the Note or Related Documents and any amounts expended or advanced by Lender to discharge Grantor's obligations or expenses incurred by Trustee or Lender to enforce Grantor's obligations under this Deed of Trust, together with interest on such amounts as provided in this Deed of Trust. Specifically, without limitation, Indebtedness includes all amounts that may be indirectly secured by the Cross-Collateralization provision of this Deed of Trust.

Lender. The word "Lender" means Capital Educators Federal Credit Union, its successors and assigns.

Note. The word "Note" means the promissory note dated August 4, 2017, **in the original principal amount of $1,450,000.00** from Grantor to Lender, together with all renewals of, extensions of, modifications of, refinancings of, consolidations of, and substitutions for the promissory note or agreement.

Personal Property. The words "Personal Property" mean all equipment, fixtures, and other articles of personal property now or hereafter owned by Grantor, and now or hereafter attached or affixed to the Real Property; together with all accessions, parts, and additions to, all replacements of, and all substitutions for, any of such property; and together with all proceeds (including without limitation all insurance proceeds and refunds of premiums) from any sale or other disposition of the Property.

Property. The word "Property" means collectively the Real Property and the Personal Property.

Real Property. The words "Real Property" mean the real property, interests and rights, as further described in this Deed of Trust.

Related Documents. The words "Related Documents" mean all promissory notes, credit agreements, loan agreements, security agreements, mortgages, deeds of trust, security deeds, collateral mortgages, and all other instruments, agreements and documents, whether now or hereafter existing, executed in connection with the Indebtedness; except that the words do not mean any guaranty or environmental agreement, whether now or hereafter existing, executed in connection with the Indebtedness.

Rents. The word "Rents" means all present and future rents, revenues, income, issues, royalties, profits, and other benefits derived from the Property.

Trustee. The word "Trustee" means FIDELITY NATIONAL TITLE COMPANY of IDAHO, whose address is 485 E RIVERSIDE DR., SUITE 200, EAGLE, ID 83616 and any substitute or successor trustees.

GRANTOR ACKNOWLEDGES HAVING READ ALL THE PROVISIONS OF THIS DEED OF TRUST, AND GRANTOR AGREES TO ITS TERMS.

GRANTOR:

JHP LLC

By: _____
Jackie L. Hammond, Member of JHP LLC

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

STATE OF Idaho)
) SS
COUNTY OF Ada)

This record was acknowledged before me on 8-4, 2017 by Jackie L. Hammond, Member of JHP LLC.

PHILLIP ARCHER NOTARY PUBLIC STATE OF IDAHO

_____
Notary Public in and for the State of _____

My commission expires _____ Residing: Meridian, Idaho
Commission Expires: 06/02/2018

REQUEST FOR FULL RECONVEYANCE
(To be used only when obligations have been paid in full)

To: _____, Trustee

The undersigned is the legal owner and holder of all Indebtedness secured by this Deed of Trust. All sums secured by this Deed of Trust have been fully paid and satisfied. You are hereby directed, upon payment to you of any sums owing to you under the terms of this Deed of Trust or pursuant to any applicable statute, to cancel the Note secured by this Deed of Trust (which is delivered to you together with this Deed of Trust), and to reconvey, without warranty, to the parties designated by the terms of this Deed of Trust, the estate now held by you under this Deed of Trust. Please mail the reconveyance and Related Documents to:

_____.

Date: _____ Beneficiary: _____

By: _____

Its: _____

EXHIBIT A

Order No.: 34601704013

For APN/Parcel ID(s): S1405110470

Beginning at the Northeast corner of Section 5 in Township. 2 North, Range 1 East Boise Meridian, in Ada County, State of Idaho, thence
South along the Section line between Sections 4 and 5, 2061.84 feet to an iron pin; thence

North 65°00' West, 264.00 feet to a point; thence

North 52°55' West, 387.05 feet to a point; thence

South 67°37' West, 315.48 feet to a point; thence

South 85°45' West, 573.54 feet to an iron pin; thence

North 0°35' West, 1320.0 feet to a point; thence

North 9°42' West, 563.64 feet to an iron pin on the North boundary of said Section 5; thence

North 89°44' East, 1518.0 feet to the POINT OF BEGINNING.

Excepting Therefrom:

A portion of the Northeast 1/4 of the Northeast 1/4 of Section 5, Township 2 North, Range 1 East of the Boise Meridian described as follows:

Commencing at the Northeast corner of Section 5, Township 2 North, Range 1 East of the Boise Meridian and running thence
South 585.38 feet along the East line of said Section to the POINT OF BEGINNING: thence
West 908.00 feet; thence
South 480.00 feet; thence
East 908.00 feet to said East line; thence
North 480.00 feet to the POINT OF BEGINNING.

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 30.00 10
BOISE IDAHO 12/30/04 11:45 AM
DEPUTY Bonnie Oberbillig
RECORDED-REQUEST OF
Title One

104165015

Property No. 576-6478

WARRANTY DEED

McKAY PROPERTIES, L.P., Grantor, does hereby GRANT, BARGAIN, SELL AND CONVEY to the **CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS, a Utah corporation sole,** Grantee, 50 East North Temple, Salt Lake City, Utah 84150, for the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, a parcel of real property located in Ada County, State of Idaho, described as follows:

See Exhibit "A" attached hereto and made a part hereof.

TO HAVE AND TO HOLD the said premises, together with all tenements, hereditaments and appurtenances thereunto belonging, unto the said Grantee, his successors and assigns forever. Grantor does hereby covenant to and with the said Grantee that IT is the owner in fee simple of said premises and that IT will warrant and defend the same from all lawful claims whatsoever.

In construing this Deed and where the context so requires, the singular includes the plural and the masculine, the feminine and neuter.

IN WITNESS WHEREOF, the said Grantors have hereunto subscribed their names this 27th day of November, 2004.

McKAY PROPERTIES, L.P., an Idaho limited partnership

By: Darwin Junior McKay
Darwin Junior McKay

By: Lorraine R. McKay
Lorraine R. McKay

By: Lawrence Darwin McKay
Lawrence Darwin McKay

By: Mary Ann McKay Miller
Mary Ann McKay Miller

By: Patricia Lou McKay Hambelton
Patricia Lou McKay Hambelton

By:_____
Charmaine McKay Anderson

By: William Dean McKay
William Dean McKay

By:_____
Brent Wiley Ritchie

"General Partners"

STATE OF IDAHO)
: ss.
County of CANYON)

On this 27th day of November, 2004, before me, Jake Tunison a Notary Public, personally appeared Darwin Junior McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)
: ss.
County of CANYON)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Lorraine R. McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

By: Charmaine McKay Anderson
Charmaine McKay Anderson

By: William Dean McKay
William Dean McKay

By: _____
Brent Wiley Ritchie

"General Partners"

STATE OF IDAHO)
: ss.
County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Darwin Junior McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)
: ss.
County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Lorraine R. McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

By:_____
Charmaine McKay Anderson

By: William Dean McKay
William Dean McKay

By: Brent Wiley Ritchie
Brent Wiley Ritchie

"General Partners"

STATE OF IDAHO)
: ss.
County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Darwin Junior McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)
: ss.
County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Lorraine R. McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)

: ss.

County of Ada)

On this 29th day of Nov, 2004, before me, Myrna A. Lamb, a Notary Public, personally appeared Lawrence Darwin McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same. as a partner of the McKay Properties, L.P.

(SEAL)

MYRNA LAMB NOTARY PUBLIC STATE OF IDAHO

Myrna Lamb
Notary Public for Idaho
Commission expires: 10/20/06

STATE OF IDAHO)

: ss.

County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Mary Ann McKay Miller, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)

: ss.

County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared Patricia Lou McKay Hambelton, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF ~~IDAHO~~ Texas)

: ss.

County of Randall)

On this 2nd day of December, 2004, before me, Patti Patterson, a Notary Public, personally appeared Charmaine McKay Anderson, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same as partner of the McKay properties, Inc.

(SEAL)

PATTI PATTERSON
NOTARY PUBLIC,
STATE OF TEXAS
My Commission Expires 08-29-2005

Notary Public for ~~Idaho~~ Texas
Commission expires: 8-29-05

STATE OF IDAHO)

: ss.

County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison, a Notary Public, personally appeared William Dean McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

JAKE TUNISON
NOTARY
PUBLIC
STATE OF IDAHO

Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)

: ss.

County of _____)

On this _____ day of _____, 2004, before me, _____, a Notary Public, personally appeared Brent Wiley Ritchie, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public for Idaho
Commission expires: _____

STATE OF IDAHO)
: ss.
County of _____)

On this _____ day of _____, 2004, before me, _____, a Notary Public, personally appeared Charmaine McKay Anderson, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

(SEAL)

_____
Notary Public for Idaho
Commission expires:_____

STATE OF IDAHO)
: ss.
County of Canyon)

On this 27th day of November, 2004, before me, Jake Tunison a Notary Public, personally appeared William Dean McKay, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

(SEAL)

JAKE TUNISON NOTARY PUBLIC STATE OF IDAHO

_____
Notary Public for Idaho
Commission expires: 5/17/2010

STATE OF IDAHO)
: ss.
County of Madison)

On this 29 day of Nov., 2004, before me, Elaine Summers, a Notary Public, personally appeared Brent Wiley Ritchie, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same. as a partner of the McKay Properties, L.P.

(SEAL)

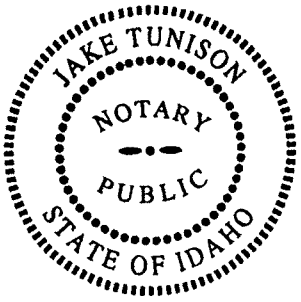
ELAINE SUMMERS NOTARY PUBLIC STATE OF IDAHO

Elaine Summers
Notary Public for Idaho
Commission expires: 7-27-05

State of Idaho
County of Canyon

On this 27th day of November, in the year 2004, before me, the undersigned, a notary public in and for said state, personally appeared Darwin Junior McKay, personally known to me or proved to me on the basis of satisfactory evidence, to be one of the partners in the partnership of McKay Properties, L.P., and the partner who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he executed the same in said partnership name.

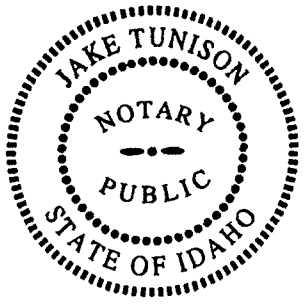
Notary public
Residing at:
Commission expires: May 17, 2010



State of Idaho
County of Canyon

On this 27th day of November, in the year 2004, before me, the undersigned, a notary public in and for said state, personally appeared Lorraine R. McKay, personally known to me or proved to me on the basis of satisfactory evidence, to be one of the partners in the partnership of McKay Properties, L.P., and the partner who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he executed the same in said partnership name.

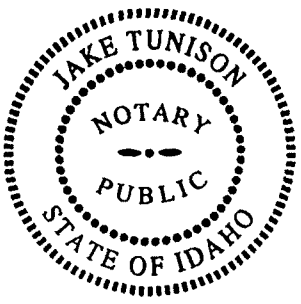
Notary public
Residing at:
Commission expires: May 17, 2010



State of Idaho
County of Canyon

On this 27th day of November, in the year 2004, before me, the undersigned, a notary public in and for said state, personally appeared Mary Ann McKay Miller, personally known to me or proved to me on the basis of satisfactory evidence, to be one of the partners in the partnership of McKay Properties, L.P., and the partner who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he executed the same in said partnership name.

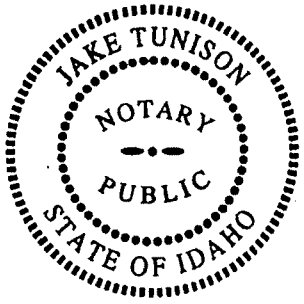
Notary public
Residing at:
Commission expires: May 17, 2010



State of Idaho
County of Canyon

On this 27th day of November, in the year 2004, before me, the undersigned, a notary public in and for said state, personally appeared Patricia Lou McKay Hambelton, personally known to me or proved to me on the basis of satisfactory evidence, to be one of the partners in the partnership of McKay Properties, L.P., and the partner who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he executed the same in said partnership name.

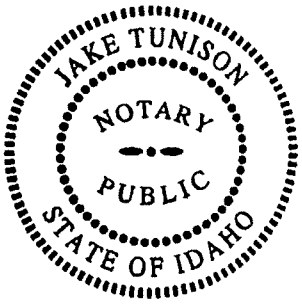
Notary public
Residing at:
Commission expires: May 17, 2010



State of Idaho
County of Canyon

On this 27th day of November, in the year 2004, before me, the undersigned, a notary public in and for said state, personally appeared William Dean McKay, personally known to me or proved to me on the basis of satisfactory evidence, to be one of the partners in the partnership of McKay Properties, L.P., and the partner who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he executed the same in said partnership name.

Notary public
Residing at:
Commission expires: May 17, 2010



ARROW
Land Surveying, Inc.

GPS, BOUNDARY,
TOPOGRAPHIC AND A.L.T.A.
SURVEYS
CONSTRUCTION STAKING
3D SCANNING

1121 E. State Street • Suite 105 • Eagle, Idaho 83616 • office: 1-208-939-7373 • fax: 1-208-939-7321

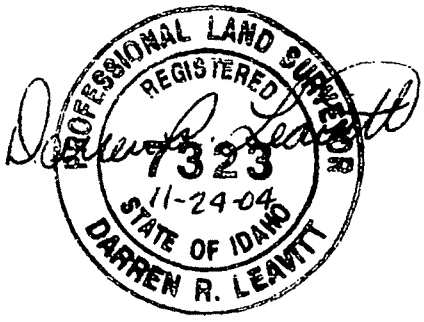
Job No. 2004924
11-24-04
D.R.L.

LEGAL DESCRIPTION
FOR THE
MC KAY PROPERTY

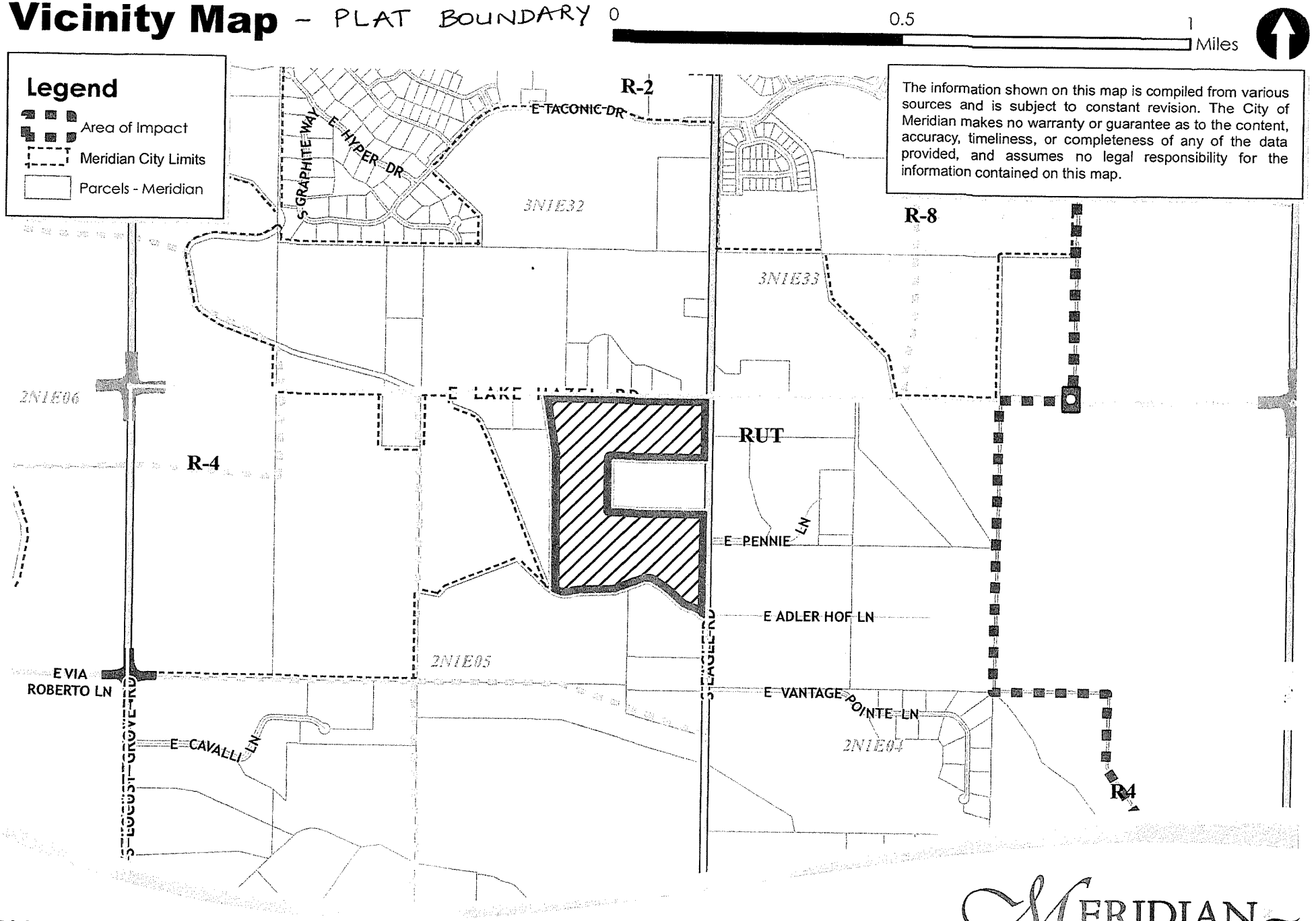
A portion of the Northeast ¼, of the Northeast ¼ of Section 5, Township 2 North, Range 1 East of the Boise Meridian described as follows:

Commencing at the Northeast corner of Section 5, Township 2 North, Range 1 East of the Boise Meridian and running thence South 585.38 feet along the East line of said section to the POINT OF BEGINNING; thence West 908.00 feet; thence South 480.00 feet; thence East 908.00 feet to said East line; thence North 480.00 feet to the point of beginning.

Parcel contains 10.00 acres and is subject to County Road right-of-way along the East side.



Vicinity Map - PLAT BOUNDARY



Print Date: 4/28/2017
User: sallen

AFFIDAVIT OF LEGAL INTEREST

STATE OF IDAHO)
)
COUNTY OF ADA)

I, **Corporation of the Presiding Bishop of The Church of Jesus Christ of Latter-day Saints, a Utah corporation sole.** (name), 50 E. North Temple Street, 12th floor (address), Salt Lake City (city), Utah (state)

being first duly sworn upon, oath, depose and say:

1. That I am the record owner of the property described on the attached, and I grant my permission to:

Jack Hammond (name), 3728 E. Vantage Point Lane, Meridian, ID 83642 (address)

to submit the accompanying application(s) pertaining to that property.

2. I agree to indemnify, defend and hold the City of Meridian and its employees harmless from any claim or liability resulting from any dispute as to the statements contained herein or as to the ownership of the property which is the subject of the application.

3. I hereby grant permission to City of Meridian staff to enter the subject property for the purpose of site inspections related to processing said application(s).

Dated this 9th day of February, 20 18

(Signature)

SUBSCRIBED AND SWORN to before me the day and year first above written.

(Notary Public for ~~Idaho~~) UTAH

LORI GUERRERO
NOTARY PUBLIC - STATE OF UTAH
My Comm. Exp. 06/09/2019
Commission # 682760

Residing at: Salt Lake

My Commission Expires: 6/9/19

CITY OF MERIDIAN
PRE-APPLICATION MEETING NOTES

Project/Subdivision Name: Mountain View Estates Date: 05/02/17 & 9/14/17
Applicant(s)/Contact(s): Jarron Langston, Richard Green, Stan McHutchison, Jack
City Staff: Sonya
Location: SWC of E. Lake Hazel Rd. & S. Eagle Rd. Size of Property: 50+/-
Comprehensive Plan FLUM Designation: LDR
Existing Use: Ag land Existing Zoning: RUT
Proposed Use: SFR (38 detached lots) Proposed Zoning: R-2/R-4
Surrounding Uses: Church, rural residential/ag uses
Street Buffer(s) and/or Land Use Buffer(s): 35' street buffer req. along portion of Lake Hazel designated as an entryway corridor – 25' along the remaining area and along S. Eagle Rd.
Open Space/Amenities/Pathways: Min. 5% qualified open space (if lots are over 16K s.f.) and 2 site amenities per UDC 11-3G-3; 10' multi-use pathway required along the south side of the Farr Lateral
Access/Stub Streets: Access is restricted to arterial streets per UDC 11-3A-3
Waterways/ Floodplain/Topography/Hazards: The Farr Lateral runs along south boundary and is required to be piped or improved as a water amenity or linear open space; Council approval of a waiver is required to leave it open as set forth in UDC 11-3A-6
History: None
Additional Meeting Notes: Comply with subdivision design & improvement standards listed in UDC 11-6C-3(culdesac, block length, etc)

- Annex with an R-4 zoning district consistent with LDR FLUM designation; max. density of 3 units per acre – Include church property in annexation boundary with their consent (memorandum of understanding with the City requires them to annex when the property is eligible for annexation, which it is with this application) – R-8 zoning for church – Property boundary adjustment requires both properties to be in the City
- Property boundary adjustment application to adjust boundary between site and church.
- Preliminary Plat to subdivide property
- Comply with dimensional standards of the R-4 district in UDC Table 11-2A-5, the standards listed in UDC 11-2A-3 and the block length standards listed in UDC 11-6C-3F
- Include the adjacent church property in the annexation boundary per the agreement with the City that provided water service to the church and required annexation when contiguous; also include in the plat if land is purchased from the church
- Provide pedestrian connectivity to the church from the proposed development

Note: A Traffic Impact Study (TIS) will be required by ACHD for large commercial projects and any residential development with over 100 units. To avoid unnecessary delays & expedite the hearing process, applicants are encouraged to submit the TIS to ACHD prior to submitting their application to the City. Not having ACHD comments and/or conditions on large projects may delay hearing(s) at the City. Please contact Mindy Wallace at 387-6178 or Christy Little at 387-6144 at ACHD for information in regard to a TIS, conditions, impact fees and process.

Other Agencies/Departments to Contact:

- ☐ Ada County Highway Dist. (ACHD)
- ☐ Idaho Transportation Dept. (ITD)
- ☐ Republic Services
- ☐ Central District Health Department
- ☐ Nampa Meridian Irrigation Dist. (NMID)
- ☐ Settler's Irrigation District
- ☐ Police Department
- ☐ Fire Department
- ☐ Public Works Department
- ☐ Building Department
- ☐ Parks Department , Jay
- ☐ Other: _____

Application(s) Required:

- ☐ Administrative Design Review
- ☐ Alternative Compliance
- X Annexation
- ☐ City Council Review
- ☐ Comprehensive Plan Amendment – Map
- ☐ Comprehensive Plan Amendment – Text
- ☐ Conditional Use Permit
- ☐ Conditional Use Permit Modification/Transfer
- ☐ Development Agreement Modification
- ☐ Final Plat
- ☐ Final Plat Modification
- ☐ Planned Unit Development
- X Preliminary Plat
- ☐ Private Street
- ☐ Rezone
- ☐ Short Plat
- ☐ Time Extension – Council
- ☐ UDC Text Amendment
- ☐ Vacation
- ☐ Variance
- X **Property Boundary Adjust.**

Notes: 1) Applicants are required to hold a neighborhood meeting in accord with UDC 11-5A-5C prior to submittal of an application requiring a public hearing (except for a vacation or short plat); and 2) All applicants for permits requiring a public hearing shall post the site with a public hearing notice in accord with UDC 11-5A-5D.3 (except for UDC text amendments, Comp Plan text amendments, and vacations). The information provided during this meeting is based on current UDC requirements and the Comprehensive Plan. Any subsequent changes to the UDC and/or Comp Plan may affect your submittal and/or application. This pre-application meeting shall be valid for four (4) months.

MERIDIAN IDAHO
Community Development Department

Development Services Division
Meridian City Hall, Suite 102
33 E. Broadway Avenue
Meridian, Idaho 83642
(208)887-2211

PRE-APPLICATION MEETING NOTES

Date: May 9, 2017

Project/Subdivision Name: Mountain View Estates

Applicant(s)/Contact(s): Jarron Langston, Stan McHutchison, Rich Green

Community Development Staff: Bruce F.

Sanitary Sewer Service: This parcel will be served from the south branch of the Ten Mile Trunk that currently is in Masine Meadows north of E. Amity Road.

Mapping Provided: ☒ Y ☐ N

Domestic Water Service: City capital project will bring sewer down Locust Grove and up Lake Hazel to Eagle Road. This project is scheduled for completion in FY 2018.

Mapping Provided: ☒ Y ☐ N

Reuse Water Service: NA

Mapping Provided: ☐ Y ☐ N

Waterways/ Floodplain/Topography/Hazards: Unknown

Mapping Provided: ☐ Y ☐ N

Gravity/Pressurized Irrigation: Unknown District

Street Lighting: Street lighting memo provided Reqs. Provided: ☒ Y ☐ N

The City of Meridian's Improvement Standards for Street Lighting can be found online at: http://www.meridiancity.org/public_works.aspx?id=272

Additional Meeting Notes: LDS church needs to be included in the annexation.

To: Sonya Allen
Subject: Re: Parcel S1405110470 - 48 Acres SW Corner of Eagle and Lake Hazel

Thanks for the email! The meeting was scheduled and attended by you. IT was May 9th at 9 am.

I attached our original proposal. However we do have a strong interest to pursue if possible the 1 acre lot sub option if that is something the city of Meridian would approve?

This is the email I sent with questions in respect to doing a 1 acre sub:

I know in our pre-application meeting we were told the Comp plan would be an R4 zoning. Could we:

- Do R2 Zone Yes

- Annex into the city Yes

- We would propose 1 acre lots on well and septic. Public Works would be open to this concept, however the Meridian City Council would have the final say on the appropriateness of such..

- We would pay for all the infrastructure within the sub for city water and sewer connection when it came available. (Would could tie this to proximity and once withing a quarter mile we would bring it the remaining distance. The development would need to connect to the city water system with this development since it currently exists in S. Eagle Road to the LDS Church (See Attached Map). It would be the position of the Public Works Department, that once sewer is brought to the point indicated by the green arrow on the attached map, you would then be required to bring it down S. Eagle Road the remaining distance. Both utilities would need to be installed along the full distance of the S. Eagle Road frontage.

- The Lots would be Deed Restricted to be forced to connect to city services and abandon well and septic when available. - We would have this Deed Restriction written into the Development Agreement. We would support this concept.

- This would ensure that every buyer was told in full disclosure that when services were connected that they would have to connect. As the developer we would also bond for those improvement and when they were available bring them in. We would design the plat to have several Connection points both on Lake Hazel or Eagle Rd depending on where the sewer and water finally comes from. We would support the concept of services being converted over to the City utilities at no cost to the lot owners.

We feel there is a large demand as evident in this meeting for this type of product and feel we could price these acre +/- lots at a point that would still make the project profitable for us.

The Keep Neighborhood Meeting Sign-In Sheet

November 14th 2017 **6:00 PM MST** **2361 S Titanium Pl Ste 100**

Meridian ID 83642

Name – Print	Address:	Signature
John & Sherrie Ewing	2934 E Lake Hazel Mer	Sherrie Ewing
BRIAN & MARY AFFLECK	6519 S. Raap Ranch Ln.	
Gaven Kills	1910 Sonny Ridge Rd. Nampa	
ADAM ROE	7085 S Eagle Rd	
Rosa Roe	7085 S. Eagle Rd Meridian	Rosa Roe

COMMITMENT OF PROPERTY POSTING

Per Unified Development Code (UDC) 11-5A-5D, the applicant for all applications requiring a public hearing (except for a UDC text amendment, a Comprehensive Plan text amendment and/or vacations) shall post the subject property not less than ten (10) days prior to the hearing. The applicant shall post a copy of the public hearing notice of the application(s) on the property under consideration.

The applicant shall submit proof of property posting in the form of a notarized statement and a photograph of the posting to the City no later than seven (7) days prior to the public hearing attesting to where and when the sign(s) were posted. Unless such Certificate is received by the required date, the hearing will be continued.

The sign(s) shall be removed no later than three (3) days after the end of the public hearing for which the sign(s) had been posted.

I am aware of the above requirements and will comply with the posting requirements as stated in UDC 11-5A-5.

Applicant/agent signature

12/4/17
Date

MERIDIAN
IDAHO
Community Development
Department

Meridian City Hall, Suite 102
33 E. Broadway Avenue
Meridian, Idaho 83642
208.887.2211

Parcel Verification

Date: **12/1/17**

The parcel information below has been researched and verified as correct by the City of Meridian Community Development Department.

Project Name:	**Keep Subdivision**
Parcel Number:	**S1405110470**
Acres:	**48.134**
T/R/S	**2N 1E 05**
Property Owner:	**JHP, LLC** **3728 E. Vantage Pointe Ln.** **Meridian, ID 83642**

From: Sub Name Mail <subnamemail@adaweb.net>
To: Stan McHutchison <stlomc@aol.com>; Jarron Langston <jarronlangston@gmail.com>; Richard Gray <rgray.cls@gmail.com>
Subject: RE: Subdivision Name Reservation - Keep Subdivision
Date: Wed, Nov 1, 2017 9:12 am

Richard Gray, Compass Land Surveying
Stan McHutchinson
Jarron Langston

RE: Subdivision Name Reservation: **KEEP SUBDIVISION**

At your request, I will reserve the name **Keep Subdivision** for your project. I can honor this reservation only as long as your project is in the approval process. Final approval can only take place when the final plat is recorded.

This reservation is available for the project as long as it is in the approval process unless the project is terminated by the client, the jurisdiction or the conditions of approval have not been met, in which case the name can be re-used by someone else.

Sincerely,

Dale P. Meyers, PLS, CFedS
Associate County Surveyor

Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7938 *office*

(208) 287-7909 *fax*

From: Stan McHutchison [mailto:stlomc@aol.com]
Sent: Wednesday, October 25, 2017 11:34 PM
To: Sub Name Mail
Cc: jarronlangston@gmail.com; rgray.cls@gmail.com; rp_green@hotmail.com; hammondjackl@gmail.com
Subject: [EXTERNAL] Subdivision Name Reservation

Please reserve the name "The Keep Subdivision". The developer is Jerron Langston, 9563 W. Harness Dr., Boise, Id. 83709. The project is located at the southwest corner of the Eagle Road/Lake Hazel Road intersection. It's in the NE 4 of Section 5, T2N, R1E. The surveyor is Richard Gray, Compass Land Surveying.

Attached Message

From	Jarron Langston <jarronlangston@gmail.com>
To	Stan Mchutchison <stlomc@aol.com>
Cc	Sub Name Mail <subnamemail@adaweb.net>
Subject	Fwd: RE: [EXTERNAL] Re: Proposed Subdivision Name - Parcel S1405110470
Date	Thu, 26 Oct 2017 13:08:17 +0000

Stan,

See below emails concerning The Keep Subdivision name.

From: Christy Little <Clittle@achdidaho.org>
To: 'Stan McHutchison' <stlomc@aol.com>
Subject: RE: Keep Sub.
Date: Fri, Apr 13, 2018 8:24 am

That's correct. A TIS will not be required for 59 lots.
Christy

From: Stan McHutchison [mailto:stlomc@aol.com]
Sent: Friday, April 13, 2018 7:01 AM
To: Christy Little
Subject: Re: Keep Sub.

We revised the application to contain 59 residential lots with a half acre minimum. Our understanding is that a TIS is still not required. Is this correct?

-----Original Message-----
From: Christy Little <Clittle@achdidaho.org>
To: 'Stan McHutchison' <stlomc@aol.com>
Sent: Mon, Dec 4, 2017 11:20 am
Subject: RE: Keep Sub.

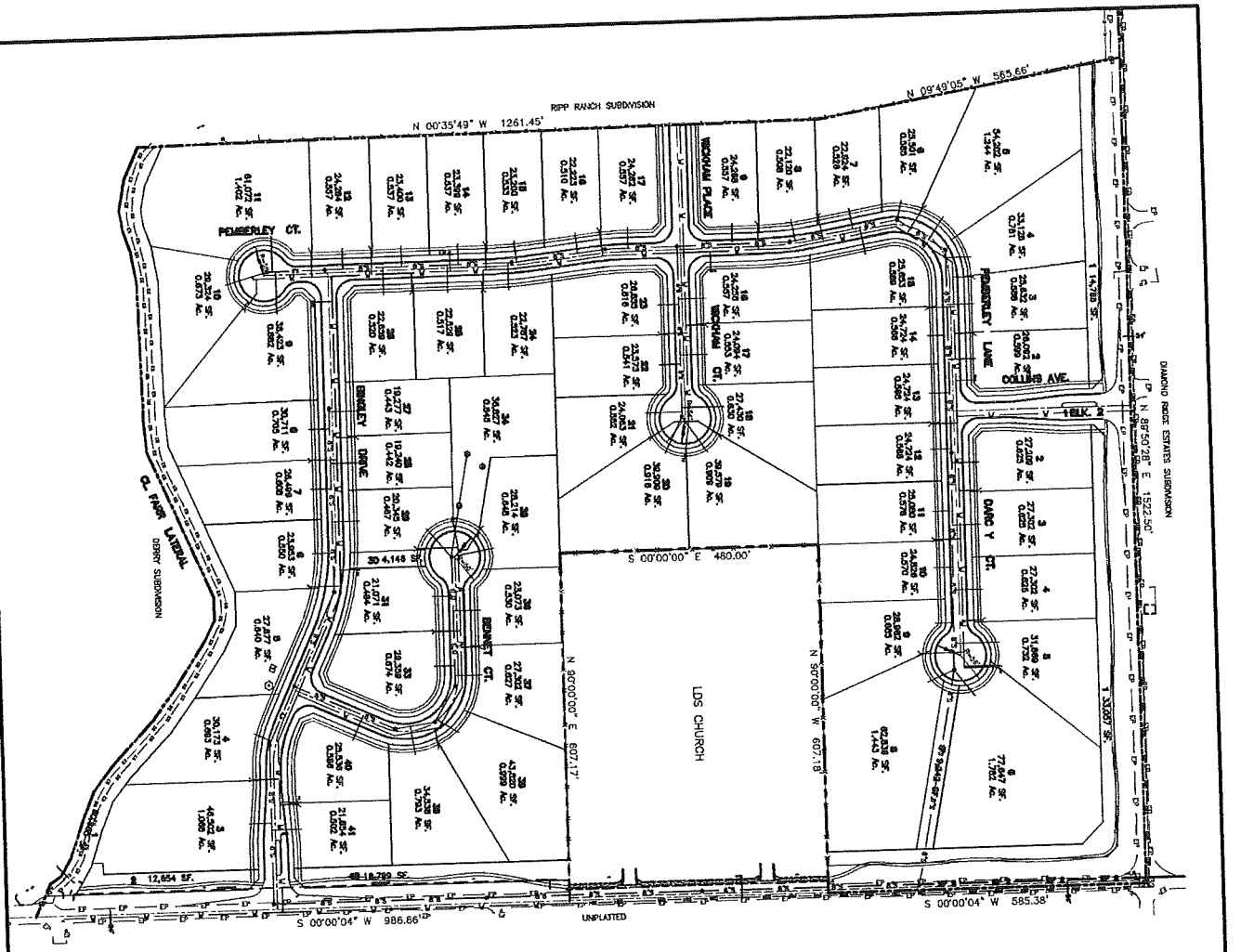
ACHD is not requiring a TIS with this application.
Christy

From: Stan McHutchison [mailto:stlomc@aol.com]
Sent: Monday, December 04, 2017 11:19 AM
To: Christy Little
Subject: Keep Sub.

I'm trying to find out if we need to do a traffic study for a new subdivision we're proposing the the southwest corner of Lake Hazel and Eagle. The sub has 53.5 acres in it and only 38 lots. The minimum lot size is 1 acre.

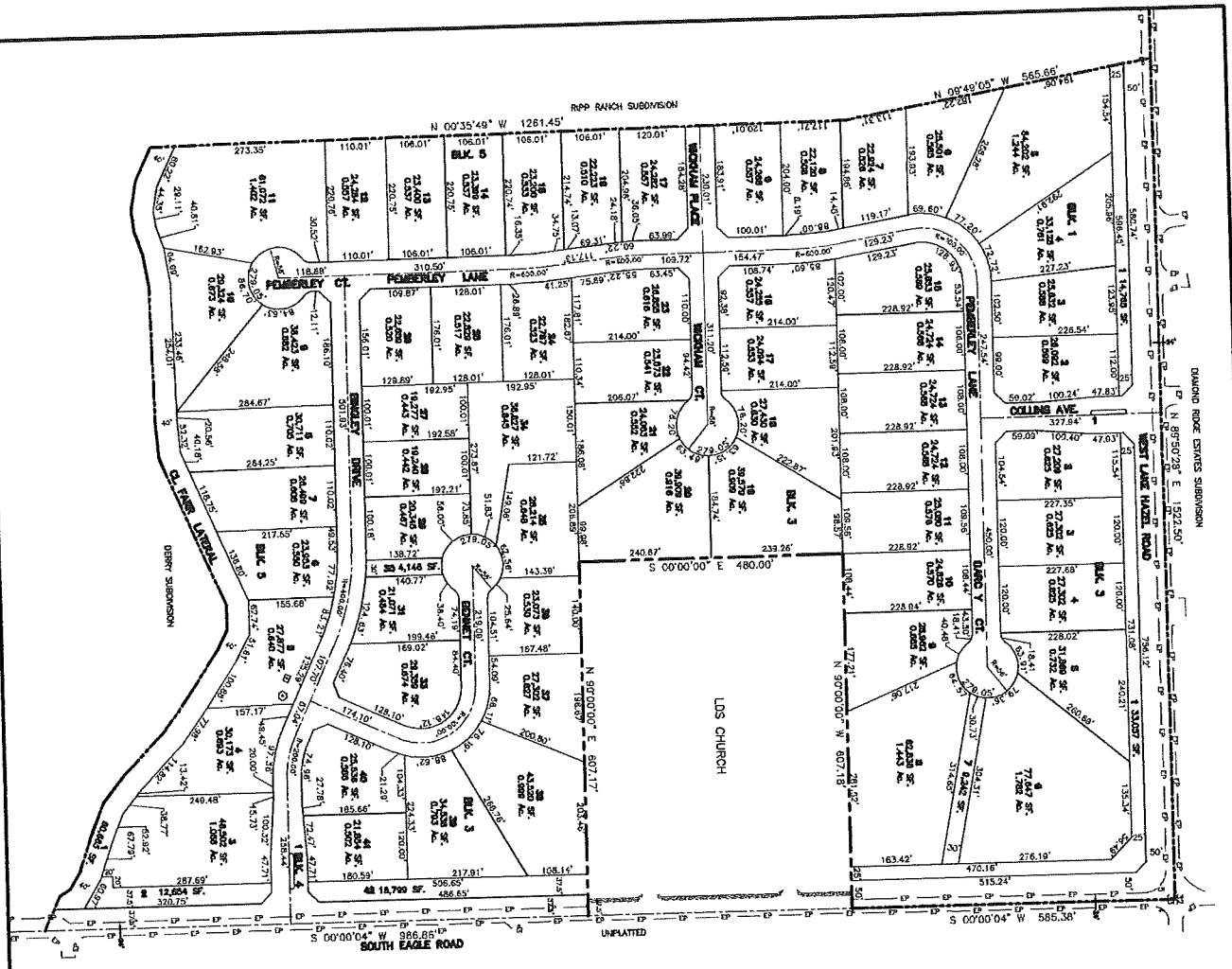
Thanks for your help.

Stan



CONTACT/DESIGNER: RICHARD L. GREEN 7653 W. SUNDANCE DR. BOISE ID. 83709 (208) 562-4022	SURVEYOR: RICHARD GRAY COMPASS LAND SURVEYING 3618 E. Newby Street Nampa, ID 83687 (208) 442-0116 (208) 327-2106 Fax	PRELIMINARY PLAT KEEP SUBDIVISION BEING A PORTION OF THE NE 1/4 OF SECTION 5, T.2N., R.1E., B.M. CITY OF MERIDIAN, ADA COUNTY ID	DEVELOPER: JACK L. HAMMOND 3726 E VANTAGE POINT LN. MERIDIAN, IDAHO 83642 (208) 898-9098	CIVIL ENGINEER: STAN McHUTCHISON 2818 N. MULE DEER WAY MERIDIAN, IDAHO 83646 (208) 484-9781

DATE	DESIGNED BY:	DRAWN BY:	CHECKED BY:
3/28/18	RLG	RLG	RAG
SHEET 1 OF 1	DRAWING NO. PLAT	JOB NO. 18-017	



LEGEND

- SUBDIVISION BOUNDARY
- PROPOSED LOT LINE
- PROPOSED CENTERLINE
- PROPOSED 8" WATER
- EX-GRAVEL DRIVEWAY
- EX-WATERLINE & CENTERLINE
- PROPOSED GRAVITY IRRIGATION LINE
- MJR 5' CONTOUR LINES
- MNR 1' CONTOUR LINES
- EXISTING CANAL RIGHT-OF-WAY
- EXISTING EDGE OF PAVEMENT
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- BIKE RACK
- PROPOSED 12' GAZEBO W/ PICNIC TABLE
- 10'X12' COVERED BIKE RACK
- LOT NUMBER

DEVELOPMENT FEATURES:

ACREAGE
TOTAL PARCEL 83.50 ACRES
BUILDABLE LOTS 59
COMMON LOTS 10
PUBLIC STREET
LANDSCAPED LOTS TOTAL 73,774 SQ. FT. (1.82 Ac.)
5-COMMON LANDSCAPE LOTS
4-COMMON LANDSCAPE LOTS
PARKWAYS 65,510 SQ. FT. (1.50) Ac.
1-COMMON LOT ALONG WATERWAY
60,865 SF. FT. (1.39 Ac.)
LANDSCAPED LOTS & PARKWAYS OPEN SPACE TOTAL AREA 5.68 Ac=(10.35%)

ZONING
EXISTING R-1
PROPOSED R-8
MINIMUM HOUSE SIZE 1,600 sf.

SEWER DISPOSAL
CITY OF MERIDIAN SEWER

WATER SUPPLY
CITY OF MERIDIAN WATER

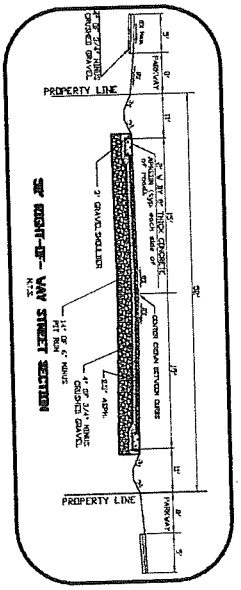
CITY
MERIDIAN CITY

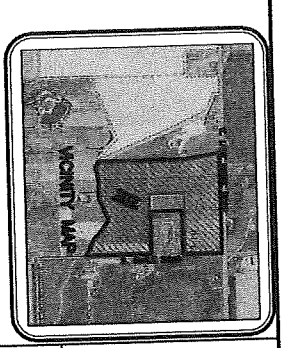
IRRIGATION DISTRICT
NEW YORK

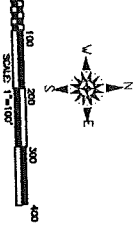
FLOOD PLANE
PARCEL IS NOT IN THE FLOOD PLANE.

NOTES

1.) ALL LOTS LINES COMMON TO THE PUBLIC RIGHT-OF-WAY HAVE A 10' PUBLIC UTILITY AND MERIDIAN CITY STREET LIGHT EASEMENT.
2.) A 10' PUBLIC UTILITY, IRRIGATION AND DRAINAGE EASEMENT IS ADJACENT TO THE EXTERIOR BOUNDARY.
3.) ALL SIDE LOT LINES TO HAVE A 5' DRAINAGE & IRRIGATION EASEMENT ON EACH SIDE OF THE LOT LINE.
4.) SEWER SERVICES SHALL BE PROVIDED TO EACH BUILDABLE LOT THROUGH MERIDIAN CITY SEWER LINE LOCATED IN THE STREETS.
5.) MERIDIAN CITY WATER MAIN LINES SHALL BE LOCATED IN THE STREETS.
6.) STORM DRAIN WATER FROM STREETS SHALL BE ROUTED TO COMMON LOT 1 BLK 4 FOR PERCOLATION.
7.) THIS SUBDIVISION IS SUBJECT TO COMPLIANCE WITH MERIDIAN CITY CODE SECTION 31-3805 CONCERNING IRRIGATION WATER.
8.) COMMON LOT 7 BLOCK 4 SHALL HAVE A 30' WIDE SEWER LINE EASEMENT AND SHALL BE DEDICATED TO MERIDIAN CITY. SHALL BE PROVIDED TO THIS SUBDIVISION BY HOME OWNER ASSOC.
9.) COMMON LOTS 1 BLOCK 4 SHALL BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOC. LANDSCAPED AND MAINTAINED BY THE HOME OWNERS ASSOC.
10.) SETBACKS SHALL BE AS OUTLINED IN THE SUBDIVISION COVE'S AND COMPLY WITH THE CITY OF MERIDIAN BUILDING CODES.
11.) STREET SECTION TO BE AN ACHD STANDARD 52' RIGHT-OF-WAY AND 30' STREET SECTION WITH 2' CONCRETE RIBBON CURB.
12.) EXISTING IRRIGATION DITCHES ON THE INTERIOR OF THE PARCEL SHALL BE ABANDONED ALONG WITH THE EASEMENT AS SHOWN.
13.) ALL FENCES ALONG THE BOUNDARY SHALL REMAIN.
14.) 10 COMMON LOTS: LOT 1 BLK.1, LOT 1 BLK.2, LOTS 1,7,35,42 BLK.3, LOT 1 BLK.4 & LOTS 1,2,5 BLK.5.







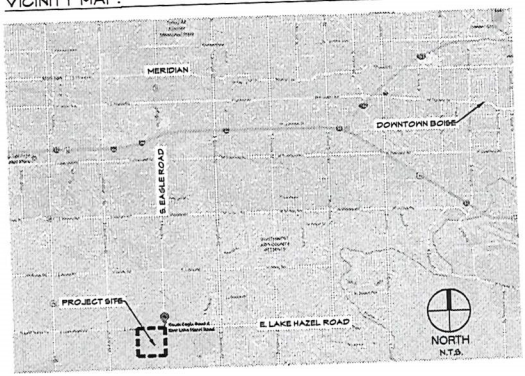
CONTACT/DESIGNER: RICHARD L. GREEN 7663 W. SUNDANCE DR. BOISE ID. 83709 (208) 362-4022	SURVEYOR: RICHARD GRAY COMPASS LAND SURVEYING 3218 E. Newby Street Nampa, ID 83687 (208) 442-0115 (208) 327-2106 Fax	PRELIMINARY PLAT KEEP SUBDIVISION BEING A PORTION OF THE NE 1/4 OF SECTION 5, T.2N., R.1E., B.M. CITY OF MERIDIAN, ADA COUNTY ID	DEVELOPER/OWNER: JACK L. HAMMOND 3728 E VANTAGE POINT LN. MERIDIAN, IDAHO 83642 (208) 696-9096	CIVIL ENGINEER: STAN McHUTCHISON PE 2816 N. MULE DEER WAY MERIDIAN, IDAHO 83646 (208) 484-9781

DATE	DESIGNED BY:	DRAWN BY:	CHECKED BY:
3/28/18	RLG	RLG	RAG
SHEET 1 OF 1	DRAWING NO. PLAT	JOB NO. 16-017	

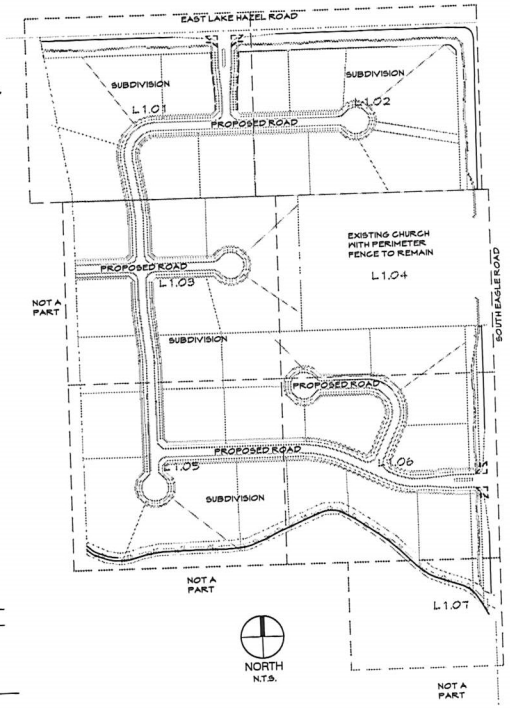
LANDSCAPE NOTES:

1. REGULATIONS & STANDARDS
   - 1.1. All contractor work shall be conducted in accordance with ISPWC (Idaho Standard Public Works Construction), 2017; and City of Meridian, ID codes, standards and state and local regulations.
2. EXISTING CONDITIONS
   - 2.1. All utilities shall be located prior to construction and protected. Any damage to structures, utilities or concrete will be replaced at contractor's expense.
   - 2.2. The site has many existing improvements such as underground utilities, curb and gutter, light poles and sidewalks.
   - 2.3. See Engineer's plans for information about existing features; all drainage pipes and locations. Protect and retain drainage at all times.
3. GRADING & SITE PREPARATION
   - 3.1. Prepare finish grades for planting by grubbing and removing weeds. If necessary apply Round-up (or equivalent herbicide), using a certified applicator. Remove rocks and other materials over 2".
   - 3.2. All gravel overprep to be removed and disposed of off site.
   - 3.3. Finish grade to be smooth transition to allow for entire site to be a natural flowing space.
   - 3.4. Fine grade lawn areas to elevations set by Engineer's plans with positive drainage away from structures.
     - 3.4.1. Refer to Engineer's plans for grading information & for all drainage pipes and locations. Protect and retain drainage at all times.
   - 3.5. No pooling or standing water will be accepted per industry standards.
4. SOILS
   - 4.1. All planter beds to receive a minimum of 18" depth of screened topsoil. Spread, compact, and fine grade to smooth and uniform grade 2" below adjacent surfaces.
   - 4.2. All lawn areas to receive a minimum of 12" depth of screened topsoil. Spread, compact, and fine grade topsoil to a smooth uniform grade 1" below adjacent surfaces.
   - 4.3. Reuse of existing topsoil that has been stockpiled on site is permitted if:
     - 4.3.1. Topsoil is tested and analyzed to ensure a proper growing medium. Provide additional amendments as determined by soil tests. And
     - 4.3.2. Topsoil is to be loose, friable sandy loam that is clean and free of toxic materials, noxious weeds, weed seeds, rocks, grass or other foreign materials.
     - 4.3.3. Topsoil should have a pH of 6.5 to 8.
     - 4.3.4. If on site topsoil does not meet these minimum standards contractor is responsible for providing approved imported topsoil or improving onsite topsoil per the approval of the project manager.
   - 4.4. If imported topsoil is used it must be from a local source and be screened free of any debris or foreign matter. Topsoil must not contain rocks, sticks, lumps, or toxic matter.
   - 4.5. Smooth, compact, and fine grade topsoil in lawn areas to smooth and uniform grade .5" below adjacent surfaces.
   - 4.6. Prepare finish grade of topsoil to elevations set by Engineer's plans with positive drainage away from structures. Refer to Civil Engineer's plans for grading information.
   - 4.7. Amend all new plantings with 2 parts topsoil and 1 part compost.
5. LAWN AREAS
   - 5.1. Sodded, to be tall turf-type fescue or approved equal per approved by owner, regionally grown.
   - 5.2. Lay sod within 24 hrs of harvesting and form a solid mass with offset, tightly fitted joints on even grades.
     - 5.2.1. All lawn areas to have cut edge.
6. PLANTS
   - 6.1. All plant material shall be installed per industry standards.
   - 6.2. All plant material shall meet or exceed the minimum federal standards as regulated by ANSI Z60.1, American Standard for Nursery Stock. Plants not meeting these standards for quality, or plants determined to be unhealthy by Owner's representative, will be rejected.
   - 6.3. All trees to be installed per detail 1/L1.00. Trees and shrubs over 36" shall not be planted within clear vision triangles per city code.
   - 6.4. Fertilize all trees and shrubs with 'agriform' planting tablets or approved equal. Apply per manufacturers recommendations.
7. IRRIGATION
   - 7.1. Irrigation system shall be design build and built to the following specifications:
     - 7.1.1. Adhere to city codes when connecting to city water.
     - 7.1.2. All irrigation material to be new with manufacturers' warranty fully intact.
     - 7.1.3. Install outdoor rated controller to be located as indicated on plan; coordinate with project manager and site electrician on exact location.
       - 7.1.3.1. Controller to have On/Off rain switch or rain shut off device that does not alter program. Install in steel lock box with (2) keys.
     - 7.1.4. All remote control valves (including master control valve) to have flow control device.
     - 7.1.5. Irrigation system piping to be minimum class 200 PVC or approved equal, sleeves to be double the size of pipes located within, all wires to be contained in separate sleeves 1-1/2" dia min.
     - 7.1.6. Use common trenching where possible.
     - 7.1.7. All PVC located under hardscapes to be schedule 40 PVC with same req's as above.
     - 7.1.8. All mainline pipe and wires to be buried a minimum of 18" and all lateral piping to be buried a minimum of 12" below grade.
     - 7.1.9. All wires to be 14 gauge direct bury wire at a minimum. Size wire for correct voltage loss.
     - 7.1.10. Supply a minimum of (2) spare wires to furthest valves from controller in all directions.
     - 7.1.11. Sprinkler heads shall have amatched precipitation within each control circuit. Velocities shall not exceed 5 feet per second.
     - 7.1.12. Contractor is responsible complying with all codes and paying all permits necessary.
     - 7.1.13. Sprinkler heads shall have matched precipitation within each control circuit. Velocities shall not exceed 5 feet per second.
     - 7.1.14. Water schedule to be provided at a min of 80% evapotranspiration as determined by the local ET.
     - 7.1.15. 8.1.14. Install all irrigation per irrigation drawings. utilize material specified or approved equal.
8. CONTRACTOR RESPONSIBILITIES
   - 8.1. Estimated quantities are shown for general reference only. Contractor shall be responsible for all quantity estimates.
   - 8.2. Refer to note 2.1 regarding damages to existing utilities & permitting note in irrigation section.
   - 8.3. All plant material and workmanship shall be guaranteed for a period of one year beginning at the date of Acceptance by Owner. Replace all dead or unhealthy plant material immediately with same type and size at no cost to Owner.
   - 8.4. Landscape contractor to turn in as built drawings at the end of project. Substantial completion will not be granted until 2 copies @ 1"=20' scale are turned in and approved by owner's representative.
9. In the event of a discrepancy, notify the General Contractor.

VICINITY MAP:



LANDSCAPE OVERVIEW:



LANDSCAPE REQUIREMENTS:

REQUIREMENTS PER CITY OF MERIDIAN ZONING CODE 11-03

BUFFER REQUIREMENTS:
- 1 TREE PER 35 LF

STREET	LINEAR FEET	REQ'D TREES	PROV'D TREES
S. EALGE RD.	1510	43	43
E. LAKE HAZEL RD.	1462	42	42

COMMON OPEN SPACE REQUIREMENTS:
- 1 TREE PER 8,000 SF

COMMON SPACE (SF)	REQ'D TREES	PRV'D TREES
NORTHEAST EASEMENT 9242 SF	1	OF

- TREE COUNT REDUCTION DUE TO SEWER EASEMENT AND LACK OF PLANTING AREA.

MINIMUM PLANT SIZES:
- ORNAMENTAL: 2" CALIPER
- SHADE TREES: 2" CALIPER
- CONIFER TREES: 6'-7'HIGH
- WOODY SHRUBS: 2 GAL

PLANT BIODIVERSITY:

NUMBER OF TREES REQUIRED	MINIMUM NUMBER OF SPECIES REQUIRED
5-10	2
11-30	3
31-50	4
50+	5

ADDITIONAL NOTES:
- TREES SHALL NOT BE LOCATED WITHIN THE 10' CLEAR ZONE OF ALL ACHD STORM DRAIN PIPE, STRUCTURES, OR FACILITIES
- LANDSCAPE ELEMENTS SHALL NOT VIOLATE CLEAR VISION TRIANGLES

PLANT SCHEDULE

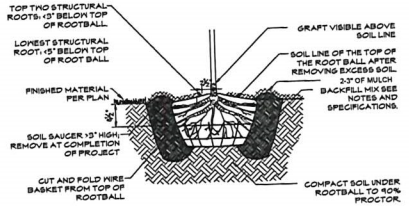
TREES	CODE	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE		QTY
	ACE GR2	Acer platanoides 'Crimson King' / Crimson King Maple CLASS II 35' TALL & 25' WIDE	B & B		6'-0" H		56
	PIC LA2	Picea pungens 'Layered' / Layered Blue Spruce	B & B		6'-0" H		32
	PYR PEA	Pyrus calleryana 'Redspire' / Redspire Callery Pear CLASS I	B & B	2"Cal			112
	QUE PAL	Quercus palustris / Pin Oak	B & B	2"Cal			71
	ZEL WIR	Zelkova serrata 'Wireless' / Wireless Zelkova	B&B	2"Cal			53

LEGEND:

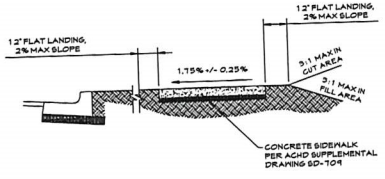
- TALL TURF-TYPE FESCUE OR APPROVED EQUAL
- CLOSED VISION FENCE ALONG DEVELOPMENT PERIMETER, INCLUDING LOT ADJACENT TO CANAL, TO BE DETERMINED BY DEVELOPER
- OPEN VISION FENCE ALONG COMMON LOT PERIMETER, TO BE DETERMINED BY DEVELOPER
- SIGN, TBD.

NOTE:
REFERENCE ACHD SUPPLEMENTAL DRAWING SD-709 & CIVIL DRAWINGS

NOTES:
1. DO NOT DAMAGE OR CUT LEADER
2. DO NOT DISTURB ROOT OR DAMAGE ROOT BALL WHEN INSTALLING TREE OR TREE STAKES.
3. TREE STAKING SHALL BE AT THE DISCRETION OF CONTRACTOR, HOWEVER ANY TREES DISTURBED FROM PLUMB DURING THE PLANT WARRANTEE PERIOD WILL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
4. WATER PLANTS THOROUGHLY IMMEDIATELY AFTER INSTILLATION.
5. REMOVE ALL BURLAP, TWINE, ROPE, OR MATERIAL FROM THE TOP ⅓ OF THE ROOTBALL.
6. 4' DIAMETER PLANTER BED/MULCH RING AROUND THE TRUNK OF THE TREE. 3" OF MULCH MIN. DO NOT PLACE MULCH WITHIN 2" OF TRUNK OF TREE.



1 BALL AND BURLAP TREE PLANTING
3/4" = 1'-0"
329343.33-04



4 CONCRETE SIDEWALKS ADJ LANDING- 12"
3/8" = 1'-0"
033301-01

REFERENCE NOTES SCHEDULE	
CODE	DESCRIPTION
1	BOUNDARY
2	PROPOSED SINGLE FAMILY LOT, TYP.
3	EXISTING CHURCH TO REMAIN, NOT A PART.
4	COMMON SPACE
5	PROPOSED STORM STRUCTURE. NO TREES WITH 10', TYP. TBD
6	LOCATE ALL PARKWAY TREES 5' OFF SIDEWALK AND 35' O.C., TY.
7	PROPOSED SIDEWALK, REFRENCE CIVIL, TYP.
8	PROPOSED FIRE HYDRANT, NO TREES WITH 10', TYP. TBD
9	PROPOSED ROAD, REFERENCE CIVIL.
10	CLEAR VISION TRIANGLE, KEEP ALL VEGETATION OVER 36" FREE AND CLEAR.
11	NOT A PART.

PROJECT INFORMATION:

MERIDIAN, IDAHO
PROJECT SIZE: 53.50 ACRES
TOTAL LOTS: 138 47
TOTAL BUILDABLE LOTS:

FENCING:
- ALL FENCING SHALL BE PROVIDED BY BUILDER
- ALL OPEN VISION FENCING SHALL NOT EXCEED 6' IN HEIGHT
- ALL CLOSED VISION FENCING SHALL NOT EXCEED 4' IN HEIGHT
  - ** AN ADDITIONAL 2' OF CLEAR, OPEN FENCE MAY BE ADDED TO THE 4' CLOSED VISION FENCE TO CREATE A 6' MIXED-VISION FENCE
- CHAINLINK FENCING OF ANY TYPE IS PROHIBITED

STACK ROCK GROUP

STACK ROCK GROUP, INC.
LANDSCAPE ARCHITECTURE/ MASTER PLANNING

MILLET C HONARD, PLA
OFFICE: (208) 345.0500
EMAIL: millet@stackrockgroup.com
www.stackrockgroup.com

PRELIMINARY

STATE OF IDAHO — MILLET C. HONARD — LA-16733 — 11.21.17 — REGISTERED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MRK	DATE	DESCRIPTION
1	--	--

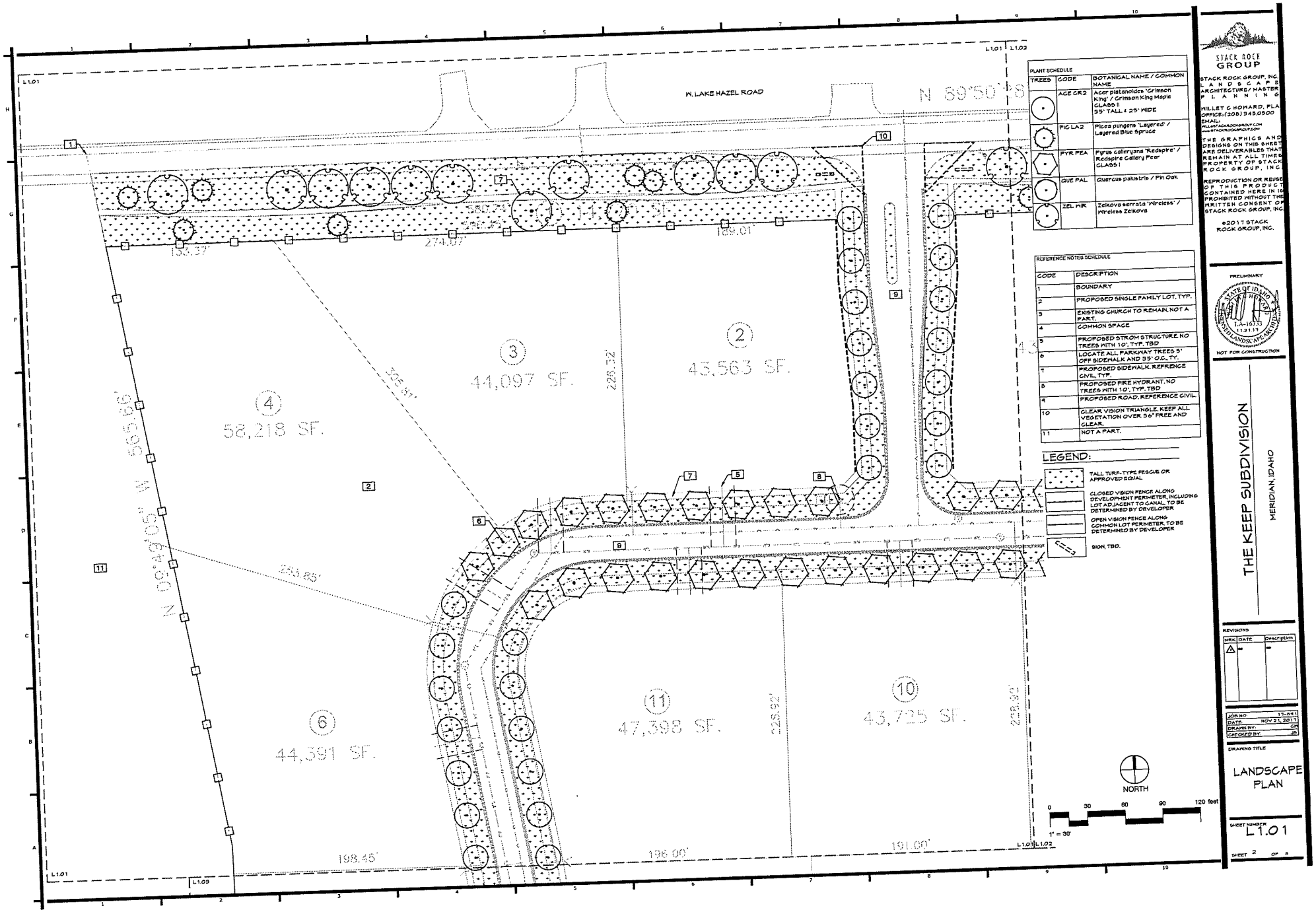
JOB NO.	17-841
DATE:	NOV 21, 2017
DRAWN BY:	CM
CHECKED BY:	JR

DRAWING TITLE

LANDSCAPE OVERVIEW

SHEET NUMBER L1.00

SHEET 1 OF 6



PLANT SCHEDULE		
TREES	CODE	BOTANICAL NAME / COMMON NAME
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	PIC LA2	Picea pungens 'Layered' / Layered Blue Spruce
	PYR PEA	Pyrus calleryana 'Redspire' / Redspire Callery Pear CLASS I
	QUE PAL	Quercus palustris / Pin Oak
	ZEL HIR	Zelkova serrata 'Wireless' / Wireless Zelkova

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LANDSCAPE ARCHITECTURE/ MASTER PLANNING

MILLET C HOWARD, PLA
OFFICE: (208) 345.0900
EMAIL:

PRELIMINARY

STATE OF IDAHO — MILLET C. HOWARD — LA-16033 — 113117 — LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MRK	DATE	Description
1		

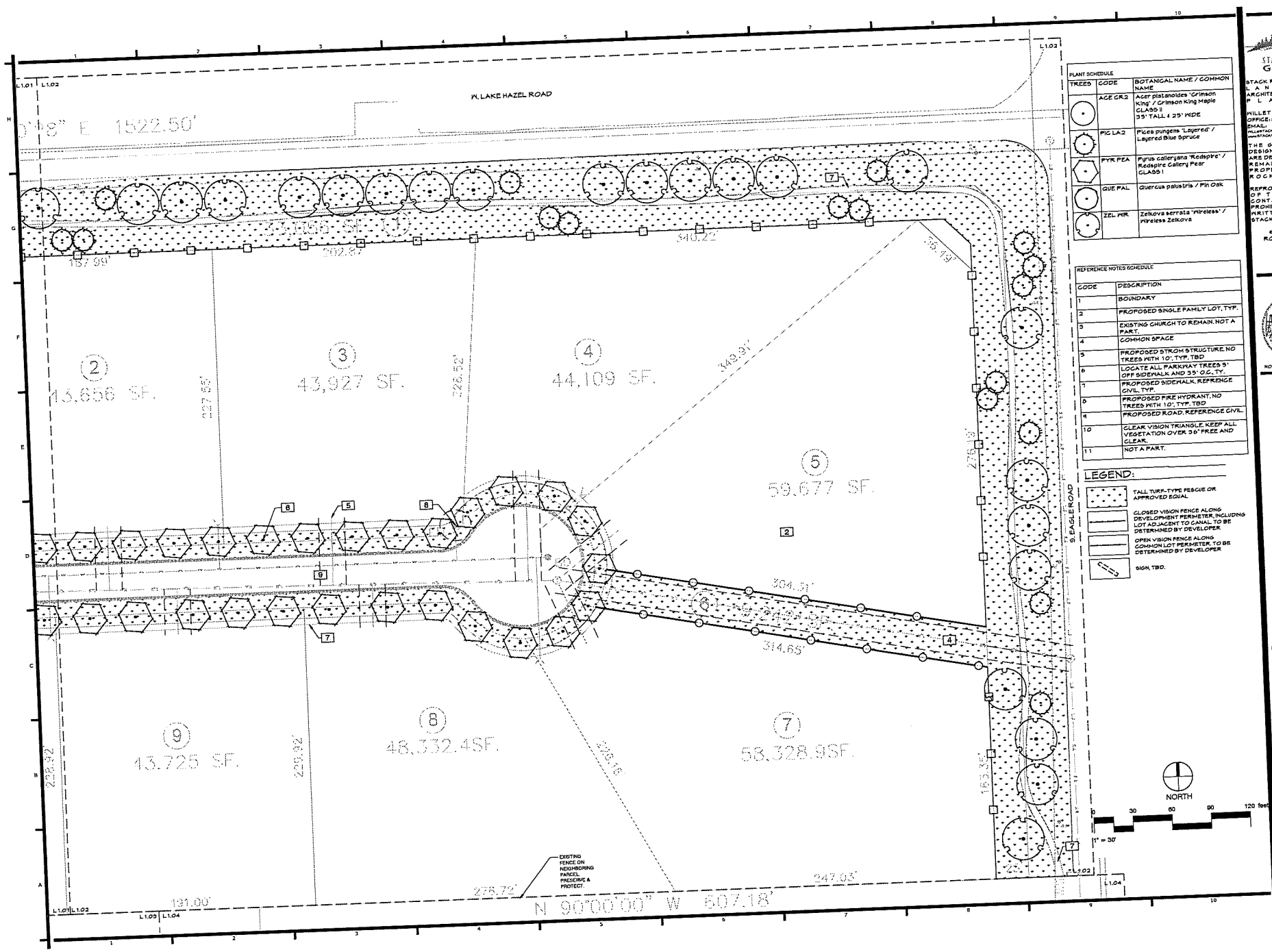
JOB NO.	17-041
DATE	NOV 21, 2017
DRAWN BY:	CG
CHECKED BY:	JB

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.01

SHEET 2 OF 8



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PRELIMINARY

STATE OF IDAHO — MILLET G. HOWARD — LA-16133 — 11.21.17 — REGISTERED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MARK	DATE	Description
1	-	-

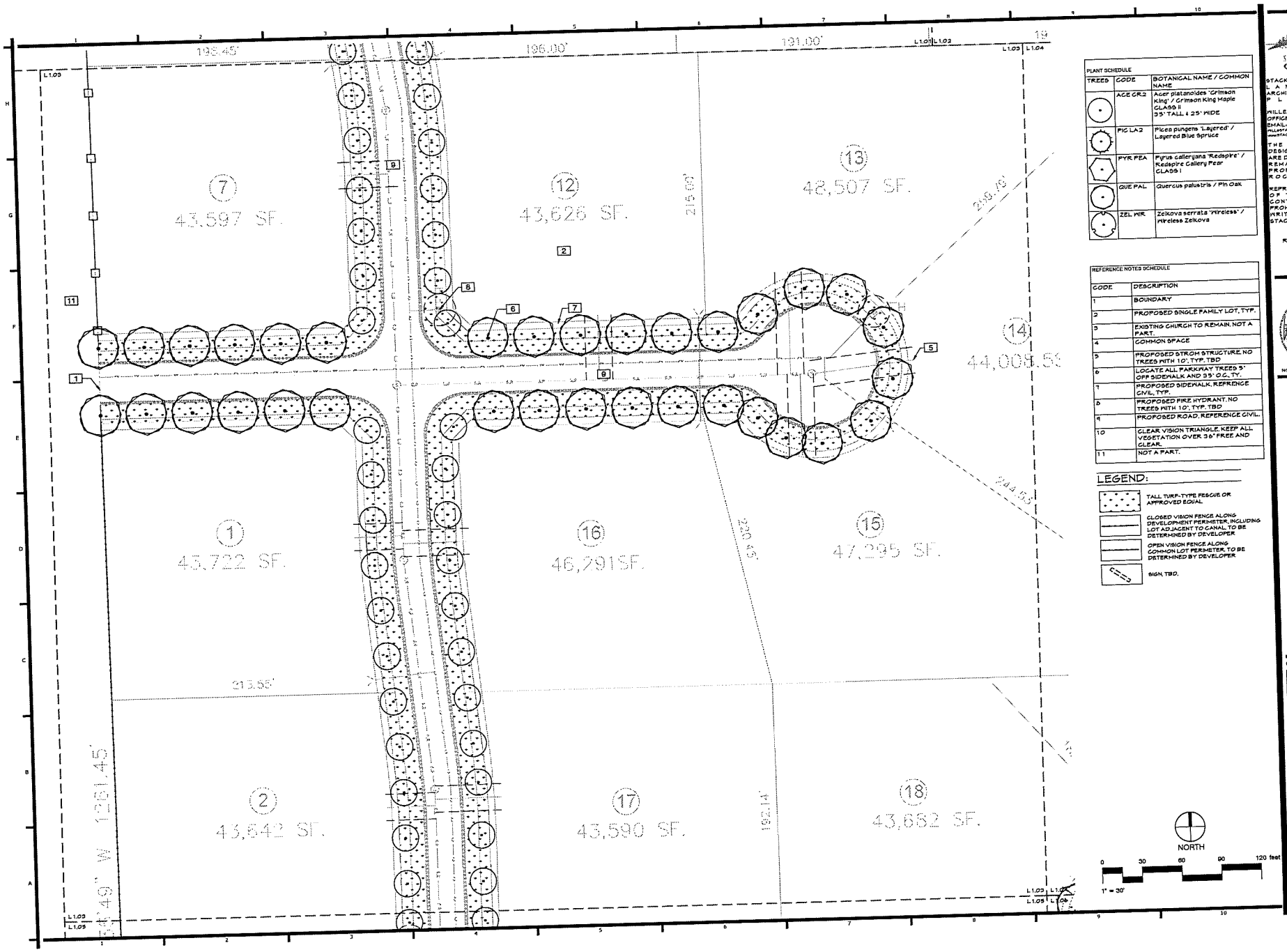
JOB NO.	17-041
DATE	NOV 21, 2017
DRAWN BY:	GH
CHECKED BY:	JH

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.02

SHEET 3 OF 5



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	ZEL MIR	Zelkova serrata 'Mirelese' / Mirelese Zelkova

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WWW.STACKROCKGROUP.COM

PRELIMINARY

STATE OF IDAHO — MILLET C. HOWARD — LA-16733 — 112117 — LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MRK	DATE	Description
1	-	-

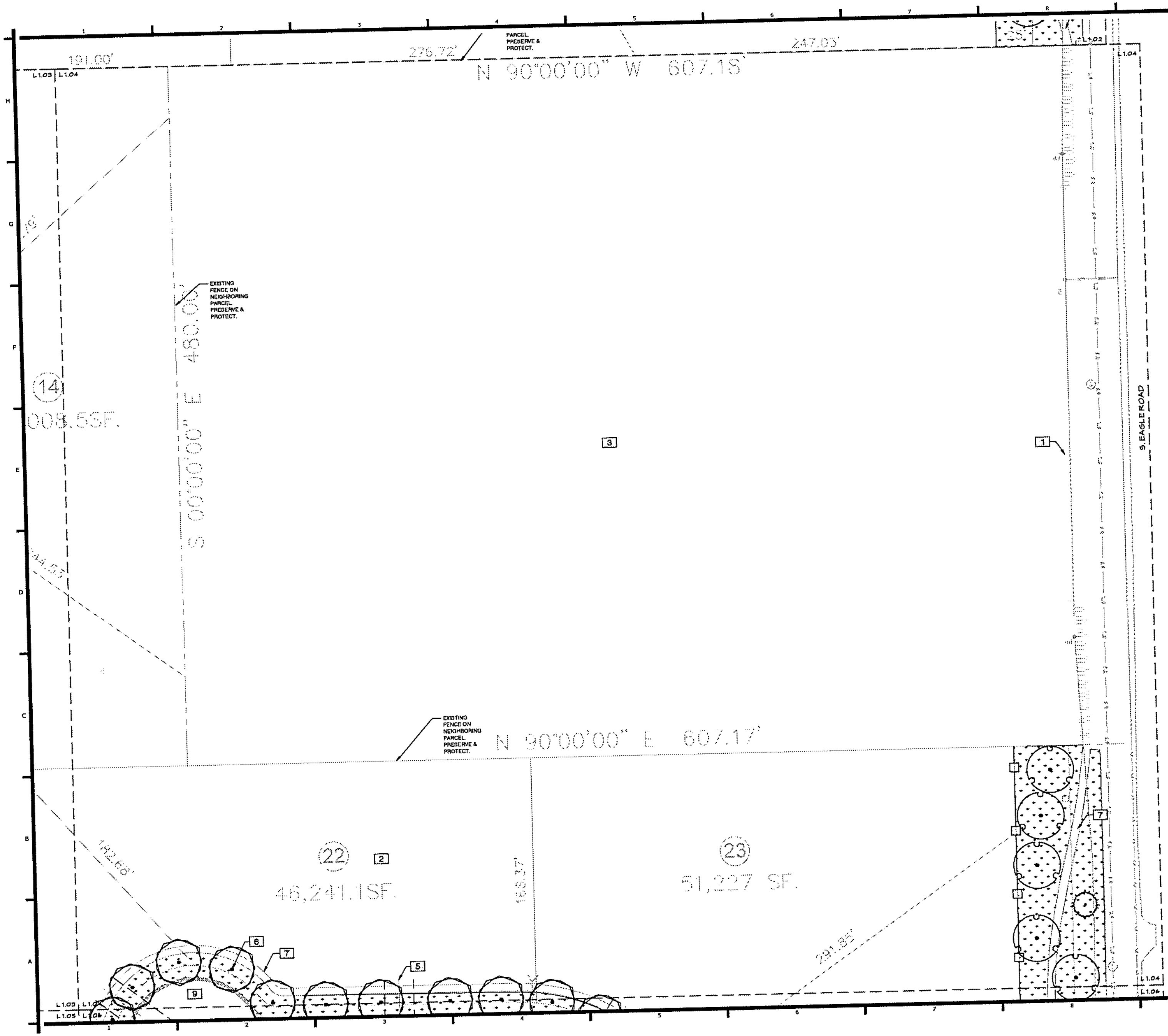
JOB NO.	17-841
DATE	NOV 21, 2017
DRAWN BY	GH
CHECKED BY	JR

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.03

SHEET 4 OF 8



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LANDSCAPE ARCHITECTURE / MASTER PLANNING
WILLET C HOWARD, PLA
OFFICE: (208) 345.0500
EMAIL:

PRELIMINARY

STATE OF IDAHO LA-16733 11.21.17 LICENSED LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS		
MRK	DATE	Description
△		

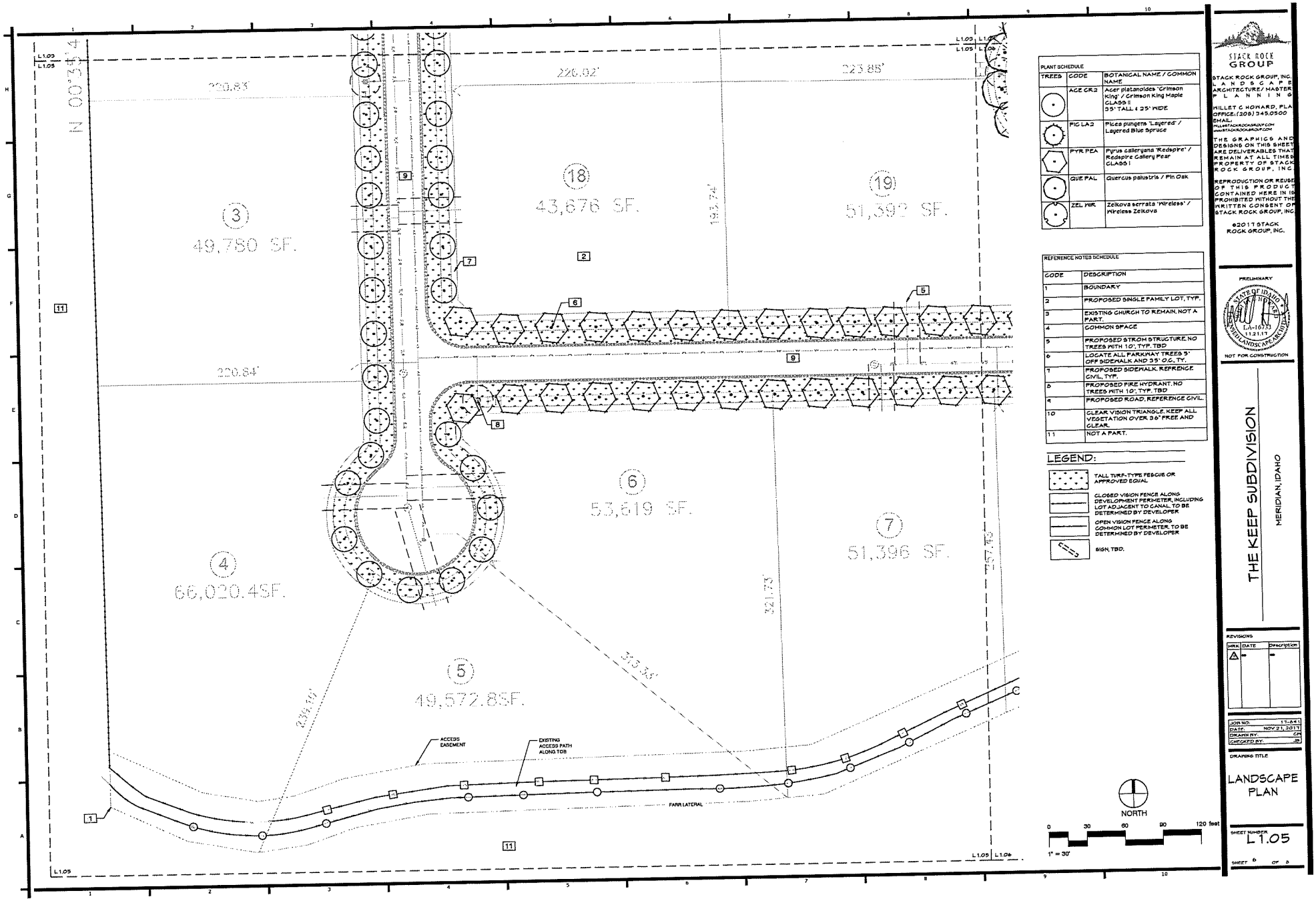
JOB NO.	17-041
DATE:	NOV 21, 2017
DRAWN BY:	CH
CHECKED BY:	JR

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.04

SHEET 5 OF 6



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6	LOCATE ALL PARKWAY TREES 3' OFF SIDEWALK AND 35' O.C. TY.
7	PROPOSED SIDEWALK. REFRENCE CIVIL, TYP.
8	PROPOSED FIRE HYDRANT. NO TREES WITH 10', TYP. TBD
9	PROPOSED ROAD, REFERENCE CIVIL
10	CLEAR VISION TRIANGLE. KEEP ALL VEGETATION OVER 36" FREE AND CLEAR.
11	NOT A PART.

LEGEND:

- TALL TURF-TYPE FESCUE OR APPROVED EQUAL
- CLOSED VISION FENCE ALONG DEVELOPMENT PERIMETER, INCLUDING LOT ADJACENT TO CANAL, TO BE DETERMINED BY DEVELOPER
- OPEN VISION FENCE ALONG COMMON LOT PERIMETER, TO BE DETERMINED BY DEVELOPER
- SIGN, TBD.

NORTH

0 30 60 90 120 feet

1" = 30'

STACK ROCK GROUP

STACK ROCK GROUP, INC.
L A N D S C A P E
ARCHITECTURE/ MASTER
P L A N N I N G

MILLET C HOWARD, PLA
OFFICE:(208) 345.0500
EMAIL:
MILLET@STACKROCKGROUP.COM
JAMES@STACKROCKGROUP.COM

PRELIMINARY

STATE OF IDAHO · JAMES PIERCE · LA-10733 · 12/31/17 · LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS		
MRK	DATE	Description
1	-	-

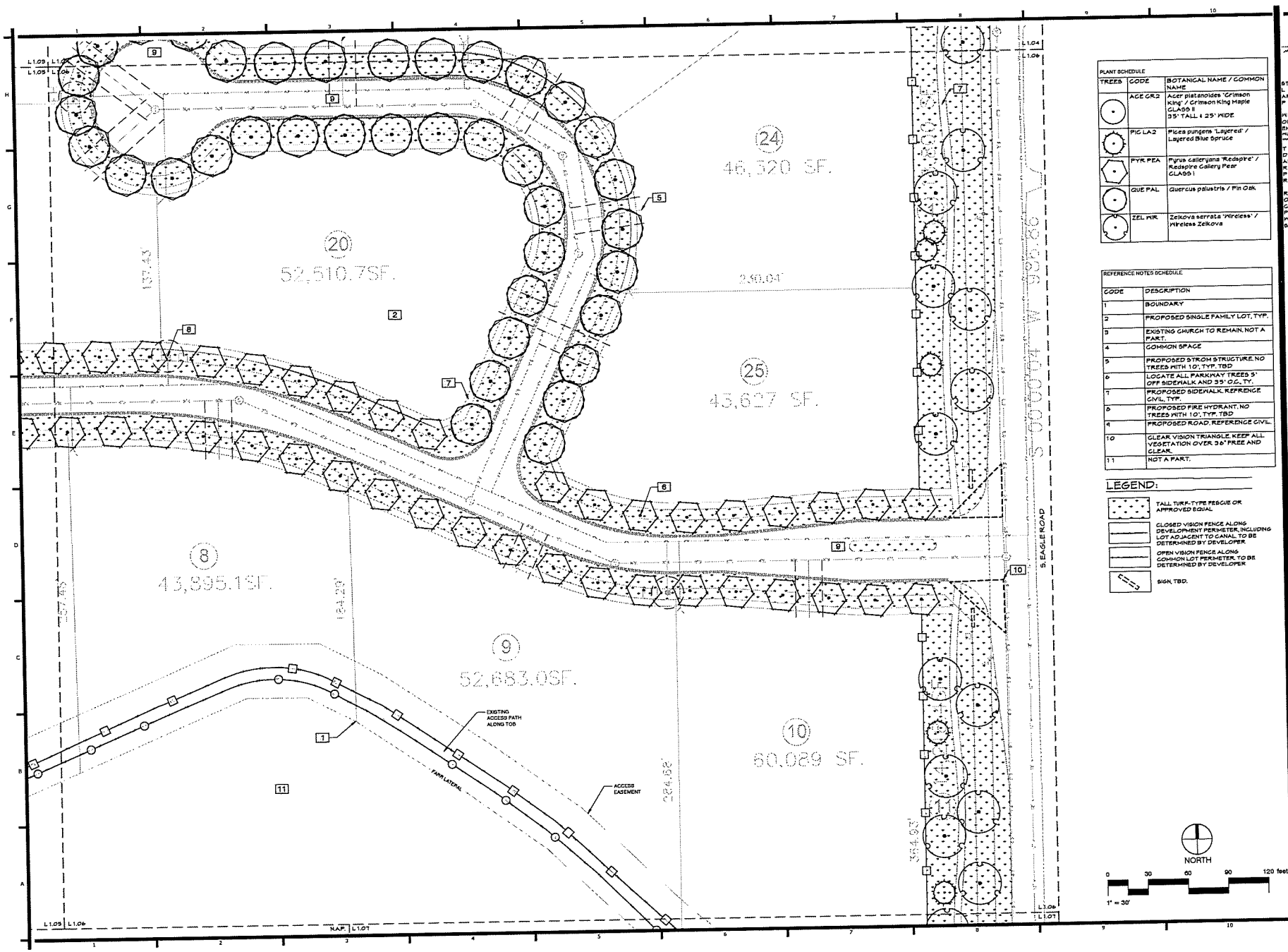
JOB NO.	17-041
DATE	NOV 21, 2017
DRAWN BY	CH
CHECKED BY	JP

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.05

SHEET 5 OF 5



PLANT SCHEDULE			
TREES	CODE	BOTANICAL NAME / COMMON NAME	
	ACE GR2	Acer platanoides 'Crimson King' / Crimson King Maple CLASS II 35' TALL x 25' WIDE	
	PIC LA2	Picea pungens 'Layered' / Layered Blue Spruce	
	PYR PEA	Pyrus calleryana 'Redspire' / Redspire Callery Pear CLASS I	
	QUE PAL	Quercus palustris / Pin Oak	
	ZEL WIR	Zelkova serrata 'Wireless' / Wireless Zelkova	

REFERENCE NOTES SCHEDULE	
CODE	DESCRIPTION
1	BOUNDARY
2	PROPOSED SINGLE FAMILY LOT, TYP.
3	EXISTING CHURCH TO REMAIN, NOT A PART.
4	COMMON SPACE
5	PROPOSED STORM STRUCTURE, NO TREES WITH 10', TYP. TBD
6	LOCATE ALL PARKWAY TREES 5' OFF SIDEWALK AND 35' O.C., TY.
7	PROPOSED SIDEWALK, REFRENCE CIVIL, TYP.
8	PROPOSED FIRE HYDRANT, NO TREES WITH 10', TYP. TBD
9	PROPOSED ROAD, REFERENCE CIVIL
10	CLEAR VISION TRIANGLE, KEEP ALL VEGETATION OVER 36" FREE AND CLEAR.
11	NOT A PART.

LEGEND:

- TALL TURF-TYPE FESCUE OR APPROVED EQUAL
- CLOSED VISION FENCE ALONG DEVELOPMENT PERIMETER, INCLUDING LOT ADJACENT TO CANAL, TO BE DETERMINED BY DEVELOPER
- OPEN VISION FENCE ALONG COMMON LOT PERIMETER, TO BE DETERMINED BY DEVELOPER
- SIGN, TBD.

NORTH

0 30 60 90 120 feet

1" = 30'

STACK ROCK GROUP

STACK ROCK GROUP, INC.
LANDSCAPE ARCHITECTURE/ MASTER PLANNING

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PRELIMINARY

STATE OF IDAHO — MILLET C. HOWARD — LA-10731 — 11-21-17 — LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MRK	DATE	Description
1		

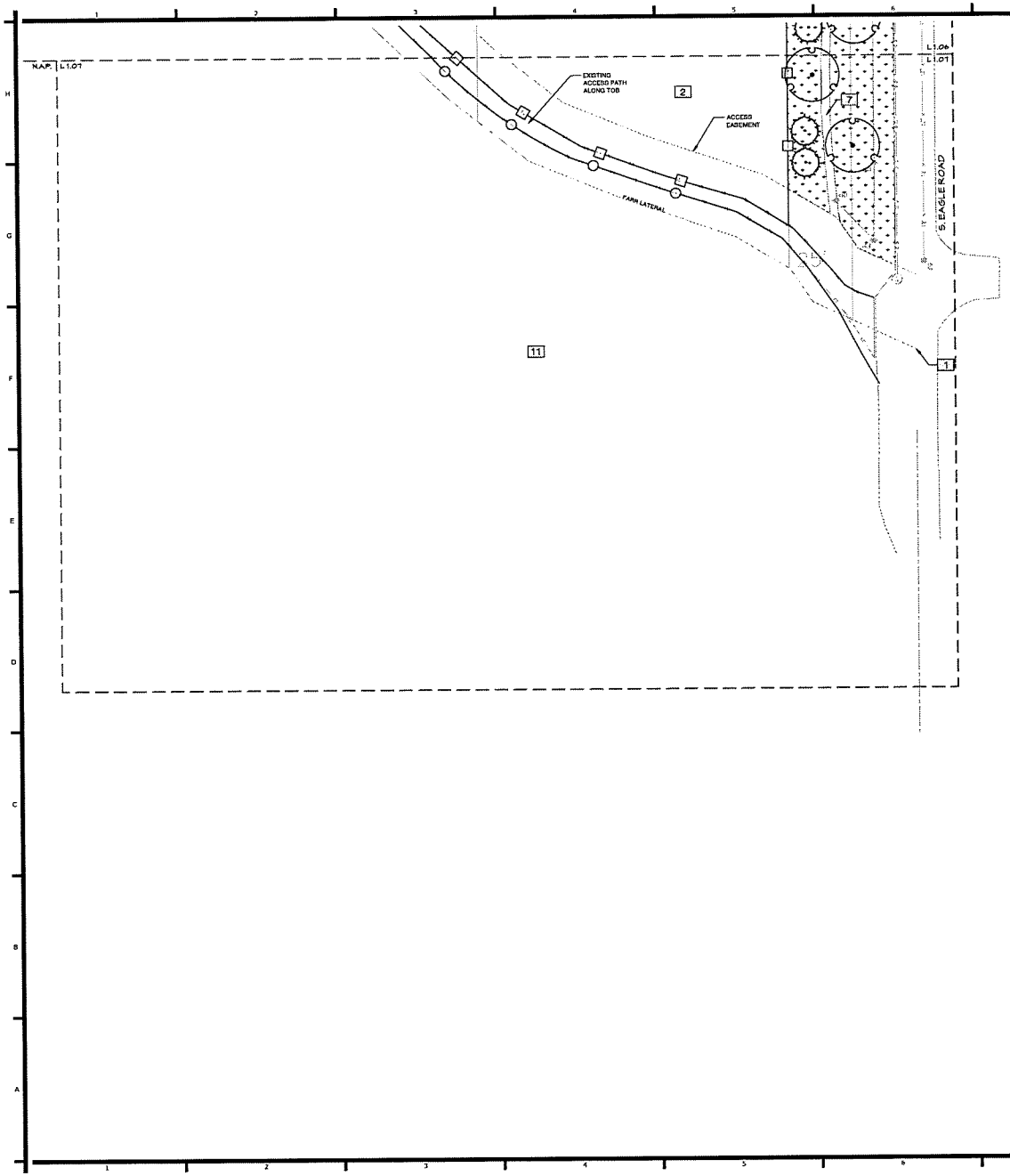
JOB NO.	17-141
DATE	NOV 21, 2017
DRAWN BY	CM
CHECKED BY	JB

DRAWING TITLE

LANDSCAPE PLAN

SHEET NUMBER L1.06

SHEET 7 OF 8



PLANT SCHEDULE		
TREES	CODE	BOTANICAL NAME / COMMON NAME
	ACE CR2	Acer platanoides 'Crimson king' / Crimson King Maple CLASS II 35' TALL I 25' WIDE
	PIC LA2	Picea pungens 'Layered' / Layered Blue Spruce
	PYR PEA	Pyrus calleryana 'Redspire' / Redspire Callery Pear CLASS I
	QUE PAL	Quercus palustris / Pin Oak
	ZEL MIR	Zelkova serrata 'Mirelese' / Mireless Zelkova

REFERENCE NOTES SCHEDULE	
CODE	DESCRIPTION
1	BOUNDARY
2	PROPOSED SINGLE FAMILY LOT, TYP.
3	EXISTING CHURCH TO REMAIN. NOT A PART.
4	COMMON SPACE
5	PROPOSED STORM STRUCTURE. NO TREES WITH 10', TYP. TBD
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- OPEN VISION FENCE ALONG COMMON LOT PERIMETER. TO BE DETERMINED BY DEVELOPER
- SIGN, TBD.

NORTH

0 30 60 90 120 feet

1" = 30'

STACK ROCK GROUP

STACK ROCK GROUP, INC.
LANDSCAPE ARCHITECTURE/ MASTER PLANNING

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PRELIMINARY

STATE OF IDAHO — MILLET C. HOWARD — LA-16733 — 11.21.17 — LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

THE KEEP SUBDIVISION

MERIDIAN, IDAHO

REVISIONS

MRK	DATE	Description
1	-	-

JOB NO.	17-141
DATE	NOV 21, 2017
DRAWN BY	CM
CHECKED BY	JR

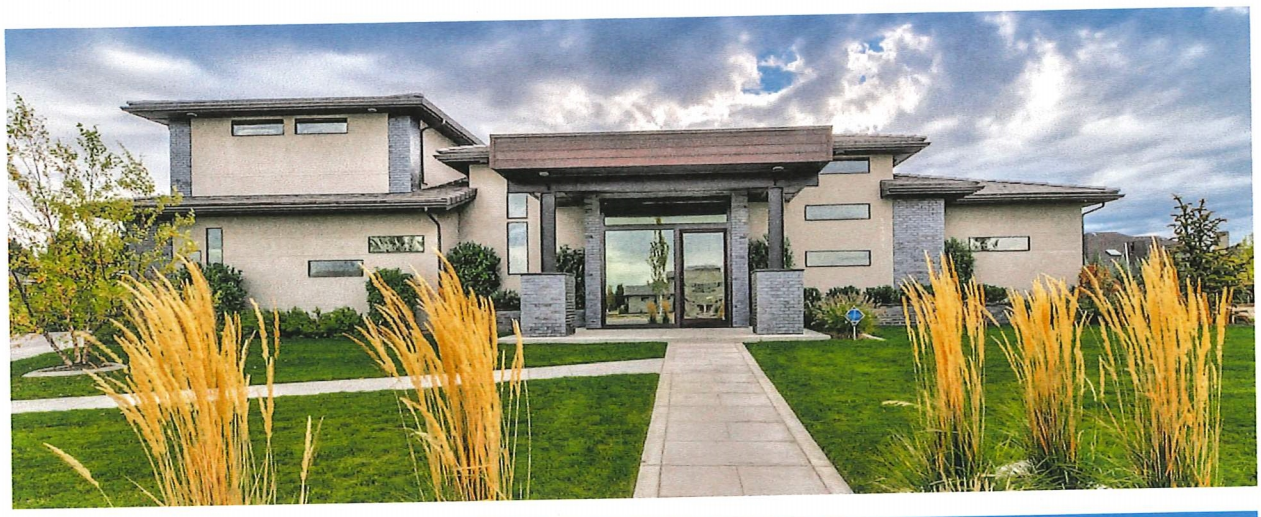
DRAWING TITLE

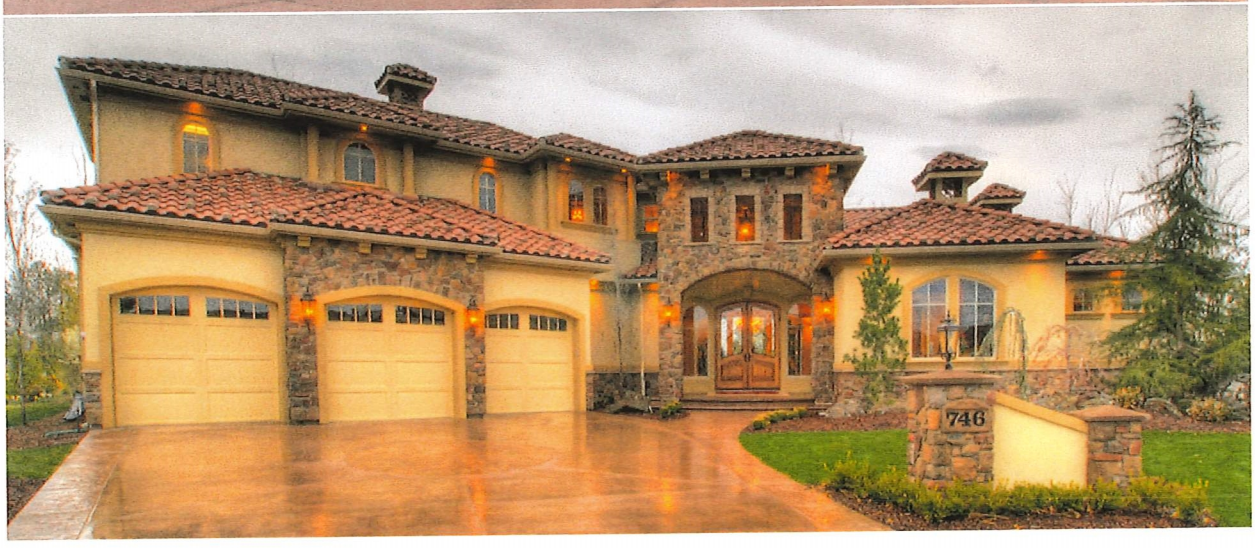
LANDSCAPE PLAN

SHEET NUMBER L1.07

SHEET 5 OF 5

THE KEEP Home Elevation Examples and Material List



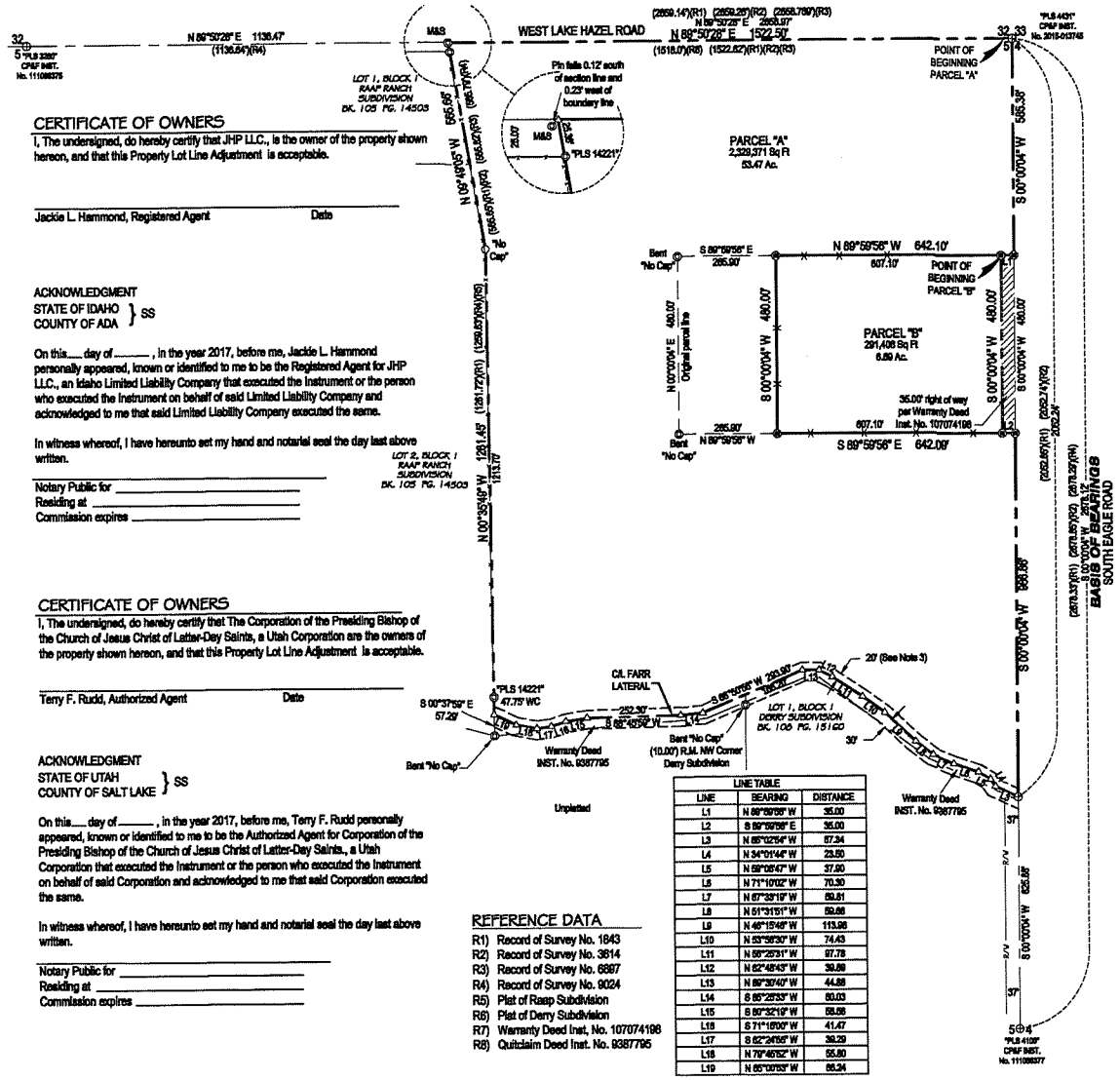

746

Material List:

- Standard Foundation with Crawl Space or Basements
- Siding to include Stucco, Masonry, Hardy Back Siding, Wood, Brick
- 30 year Architectural Shingle, Clay Shingles, Metal Roofing Accents
- Standard Double Pane Vinyl or wood Windows
- Wood Framed and Trusses
- Exposed Timber
- Standard Garage Doors

RECORD OF SURVEY

LOCATED IN THE NE1/4 OF SECTION 5, T. 2 N., R. 1 E., B.M., ADA COUNTY, IDAHO 2017



LINE TABLE

LINE	BEARING	DISTANCE
L1	N 89°59'56" W	35.00
L2	S 89°59'56" E	35.00
L3	N 85°02'54" W	67.34
L4	N 34°01'44" W	23.50
L5	N 59°08'47" W	37.90
L6	N 71°10'02" W	70.30
L7	N 67°38'19" W	59.81
L8	N 51°31'51" W	59.66
L9	N 46°15'48" W	113.96
L10	N 53°56'30" W	74.43
L11	N 55°25'31" W	97.78
L12	N 62°48'43" W	39.66
L13	N 89°30'40" W	44.88
L14	S 85°29'33" W	80.03
L15	S 80°32'19" W	58.06
L16	S 71°15'00" W	41.47
L17	S 62°24'55" W	39.29
L18	N 70°46'52" W	55.80
L19	N 85°09'53" W	86.24

CERTIFICATE OF OWNERS

I, The undersigned, do hereby certify that JHP LLC., is the owner of the property shown hereon, and that this Property Lot Line Adjustment is acceptable.

Jackie L. Hammond, Registered Agent Date

ACKNOWLEDGMENT
STATE OF IDAHO } SS
COUNTY OF ADA }

On this___ day of _____, in the year 2017, before me, Jackie L. Hammond personally appeared, known or identified to me to be the Registered Agent for JHP LLC., an Idaho Limited Liability Company that executed the Instrument or the person who executed the Instrument on behalf of said Limited Liability Company and acknowledged to me that said Limited Liability Company executed the same.

In witness whereof, I have hereunto set my hand and notarial seal the day last above written.

Notary Public for _____
Residing at _____
Commission expires _____

CERTIFICATE OF OWNERS

I, The undersigned, do hereby certify that The Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter-Day Saints, a Utah Corporation are the owners of the property shown hereon, and that this Property Lot Line Adjustment is acceptable.

Terry F. Rudd, Authorized Agent Date

ACKNOWLEDGMENT
STATE OF UTAH } SS
COUNTY OF SALT LAKE }

On this___ day of _____, in the year 2017, before me, Terry F. Rudd personally appeared, known or identified to me to be the Authorized Agent for Corporation of the Presiding Bishop of the Church of Jesus Christ of Latter-Day Saints., a Utah Corporation that executed the Instrument or the person who executed the Instrument on behalf of said Corporation and acknowledged to me that said Corporation executed the same.

In witness whereof, I have hereunto set my hand and notarial seal the day last above written.

Notary Public for _____
Residing at _____
Commission expires _____

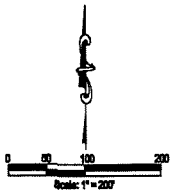
REFERENCE DATA

R1) Record of Survey No. 1843
R2) Record of Survey No. 3814
R3) Record of Survey No. 6897
R4) Record of Survey No. 9024
R5) Plat of Raap Subdivision
R6) Plat of Derry Subdivision
R7) Warranty Deed Inst. No. 107074198
R8) Quitclaim Deed Inst. No. 9387795

RECORD OF SURVEY No. _____

STATE OF IDAHO,
COUNTY OF ADA, ss

Filed for record at the request of _____
____ Min. past ____ o'clock ___ M. this _____ day of _____ 20___
Christopher D. Rich, Recorder, By _____ Deputy
Instrument Number _____
Fee $_____



LEGEND

△	Calculated point
⊕	Found Aluminum Cap Monument
⊕	Found 5/8 inch dia. Iron Pin As Noted
○	Found 1/2 inch dia. Iron Pin As Noted
●	Set 5/8" dia. x 24" Iron Pin w/ Plastic Cap "PLS 7732"
W.C.	Witness Corner
R.M.	Reference Monument
	Boundary Line
	Parcel Line
	Original Parcel Line
	Section Line
—X—X—	Fence Line
	Easement Line
	(R8)

SURVEYOR'S NOTES

1)The recording of this Record of Survey does not enable the owners of the property shown to convey ownership based solely on this map. A written conveyance must accompany such change in ownership. This Record of Survey does not serve as a legal description for the property shown hereon.
2) This drawing does not necessarily show all of the physical features of the property. Compass Land Surveying P.L.L.C. assumes no liability for present or future compliance or noncompliance with governing jurisdictions restrictions as it pertains to building permits, vehicle access permits or septic permits.
3) The 50.00' foot wide Farr Lateral Easement (30' South & 20' North) shown hereon is based on a conversation had with Bob Carter with the Boise Project Board of Control on October 12, 2017.

CERTIFICATE OF SURVEYOR

I, Richard A. Gray do hereby certify that I am a Professional Land Surveyor licensed by the State of Idaho, and that this Record of Survey correctly represents a survey made by me or under my direct supervision in conformance with Idaho Code: 31-2709, 1947 and accepted procedures of land surveying. I further certify that I have complied with Title 55, Chapter 18, Idaho Code.

Richard A. Gray P.L.S. License No. 7732

INDEX NO. 211-S-1-00-0-00-0000

RECORD OF SURVEY FOR:
JARRON LANGSTON

COMPASS

COMPASS LAND SURVEYING, PLLC
623 11th Avenue South Nampa, ID 83651
Office: (208) 442-0115 Fax: (208) 327-2106

SHEET NO.	JOB NO.	DWG NO.	SCALE:	DRAWN BY:	DATE:	REV:
1 OF 1	7017	7017ROS	1"=200'	LHK	10/18/17	△

MATERIALS
TESTING &
INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

GEOTECHNICAL ENGINEERING REPORT
of
The Keep Subdivision
Eagle Road & Lake Hazel Road
Meridian, ID

Prepared for:

Mr. Jarron Langston
9563 West Harness Drive
Boise, ID 83709

MTI File Number BI71395g

2791 S Victory View Way • Boise, ID 83709 • (208) 376-4748 • Fax (208) 322-6515
www.mti-id.com • mti@mti-id.com

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

Mr. Jarron Langston
9563 West Harness Drive
Boise, ID 83709
208-724-6239

Re: Geotechnical Engineering Report
The Keep Subdivision
Eagle Road & Lake Hazel Road
Meridian, ID

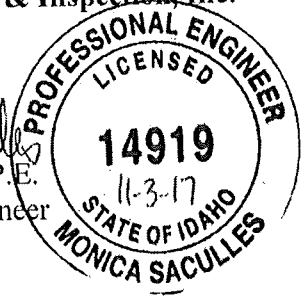
Dear Mr. Langston:

In compliance with your instructions, MTI has conducted a soils exploration and foundation evaluation for the above referenced development. Fieldwork for this investigation was conducted from 2 to 3 October 2017. Data have been analyzed to evaluate pertinent geotechnical conditions. Results of this investigation, together with our recommendations, are to be found in the following report. We have provided a PDF copy and one paper copy for your review and distribution.

Often, questions arise concerning soil conditions because of design and construction details that occur on a project. MTI would be pleased to continue our role as geotechnical engineers during project implementation. Additionally, MTI can provide materials testing and special inspection services during construction of this project. If you will advise us of the appropriate time to discuss these engineering services, we will meet with you at your convenience.

MTI appreciates this opportunity to be of service to you and looks forward to working with you in the future. If you have questions, please call (208) 376-4748.

Respectfully Submitted,
Materials Testing & Inspection, Inc.



Monica Saculles, P.E.
Geotechnical Engineer

Reviewed by: Elizabeth Brown, P.E.
Geotechnical Services Manager

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INTRODUCTION

This report presents results of a geotechnical investigation and analysis in support of data utilized in design of structures as defined in the 2012 International Building Code (IBC). Information in support of groundwater and stormwater issues pertinent to the practice of Civil Engineering is included. Observations and recommendations relevant to the earthwork phase of the project are also presented. Revisions in plans or drawings for the proposed development from those enumerated in this report should be brought to the attention of the soils engineer to determine whether changes in the provided recommendations are required. Deviations from noted subsurface conditions, if encountered during construction, should also be brought to the attention of the soils engineer.

Project Description

The proposed development is in the southwestern portion of the City of Meridian, Ada County, ID, and occupies a portion of the NW¼NW¼ of Section 6, Township 4 North, Range 2 East, Boise Meridian. This project will consist of construction of a residential subdivision roughly 48 acres in size. It is anticipated that the subdivision will be made up of 39 residential lots. City water services will be installed for the site and dry-line sewer systems will be installed to facilitate future connection to city sewer. Until connection with city sewer can take place, individual septic systems will be utilized. Total settlements are limited to 1 inch. Loads of up to 4,000 pounds per lineal foot for wall footings, and column loads of up to 50,000 pounds were assumed for settlement calculations. Additionally, assumptions have been made for traffic loading of pavements. Retaining walls are not anticipated as part of the project. MTI has not been informed of the proposed grading plan.

Authorization

Authorization to perform this exploration and analysis was given in the form of a written authorization to proceed from Mr. Jarron Langston to Monica Saculles of Materials Testing and Inspection, Inc. (MTI), on 12 September 2017. Said authorization is subject to terms, conditions, and limitations described in the Professional Services Contract entered into between Mr. Jarron Langston and MTI. Our scope of services for the proposed development has been provided in our proposal dated 8 September 2017 and repeated below.

Purpose

The purpose of this Geotechnical Engineering Report is to determine various soil profile components and their engineering characteristics for use by either design engineers or architects in:

- Preparing or verifying suitability of foundation design and placement
- Preparing site drainage designs
- Indicating issues pertaining to earthwork construction
- Preparing residential pavement section design requirements

Scope of Investigation

The scope of this investigation included review of geologic literature and existing available geotechnical studies of the area, visual site reconnaissance of the immediate site, subsurface exploration of the site, field and laboratory testing of materials collected, and engineering analysis and evaluation of foundation materials. The scope of work did not include design recommendations specific to individual residences.

Warranty and Limiting Conditions

MTI warrants that findings and conclusions contained herein have been formulated in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology only for the site and project described in this report. These engineering methods have been developed to provide the client with information regarding apparent or potential engineering conditions relating to the site within the scope cited above and are necessarily limited to conditions observed at the time of the site visit and research. Field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for the purposes cited above.

Exclusive Use

This report was prepared for exclusive use of the property owner(s), at the time of the report, and their retained design consultants ("Client"). Conclusions and recommendations presented in this report are based on the agreed-upon scope of work outlined in this report together with the Contract for Professional Services between the Client and Materials Testing and Inspection, Inc. ("Consultant"). Use or misuse of this report, or reliance upon findings hereof, by parties other than the Client is at their own risk. Neither Client nor Consultant make representation of warranty to such other parties as to accuracy or completeness of this report or suitability of its use by such other parties for purposes whatsoever, known or unknown, to Client or Consultant. Neither Client nor Consultant shall have liability to indemnify or hold harmless third parties for losses incurred by actual or purported use or misuse of this report. No other warranties are implied or expressed.

Report Recommendations are Limited and Subject to Misinterpretation

There is a distinct possibility that conditions may exist that could not be identified within the scope of the investigation or that were not apparent during our site investigation. Findings of this report are limited to data collected from noted explorations advanced and do not account for unidentified fill zones, unsuitable soil types or conditions, and variability in soil moisture and groundwater conditions. To avoid possible misinterpretations of findings, conclusions, and implications of this report, MTI should be retained to explain the report contents to other design professionals as well as construction professionals.

Since actual subsurface conditions on the site can only be verified by earthwork, note that construction recommendations are based on general assumptions from selective observations and selective field exploratory sampling. Upon commencement of construction, such conditions may be identified that require corrective actions, and these required corrective actions may impact the project budget. Therefore, construction recommendations in this report should be considered preliminary, and MTI should be retained to observe actual subsurface conditions during earthwork construction activities to provide additional construction recommendations as needed.

Since geotechnical reports are subject to misinterpretation, **do not** separate the soil logs from the report. Rather, provide a copy of, or authorize for their use, the complete report to other design professionals or contractors. Locations of exploratory sites referenced within this report should be considered approximate locations only. For more accurate locations, services of a professional land surveyor are recommended.

This report is also limited to information available at the time it was prepared. In the event additional information is provided to MTI following publication of our report, it will be forwarded to the client for evaluation in the form received.

Environmental Concerns

Comments in this report concerning either onsite conditions or observations, including soil appearances and odors, are provided as general information. These comments are not intended to describe, quantify, or evaluate environmental concerns or situations. Since personnel, skills, procedures, standards, and equipment differ, a geotechnical investigation report is not intended to substitute for a geoenvironmental investigation or a Phase II/III Environmental Site Assessment. If environmental services are needed, MTI can provide, via a separate contract, those personnel who are trained to investigate and delineate soil and water contamination.

SITE DESCRIPTION

Site Access

Access to the site may be gained via Interstate 84 to the Eagle Road exit. Proceed south on Eagle Road approximately 3.4 miles to its intersection with Lake Hazel Road. The site occupies the southwest corner of this intersection. Presently the site exists as agricultural fields. The location is depicted on site map plates included in the **Appendix**.

Regional Geology

The project site is located within the western Snake River Plain of southwestern Idaho and eastern Oregon. The plain is a northwest trending rift basin, about 45 miles wide and 200 miles long, that developed about 14 million years ago (Ma) and has since been occupied sporadically by large inland lakes. Geologic materials found within and along the plain's margins reflect volcanic and fluvial/lacustrine sedimentary processes that have led to an accumulation of approximately 1 to 2 km of interbedded volcanic and sedimentary deposits within the plain. Along the margins of the plain, streams that drained the highlands to the north and south provided coarse to fine-grained sediments eroded from granitic and volcanic rocks, respectively. About 2 million years ago the last of the lakes was drained and since that time fluvial erosion and deposition has dominated the evolution of the landscape. The project site is underlain by "Gravel of Amity Terrace" as mapped by Othberg and Stanford (1993). The Amity terrace is the fifth terrace above the modern Boise River and represents the first level of Quaternary incision by the Boise River. The terrace, which has been correlated with Deer Flat terrace deposits to the west, is modified extensively by erosion and faulting. Where little erosion has taken place the terrace is mantled with loess 1.6-7 feet thick.

General Site Characteristics

This proposed development consists of approximately 48 acres of relatively flat and level terrain. However, relatively steep to near vertical slopes are present along the northern and eastern property boundaries near the intersection of Eagle and Lake Hazel Roads. A series of irrigation ditches run north-south and east-west through the property, and the Farr Lateral is present along the southern property boundary of the site. Throughout the majority of the site, surficial soils consist of fine-grained clay soils. Vegetation primarily consists of agricultural crops and other native grass varieties typical of arid to semi-arid environments.

Regional drainage is north and west toward the Boise River. Stormwater drainage for the site is achieved by both sheet runoff and percolation through surficial soils. Runoff predominates for the steeper slopes while percolation prevails across the gently sloping and near level areas. The site is situated so that it is unlikely that it will receive any stormwater drainage from off-site sources. Stormwater drainage collection and retention systems are not in place on the project site and were not noted within the vicinity of the project site.

Historical Research

MTI reviewed aerial photographs for the site and surrounding area from 1992 through 2016. Based on these photographs, the site and nearby properties were visible primarily as agricultural land with various rural residential structures and outbuildings. Over the years, additional rural residential properties have been developed surrounding the property. In the 2002 aerial, the Coolwater Creek Event Center was present to the south of the site. By 2006, construction of the LDS church that is near the east central portion of the site had commenced. Recently, construction of high-density residential subdivisions has been prevalent to the north and northeast of the project site.

Regional Site Climatology and Geochemistry

According to the Western Regional Climate Center, the average precipitation for the Treasure Valley is on the order of 10 to 12 inches per year, with an annual snowfall of approximately 20 inches and a range from 3 to 49 inches. The monthly mean daily temperatures range from 21°F to 95°F, with daily extremes ranging from -25°F to 111°F. Winds are generally from the northwest or southeast with an annual average wind speed of approximately 9 miles per hour (mph) and a maximum of 62 mph. Soils and sediments in the area are primarily derived from siliceous materials and exhibit low electro-chemical potential for corrosion of metals or concretes. Local aggregates are generally appropriate for Portland cement and lime cement mixtures. Surface water, groundwater, and soils in the region typically have pH levels ranging from 7.2 to 8.2.

Geoseismic Setting

Soils on site are classed as Site Class D in accordance with Chapter 20 of the American Society of Civil Engineers (ASCE) publication ASCE/SEI 7-10. Structures constructed on this site should be designed per IBC requirements for such a seismic classification. Our investigation did not reveal hazards resulting from potential earthquake motions including: slope instability, liquefaction, and surface rupture caused by faulting or lateral spreading. Incidence and anticipated acceleration of seismic activity in the area is low.

SOILS EXPLORATION

Exploration and Sampling Procedures

Field exploration conducted to determine engineering characteristics of subsurface materials included a reconnaissance of the project site and investigation by test pit. Test pit sites were staked in the field by a representative of the client and were labeled with a ground surface elevation. Each of these staked locations was also located in the field by means of a Global Positioning System (GPS) device and are reportedly accurate to within sixteen feet. Upon completion of investigation, each test pit was backfilled with loose excavated materials. Re-excavation and compaction of these test pit areas are required prior to construction of overlying structures.

In addition, samples were obtained from representative soil strata encountered. Samples obtained have been visually classified in the field by professional staff, identified according to test pit number and depth, placed in sealed containers, and transported to our laboratory for additional testing. Subsurface materials have been described in detail on logs provided in the **Appendix**. Results of field and laboratory tests are also presented in the **Appendix**. MTI recommends that these logs **not** be used to estimate fill material quantities.

Laboratory Testing Program

Along with our field investigation, a supplemental laboratory testing program was conducted to determine additional pertinent engineering characteristics of subsurface materials necessary in an analysis of anticipated behavior of the proposed structures. Laboratory tests were conducted in accordance with current applicable American Society for Testing and Materials (ASTM) and American Association of State Highway and Transportation Officials (AASHTO) specifications, and results of these tests are to be found on the accompanying logs located in the **Appendix**. The laboratory testing program for this report included: Atterberg Limits Testing – ASTM D4318, Grain Size Analysis – ASTM C117/C136, and Resistance Value (R-value) and Expansion Pressure of Compacted Soils – Idaho T-8.

Soil and Sediment Profile

The profile below represents a generalized interpretation for the project site. Note that on site soils strata, encountered between test pit locations, may vary from the individual soil profiles presented in the logs, which can be found in the **Appendix**.

The materials encountered during exploration were quite typical for the geologic area mapped as Gravel of Amity Terrace. Lean clay soils were encountered at ground surface across the site. These materials varied from brown to dark brown and generally exhibited moisture contents of dry to slightly moist. Clays were noted to have consistencies of stiff to hard. Fine-grained sand was generally present throughout. Organic materials were measured to depths of roughly ½ to 2 feet, and disturbed materials, as a result of plowing activities, usually reached a depth of 1½ feet if present.

Silts with varying sand contents were encountered beneath surficial lean clays. These silt soils were tan to brown and dry to slightly moist. Consistencies commonly ranged from very stiff to hard. Fine-grained sand was present in portions of these horizons. Silty sand sediments were often observed below the silt soils. Silty sands, where present, were classified as light brown to brown, dry to slightly moist, and very dense, with fine to medium-grained sand. Many of the firmer/denser silt/sand soil horizons contained some degree of calcium carbonate cementation (hardpan).

At depth, silty gravel and/or poorly graded gravel with sand sediments were exposed. In a few cases, poorly graded sand sediments were also exposed. These granular sediments were generally tan to brown, dry to slightly moist, and medium dense to very dense. Fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles were noted throughout portions of these horizons. Varying degrees of calcium carbonate cementation were often noted within the silty gravel sediments.

Competency of test pit sidewalls varied little across the site. In general, fine grained soils remained stable while more granular sediments exhibited some sloughing. However, moisture contents will also affect wall competency with saturated soils having a tendency to readily slough when under load and unsupported.

Volatile Organic Scan

No environmental concerns were identified prior to commencement of the investigation. Therefore, soils obtained during on-site activities were not assessed for volatile organic compounds by portable photoionization detector. Samples obtained during our exploration activities exhibited no odors or discoloration typically associated with this type of contamination. No groundwater was encountered.

SITE HYDROLOGY

Existing surface drainage conditions are defined in the **General Site Characteristics** section. Information provided in this section is limited to observations made at the time of the investigation. Either regional or local ordinances may require information beyond the scope of this report.

Groundwater

During this field investigation, groundwater was not encountered in test pits advanced to a maximum depth of 15.1 feet bgs. Soil moistures in the test pits were generally dry to slightly moist throughout. In the vicinity of the project site, groundwater levels are controlled in large part by residential and agricultural irrigation activity and leakage from nearby canals. Maximum groundwater elevations likely occur during the later portion of the irrigation season. During previous investigations performed in December 2015, May 2017, and August 2017 approximately ½-mile to the northeast of the project site, groundwater was noted within numerous test pits at depths ranging from 3.6 to 10.3 feet bgs. However these sites were at significantly lower elevations than the project site. Two previous investigations performed within roughly ½ mile east of the site in June 2014 and December 2015 showed no evidence of groundwater in test pits advanced to depths as great as 12.0 feet bgs. These sites were at somewhat higher elevations than the project site. Furthermore, according to United States Geological Survey (USGS) monitoring well data within approximately ½-mile of the project site and at similar ground surface elevations as the site, groundwater was measured at depths in excess of 50 feet bgs.

Based on evidence of this investigation and background knowledge of the area, MTI estimates groundwater depths to remain greater than approximately 20 feet bgs throughout the year. This depth can be confirmed through long-term groundwater monitoring.

Soil Infiltration Rates

Soil permeability, which is a measure of the ability of a soil to transmit a fluid, was not tested in the field. Given the absence of direct measurements, for this report an estimation of infiltration is presented using generally recognized values for each soil type and gradation. Of soils comprising the generalized soil profile for this study, lean clay and silt with sand soils generally offer little permeability, with typical hydraulic infiltration rates of less than 2 inches per hour. Sandy silt soils will commonly exhibit infiltration rates from 2 to 4 inches per hour and silty sand/silty gravel sediments usually display rates of 4 to 8 inches per hour; though calcium carbonate cementation may reduce these values to near zero. Poorly graded sand and gravel sediments typically exhibit infiltration values in excess of 12 inches per hour. Infiltration testing is generally not required within these sediments because of their free-draining nature.

Ada County Highway District (ACHD) may require onsite percolation testing once the proposed locations of infiltration facilities are determined. The quantity of testing will be dependent on the size and number of infiltration facilities planned, and can be determined from Section 8000 of the ACHD Policy Manual. The estimated infiltration rates listed above are to be considered preliminary and are only provided to determine feasibility for onsite infiltration.

SLOPES AND SETBACKS

Native cut slopes steeper than 3 feet horizontal to 1 foot vertical (3:1) are present along portions of the northern and eastern property boundaries. For structures to be constructed near slopes like these, it is necessary to apply slope setback requirements as outlined in the IBC. No potential slope stability deficiencies were noted during the investigation. However, some erosion of the gravel slopes was observed.

Soils onsite are not sufficiently stable to allow vertical cuts greater than 4 feet to stand for an extended period of time. Soils in the project vicinity are stable at a 2:1 gradient. However, soil types throughout the area are variable, and existing slopes will be dependent upon soil composition. Proposed cut-fill sections constructed from these soils should not be steeper than 2:1. Cut slopes in fine-grained soil are stable on a 1.5:1 slope with respect to mass movement and downslope creep. Fill slopes should be placed and compacted in a controlled manner as detailed in the **Structural Fill** section of this report. Fills to be constructed on existing slopes steeper than **20 percent** (approximately 5:1) should be benched a minimum of 10 feet into competent native soils.

To ensure slope stability with respect to surficial movement and gullying, cohesive soils should be placed on the face of slopes. This will help limit downslope creep and aid in re-vegetation of slope surfaces. When slopes are steeper than 2:1, soils must be aggressively protected from erosion. More granular soils will require an even greater degree of protection.

Setbacks from constructed slopes should adhere to provisions of Section 1808.7 of the 2012 IBC. Footing loads on soil masses adjacent to slopes must be set back in accordance with the provisions of the IBC. For buildings constructed above slopes steeper than 3:1, the horizontal setback distance from the face of slope to the face of an upslope footing must be no less than ⅓ the vertical height of the total slope, however, need not exceed 40 feet. Benches or steps in the slope do not modify slope height. For buildings constructed below slopes steeper than 3:1, the horizontal setback distance from the toe of the slope to the face of a downslope structure must be no less than ½ the vertical height of the total slope, however, need not exceed 15 feet.

Retaining walls can be constructed to alter the dimensional parameters of a slope. The top of the retaining wall constitutes the toe of the slope, and slope height is determined from the top of wall. Downslope setback requirements can be reduced to zero if the retaining wall reduces the upslope gradient to 3:1 or flatter. Because upslope setbacks are determined at footing elevation, top of slope setbacks can be managed through the footing depth. In some cases, it may be desirable to use a foundation based on tip bearing piles or caissons to achieve greater footing depths.

Setback requirements for pools are ½ those required for structures. Additionally, pools with portions of their walls within 7 feet of the top of the slope must be capable of supporting pool water without soil support.

FOUNDATION, SLAB, AND PAVEMENT DISCUSSION AND RECOMMENDATIONS

Various foundation types have been considered for support of the proposed structures. Two requirements must be met in the design of foundations. First, the applied bearing stress must be less than the ultimate bearing capacity of foundation soils to maintain stability. Second, total and differential settlement must not exceed an amount that will produce an adverse behavior of the superstructure. Allowable settlement is usually exceeded before bearing capacity considerations become important; thus, allowable bearing pressure is normally controlled by settlement considerations.

Considering subsurface conditions and the proposed construction, it is recommended that the structures be founded upon conventional spread footings and continuous wall footings. Total settlements should not exceed 1 inch if the following design and construction recommendations are observed. Presently, there are approximately 39 lots proposed for the project site. The following recommendations are not specific to the individual structures, but rather should be viewed as guidelines for the subdivision – wide development.

Foundation Design Recommendations

Based on data obtained from the site and test results from various laboratory tests performed, MTI recommends the following guidelines for the net allowable soil bearing capacity:

Soil Bearing Capacity

Footing Depth	ASTM D1557 Subgrade Compaction	Net Allowable Soil Bearing Capacity
Footings must bear on competent, undisturbed, native silt with sand/sandy silt soils, silty sand sediments, or compacted structural fill. Existing lean clay soils must be completely removed from below foundation elements.[1] Excavation depths ranging from roughly 0.8 to 3.9 feet bgs should be anticipated to expose proper bearing soils.[2]	Not Required for Native Soil 95% for Structural Fill	2,000 lbs/ft^2 A ⅓ increase is allowable for short-term loading, which is defined by seismic events or designed wind speeds.

[1]It will be required for MTI personnel to verify the bearing soil suitability for each structure at the time of construction.
[2]Depending on the time of year construction takes place, the subgrade soils may be unstable because of high moisture contents. If unstable conditions are encountered, over-excavation and replacement with granular structural fill and/or use of geotextiles may be required.

Footings should be proportioned to meet either the stated soil bearing capacity or the 2012 IBC minimum requirements. Total settlement should be limited to approximately 1 inch, and differential settlement should be limited to approximately ½ inch. Objectionable soil types encountered at the bottom of footing excavations should be removed and replaced with structural fill. Excessively loose or soft areas that are encountered in the footings subgrade will require over-excavation and backfilling with structural fill. To minimize the effects of slight differential movement that may occur because of variations in the character of supporting soils and seasonal moisture content, MTI recommends continuous footings be suitably reinforced to make them as rigid as possible. For frost protection, the bottom of external footings should be 24 inches below finished grade.

Crawl Space Recommendations

Considering the presence of shallow cemented soils across the site, all residences constructed with crawl spaces should be designed in a manner that will inhibit water in the crawl spaces. MTI recommends that roof drains carry stormwater at least 10 feet away from each residence. Grades should be at least 5 percent for a distance of 10 feet away from all residences. In addition, rain gutters should be placed around all sides of residences, and backfill around stem walls should be placed and compacted in a controlled manner.

Based on test pit logs, areas with shallow cementation are likely to be encountered across much of the site, with cementation present as shallow as 0.9 to 5.0 feet. In areas where cemented soils will be within 2 feet of the crawl space elevation, construction of subsurface drains is also recommended. Review of proposed grading in conjunction with soils data presented by MTI will be required to identify these areas. Subsurface drains should be placed at stormwater and irrigation water collection points within the lawn area. These drains will require over-excavation through cemented soils to underlying free-draining soils and backfilling with permeable soils to permit drainage.

Floor, Patio, and Garage Slab-on-Grade

Plow zones, which should be treated as uncontrolled fill, was encountered throughout the majority of the site. MTI recommends that these fill materials be excavated to a sufficient depth to expose competent, native soils or to a minimum depth of 1½ feet below finished subgrade. If fill materials remain after over-excavation, the exposed subgrade must be compacted to at least 95 percent of the maximum dry density as determined by ASTM D1557. MTI personnel must be present during excavation to identify these materials.

Native clay soils are moderately plastic and will be susceptible to shrink/swell movements associated with moisture changes. Areas of the site within the proposed structures should be excavated to sufficient depths to expose lean clay. The clay soils should be scarified to a depth of 6 inches and compacted between 92 to 98 percent of the maximum dry density as determined by ASTM D698. The moisture content should be within 2 percent of optimum. Structural fill should be placed as soon as possible after compaction of clay soils in order to limit moisture loss within the upper clays. Ground surfaces should be sloped away from structures at a minimum of 5 percent for a distance of 10 feet to provide positive drainage of surface water away from buildings. Grading must be provided and maintained following construction.

Organic, loose, or obviously compressive materials must be removed prior to placement of concrete floors or floor-supporting fill. In addition, the remaining subgrade should be treated in accordance with guidelines presented in the **Earthwork** section. Areas of excessive yielding should be excavated and backfilled with structural fill. Fill used to increase the elevation of the floor slab should meet requirements detailed in the **Structural Fill** section. Fill materials must be compacted to a minimum 95 percent of the maximum dry density as determined by ASTM D1557.

A free-draining granular mat (drainage fill course) should be provided below slabs-on-grade. This should be a minimum of 4 inches in thickness and properly compacted. The mat should consist of a sand and gravel mixture, complying with Idaho Standards for Public Works Construction (ISPWC) specifications for ¾-inch (Type 1) crushed aggregate. A moisture-retarder should be placed beneath floor slabs to minimize potential ground moisture effects on moisture-sensitive floor coverings. The moisture-retarder should be at least 15-mil in thickness and have a permeance of less than 0.01 US perms as determined by ASTM E96. Placement of the moisture-retarder will require special consideration with regard to effects on the slab-on-grade and should adhere to recommendations outlined in the ACI 302.1R and ASTM E1745 publications. The granular mat should be compacted to no less than 95 percent of the maximum dry density as determined by ASTM D1557. Upon request, MTI can provide further consultation regarding installation.

Recommended Pavement Sections

As required by Ada County Highway District (ACHD), MTI has used a traffic index of 6 to determine the necessary pavement cross-section for the site. MTI has made assumptions for traffic loading variables based on the character of the proposed construction. The Client should review these assumptions to make sure they reflect intended use and loading of pavements both now and in the future. MTI collected a sample of near-surface soils for Resistance Value (R-value) testing representative of soils to depths of 2 feet below existing ground surface. This sample, consisting of lean clay collected from test pit 14, yielded a R-value of less than 5. An R-value of 4 was used for design.

The following are minimum thickness requirements for assured pavement function. Depending on site conditions, additional work, e.g. soil preparation, may be required to support construction equipment. These have been listed within the **Soft Subgrade Soils** section. Results of the test are graphically depicted in the **Appendix**.

Flexible Pavement Section

The Gravel Equivalent Method, as defined in Section 500 of the State of Idaho Department of Transportation (ITD) Materials Manual, was used to develop the pavement sections. ACHD parameters for traffic index and substitution ratios, which were obtained from the ACHD Policy Manual, were also used in the design. A calculation sheet provided in the **Appendix** indicates the soils constant, traffic loading, traffic projections, and material constants used to calculate the pavement sections. MTI recommends that materials used in the construction of asphaltic concrete pavements meet the requirements of the ISPWC Standard Specification for Highway Construction. Construction of the pavement section should be in accordance with these specifications and should adhere to guidelines recommended in the section on **Construction Considerations**.

Gravel Equivalent Method Flexible Pavement Specifications

Pavement Section Component[1]	Roadway Section
Asphaltic Concrete	2.5 Inches
Crushed Aggregate Base	4.0 Inches
Structural Subbase	14.0 Inches
Compacted Subgrade	See **Pavement Subgrade Preparation** Section

[1]It will be required for MTI personnel to verify subgrade competency at the time of construction.

Asphaltic Concrete: Asphalt mix design shall meet the requirements of ISPWC, Section 810 Class III plant mix. Materials shall be placed in accordance with ISPWC Standard Specifications for Highway Construction.

Aggregate Base: Material complying with ISPWC Standards for Crushed Aggregate Materials.

Structural Subbase: Material complying with requirements for granular structural fill (uncrushed) as defined in ISPWC.

Pavement Subgrade Preparation

Plow zones, which should be treated as uncontrolled fill, was encountered across the majority of the site. MTI recommends that these fill materials be excavated to a sufficient depth to expose competent, native soils or to a minimum depth of 1½ feet below finished subgrade. If fill materials remain after over-excavation, the exposed subgrade must be compacted to at least 95 percent of the maximum dry density as determined by ASTM D698. MTI personnel must be present during excavation to identify these materials.

Native clay soils are moderately plastic and will be susceptible to shrink/swell movements associated with moisture changes. Areas of the site within the proposed pavement sections should be excavated to sufficient depths to expose clay soils. The clay soils should be scarified to a depth of 6 inches and compacted between 92 to 98 percent of the maximum dry density as determined by ASTM D698. The moisture content should be within 2 percent of optimum. Structural fill should be placed as soon as possible after compaction of clay soils in order to limit moisture loss within the upper clays.

Common Pavement Section Construction Issues

The subgrade upon which above pavement sections are to be constructed must be properly stripped, compacted (if indicated), inspected, and proof-rolled. Proof rolling of subgrade soils should be accomplished using a heavy rubber-tired, fully loaded, tandem-axle dump truck or equivalent. Verification of subgrade competence by MTI personnel at the time of construction is required. Fill materials on the site must demonstrate the indicated compaction prior to placing material in support of the pavement section. MTI anticipated that pavement areas will be subjected to moderate traffic. Subgrade clays and silts near and above optimum moisture contents may pump during compaction. Pumping or soft areas must be removed and replaced with structural fill.

Fill material and aggregates in support of the pavement section must be compacted to no less than 95 percent of the maximum dry density as determined by ASTM D698 for flexible pavements and by ASTM D1557 for rigid pavements. If a material placed as a pavement section component cannot be tested by usual compaction testing methods, then compaction of that material must be approved by observed proof rolling. Minor deflections from proof rolling for flexible pavements are allowable. Deflections from proof rolling of rigid pavement support courses should not be visually detectable.

CONSTRUCTION CONSIDERATIONS

Recommendations in this report are based upon structural elements of the project being founded on competent, native silty with sand/sandy silt soils, silty sand sediments, or compacted structural fill. Structural areas should be stripped to an elevation that exposes these soil types.

Earthwork

Excessively organic soils, deleterious materials, or disturbed soils generally undergo high volume changes when subjected to loads, which is detrimental to subgrade behavior in the area of pavements, floor slabs, structural fills, and foundations. Agricultural crops and brush with associated root systems were noted at the time of our investigation. It is recommended that organic or disturbed soils, if encountered, be removed to depths of 1 foot (minimum), and wasted or stockpiled for later use. Stripping depths should be adjusted in the field to assure that the entire root zone or disturbed zone (plow depths) or topsoil are removed prior to placement and compaction of structural fill materials. Exact removal depths should be determined during grading operations by MTI personnel, and should be based upon subgrade soil type, composition, and firmness or soil stability. If underground storage tanks, underground utilities, wells, or septic systems are discovered during construction activities, they must be decommissioned then removed or abandoned in accordance with governing Federal, State, and local agencies. Excavations developed as the result of such removal must be backfilled with structural fill materials as defined in the **Structural Fill** section.

MTI should oversee subgrade conditions (i.e., moisture content) as well as placement and compaction of new fill (if required) after native soils are excavated to design grade. Recommendations for structural fill presented in this report can be used to minimize volume changes and differential settlements that are detrimental to the behavior of footings, pavements, and floor slabs. Sufficient density tests should be performed to properly monitor compaction. For structural fill beneath building structures, one in-place density test per lift for every 5,000 square feet is recommended. In parking and driveway areas, this can be decreased to one test per lift for every 10,000 square feet.

Dry Weather

If construction is to be conducted during dry seasonal conditions, many problems associated with soft soils may be avoided. However, some rutting of subgrade soils may be induced by shallow groundwater conditions related to springtime runoff or irrigation activities during late summer through early fall. Solutions to problems associated with soft subgrade soils are outlined in the **Soft Subgrade Soils** section. Problems may also arise because of lack of moisture in native and fill soils at time of placement. This will require the addition of water to achieve near-optimum moisture levels. Low-cohesion soils exposed in excavations may become friable, increasing chances of sloughing or caving. Measures to control excessive dust should be considered as part of the overall health and safety management plan.

Wet Weather

If construction is to be conducted during wet seasonal conditions (commonly from mid-November through May), problems associated with soft soils must be considered as part of the construction plan. During this time of year, fine-grained soils such as silts and clays will become unstable with increased moisture content, and eventually deform or rut. Additionally, constant low temperatures reduce the possibility of drying soils to near optimum conditions.

Soft Subgrade Soils

Shallow fine-grained subgrade soils that are high in moisture content should be expected to pump and rut under construction traffic. During periods of wet weather, construction may become very difficult if not impossible. The following recommendations and options have been included for dealing with soft subgrade conditions:

- Track-mounted vehicles should be used to strip the subgrade of root matter and other deleterious debris. Heavy rubber-tired equipment should be prohibited from operating directly on the native subgrade and areas in which structural fill materials have been placed. Construction traffic should be restricted to designated roadways that do not cross, or cross on a limited basis, proposed roadway or parking areas.
- Soft areas can be over-excavated and replaced with granular structural fill.
- Construction roadways on soft subgrade soils should consist of a minimum 2-foot thickness of large cobbles of 4 to 6 inches in diameter with sufficient sand and fines to fill voids. Construction entrances should consist of a 6-inch thickness of clean, 2-inch minimum, angular drain-rock and must be a minimum of 10 feet wide and 30 to 50 feet long. During the construction process, top dressing of the entrance may be required for maintenance.

- Scarification and aeration of subgrade soils can be employed to reduce the moisture content of wet subgrade soils. After stripping is complete, the exposed subgrade should be ripped or disked to a depth of 1½ feet and allowed to air dry for 2 to 4 weeks. Further disking should be performed on a weekly basis to aid the aeration process.
- Alternative soil stabilization methods include use of geotextiles, lime, and cement stabilization. MTI is available to provide recommendations and guidelines at your request.

Frozen Subgrade Soils

Prior to placement of structural fill materials or foundation elements, frozen subgrade soils must either be allowed to thaw or be stripped to depths that expose non-frozen soils and wasted or stockpiled for later use. Stockpiled materials must be allowed to thaw and return to near-optimal conditions prior to use as structural fill.

The onsite, shallow clayey and silty soils are susceptible to frost heave during freezing temperatures. For exterior flatwork and other structural elements, adequate drainage away from subgrades is critical. Compaction and use of structural fill will also help to mitigate the potential for frost heave. Complete removal of frost susceptible soils for the full frost depth, followed by replacement with a non-frost susceptible structural fill, can also be used to mitigate the potential for frost heave. MTI is available to provide further guidance/assistance upon request.

Structural Fill

Soils recommended for use as structural fill are those classified as GW, GP, SW, and SP in accordance with the Unified Soil Classification System (USCS) (ASTM D2487). Use of silty soils (USCS designation of GM, SM, and ML) as structural fill may be acceptable. However, use of silty soils (GM, SM, and ML) as structural fill below footings is prohibited. These materials require very high moisture contents for compaction and require a long time to dry out if natural moisture contents are too high and may also be susceptible to frost heave under certain conditions. Therefore, these materials can be quite difficult to work with as moisture content, lift thickness, and compactive effort becomes difficult to control. If silty soil is used for structural fill, lift thicknesses should not exceed 6 inches (loose), and fill material moisture must be closely monitored at both the working elevation and the elevations of materials already placed. Following placement, silty soils must be protected from degradation resulting from construction traffic or subsequent construction.

Recommended granular structural fill materials, those classified as GW, GP, SW, and SP, should consist of a 6-inch minus select, clean, granular soil with no more than 50 percent oversize (greater than ¾-inch) material and no more than 12 percent fines (passing No. 200 sieve). These fill materials should be placed in layers not to exceed 12 inches in loose thickness. Prior to placement of structural fill materials, surfaces must be prepared as outlined in the **Construction Considerations** section. Structural fill material should be moisture-conditioned to achieve optimum moisture content prior to compaction. For structural fill below footings, areas of compacted backfill must extend outside the perimeter of the footings for a distance equal to the thickness of fill between the bottom of foundation and underlying soils, or 5 feet, whichever is less. All fill materials must be monitored during placement and tested to confirm compaction requirements, outlined below, have been achieved.

Each layer of structural fill must be compacted, as outlined below:

- Below Structures and Rigid Pavements: A minimum of 95 percent of the maximum dry density as determined by ASTM D1557.
- Below Flexible Pavements: A minimum of 92 percent of the maximum dry density as determined by ASTM D1557 or 95 percent of the maximum dry density as determined by ASTM D698.

The ASTM D1557 test method must be used for samples containing up to 40 percent oversize (greater than ¾-inch) particles. If material contains more than 40 percent but less than 50 percent oversize particles, compaction of fill must be confirmed by proof rolling each lift with a 10-ton vibratory roller (or equivalent) until the maximum density has been achieved. Density testing must be performed after each proof rolling pass until the in-place density test results indicate a drop (or no increase) in the dry density, defined as maximum density or "break over" point. The number of required passes should be used as the requirements on the remainder of fill placement. Material should contain sufficient fines to fill void spaces, and must not contain more than 50 percent oversize particles.

Backfill of Walls

Backfill materials must conform to the requirements of structural fill, as defined in this report. For wall heights greater than 2.5 feet, the maximum material size should not exceed 4 inches in diameter. Placing oversized material against rigid surfaces interferes with proper compaction, and can induce excessive point loads on walls. Backfill shall not commence until the wall has gained sufficient strength to resist placement and compaction forces. Further, retaining walls above 2.5 feet in height shall be backfilled in a manner that will limit the potential for damage from compaction methods and/or equipment. It is recommended that only small hand-operated compaction equipment be used for compaction of backfill within a horizontal distance equal to the height of the wall, measured from the back face of the wall.

Backfill should be compacted in accordance with the specifications for structural fill, except in those areas where it is determined that future settlement is not a concern, such as planter areas. In nonstructural areas, backfill must be compacted to a firm and unyielding condition.

Excavations

Shallow excavations that do not exceed 4 feet in depth may be constructed with side slopes approaching vertical. Below this depth, it is recommended that slopes be constructed in accordance with Occupational Safety and Health Administration (OSHA) regulations, Section 1926, Subpart P. Based on these regulations, on-site soils are classified as type "C" soil, and as such, excavations within these soils should be constructed at a maximum slope of 1½ feet horizontal to 1 foot vertical (1½:1) for excavations up to 20 feet in height. Excavations in excess of 20 feet will require additional analysis. Note that these slope angles are considered stable for short-term conditions only, and will not be stable for long-term conditions.

During the subsurface exploration, test pit sidewalls generally exhibited little indication of collapse; however, sloughing of native granular sediments from test pit sidewalls was observed. For deep excavations, native granular sediments cannot be expected to remain in position. These materials are prone to failure and may collapse, thereby undermining upper soil layers. This is especially true when excavations approach depths near the water table. Care must be taken to ensure that excavations are properly backfilled in accordance with procedures outlined in this report.

Shallow soil cementation (caliche) was observed throughout much of the site and may cause difficulties during foundation development and utility placement. Cemented soils should be anticipated throughout the site at depths as shallow as 0.9 to 5.0 feet bgs.

Groundwater Control

Groundwater was not encountered during the investigation and is anticipated to be below the depth of most construction. Special precautions may be required for control of surface runoff and subsurface seepage. It is recommended that runoff be directed away from open excavations. Silty or clayey soils may become soft and pump if subjected to excessive traffic during time of surface runoff. Ponded water in construction areas should be drained through methods such as trenching, sloping, crowning grades, nightly smooth drum rolling, or installing a French drain system. Additionally, temporary or permanent driveway sections should be constructed if extended wet weather is forecasted.

GENERAL COMMENTS

When plans and specifications are complete, or if significant changes are made in the character or location of the proposed development, consultation with MTI should be arranged as supplementary recommendations may be required. Suitability of subgrade soils and compaction of structural fill materials must be verified by MTI personnel prior to placement of structural elements. Additionally, monitoring and testing should be performed to verify that suitable materials are used for structural fill and that proper placement and compaction techniques are utilized.

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APPENDICES

ACRONYM LIST

AASHTO:	American Association of State Highway and Transportation Officials
ACHD:	Ada County Highway District
ACI	American Concrete Institute
ASCE	American Society of Civil Engineers
ASTM:	American Society for Testing and Materials
bgs:	below ground surface
CBR:	California Bearing Ratio
D:	natural dry unit weight, pcf
ESAL	Equivalent Single Axle Load
GS:	grab sample
IBC:	International Building Code
IDEQ	Idaho Department of Environmental Quality
ISPWC:	Idaho Standards for Public Works Construction
ITD:	Idaho Transportation Department
LL:	Liquid Limit
M:	water content
MSL:	mean sea level
N:	Standard "N" penetration: blows per foot, Standard Penetration Test
NP:	nonplastic
OSHA	Occupational Safety and Health Administration
PCCP:	Portland Cement Concrete Pavement
PERM:	vapor permeability
PI:	Plasticity Index
PID:	photoionization detector
PVC:	polyvinyl chloride
Qc:	cone penetrometer value, unconfined compressive strength, psi
Qp:	Penetrometer value, unconfined compressive strength, tsf
Qu:	Unconfined compressive strength, tsf
RMR	Rock Mass Rating
RQD	Rock Quality Designation
R-Value	Resistance Value
SPT:	Standard Penetration Test (140:pound hammer falling 30 in. on a 2:in. split spoon)
USCS:	Unified Soil Classification System
USDA:	United States Department of Agriculture
UST:	underground storage tank
V:	vane value, ultimate shearing strength, tsf

GEOTECHNICAL GENERAL NOTES

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION			
Coarse-Grained Soils	**SPT Blow Counts (N)**	**Fine-Grained Soils**	**SPT Blow Counts (N)**
Very Loose:	< 4	Very Soft:	< 2
Loose:	4-10	Soft:	2-4
Medium Dense:	10-30	Medium Stiff:	4-8
Dense:	30-50	Stiff:	8-15
Very Dense:	>50	Very Stiff:	15-30
		Hard:	>30

Moisture Content	
Description	**Field Test**
Dry	Absence of moisture, dusty, dry to touch
Moist	Damp but not visible moisture
Wet	Visible free water, usually soil is below water table

Cementation	
Description	**Field Test**
Weakly	Crumbles or breaks with handling or slight finger pressure
Moderately	Crumbles or beaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

PARTICLE SIZE					
Boulders:	>12 in.	Coarse-Grained Sand:	5 to 0.6 mm	Silts:	0.075 to 0.005 mm
Cobbles:	12 to 3 in.	Medium-Grained Sand:	0.6 to 0.2 mm	Clays:	<0.005 mm
Gravel:	3 in. to 5 mm	Fine-Grained Sand:	0.2 to 0.075 mm		

UNIFIED SOIL CLASSIFICATION SYSTEM			
Major Divisions		**Symbol**	**Soil Descriptions**
Coarse-Grained Soils <50% passes No.200 sieve	Gravel & Gravelly Soils <50% coarse fraction passes No.4 sieve	GW	Well-graded gravels; gravel/sand mixtures with little or no fines
		GP	Poorly-graded gravels; gravel/sand mixtures with little or no fines
		GM	Silty gravels; poorly-graded gravel/sand/silt mixtures
		GC	Clayey gravels; poorly-graded gravel/sand/clay mixtures
	Sand & Sandy Soils >50% coarse fraction passes No.4 sieve	SW	Well-graded sands; gravelly sands with little or no fines
		SP	Poorly-graded sands; gravelly sands with little or no fines
		SM	Silty sands; poorly-graded sand/gravel/silt mixtures
		SC	Clayey sands; poorly-graded sand/gravel/clay mixtures
Fine Grained Soils >50% passes No.200 sieve	Silts & Clays LL < 50	ML	Inorganic silts; sandy, gravelly or clayey silts
		CL	Lean clays; inorganic, gravelly, sandy, or silty, low to medium-plasticity clays
		OL	Organic, low-plasticity clays and silts
	Silts & Clays LL > 50	MH	Inorganic, elastic silts; sandy, gravelly or clayey elastic silts
		CH	Fat clays; high-plasticity, inorganic clays
		OH	Organic, medium to high-plasticity clays and silts
Highly Organic Soils		PT	Peat, humus, hydric soils with high organic content

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-1 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.

Excavated by: Andersen Construction **Location:** See Site Map Plates

Depth to Water Table: Not Encountered **Total Depth:** 15.1 Feet bgs

Staked Location Information: Test Pit 50, Elevation 2752.54

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-0.8	Lean Clay (CL): *Brown to dark brown, dry, medium stiff to very stiff.* *--Organic material to a depth of 0.3 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable*			1.0-2.0	
0.8-2.8	Sandy Silt (ML): *Brown, dry, very stiff to hard, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.*	Silt Loam B-2			3.0-4.5	
2.8-5.0	Silty Sand (SM): *Light brown, dry, dense, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.*	Loam B-2				
5.0-8.0	Silty Gravel (GM): *Brown, dry, very dense, with fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles.* *--Weak to moderate calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
8.0-15.1	Poorly Graded Gravel with Sand (GP): *Brown, dry to slightly moist, dense to very dense, with fine to coarse-grained sand, fine to coarse gravel and 16-inch minus boulders.*	Extremely Gravelly Sand B-1**				

*Soil is considered unsuitable because of the presence of calcium carbonate cementation.

**Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-2 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 7.5 Feet bgs
Staked Location Information: Test Pit 51, Elevation 2757.93

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.0	Silt with Sand (ML): *Brown to light brown, dry, stiff, with fine-grained sand.* *--Organic material throughout.* *--Plow zone to 1.5 feet bgs.*	Silt C-1				
2.0-3.9	Silty Gravel (GM): *Light brown, dry, dense, with fine to medium-grained sand, coarse gravel, and 6-inch minus cobbles.* *--Organic material throughout.*	Very Gravelly Loamy Sand B-1*				
3.9-7.5	Poorly Graded Gravel with Sand (GP): *Light brown, dry, dense, with fine to coarse-grained sand, fine to coarse gravel, and 6-inch minus cobbles.*	Extremely Gravelly Sand A-2b**				

* Soil has been lowered one subgroup because it is very gravelly.
**Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-3 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.

Excavated by: Andersen Construction **Location:** See Site Map Plates

Depth to Water Table: Not Encountered **Total Depth:** 8.0 Feet bgs

Staked Location Information: Test Pit 52, Elevation 2758.96

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.0	Lean Clay (CL): *Dark brown, dry, very stiff, with fine-grained sand.* *--Organic material throughout.* *--Plow zone throughout.*	Clay Unsuitable			3.5	
1.0-4.4	Sandy Silt (ML): *Brown, dry, hard, with fine-grained sand.* *--Moderate calcium carbonate cementation from 2.5 to 4.4 feet bgs.*	Silt Loam Unsuitable*			4.5+	
4.4-5.9	Silty Sand (SM): *Light brown to brown, dry, dense, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation.*	Loam B-2				
5.9-8.0	Poorly Graded Gravel with Sand (GP): *Brown to light brown, dry to slightly moist, dense to medium dense, with fine to coarse-grained sand, fine to coarse gravel, and 4-inch minus cobbles.* *--Moderate calcium carbonate cementation from 5.9 to 6.5 feet bgs.*	Extremely Gravelly Sand Unsuitable* (5.9 to 6.5) B-1** (6.5 to 8.0)				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
**Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-4 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.

Excavated by: Andersen Construction **Location:** See Site Map Plates

Depth to Water Table: Not Encountered **Total Depth:** 9.8 Feet bgs

Staked Location Information: Test Pit 53, Elevation 2753.48

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-0.9	Lean Clay (CL): *Dark brown, dry, very stiff, with fine-grained sand.* *--Organic material throughout.* *--Plow zone throughout.*	Clay Unsuitable			3.5-4.5	
0.9-1.8	Silt with Sand (ML): *Tan to light brown, dry, hard, with fine-grained sand.* *--Moderate to strong calcium carbonate cementation throughout.*	Silt Unsuitable*			4.5+	
1.8-3.7	Silty Sand with Gravel (SM): *Light brown to brown, dry, dense, with fine to medium-grained sand, coarse gravel, and occasional 6-inch minus cobbles.* *--Intermittent weak calcium carbonate cementation.*	Loam Unsuitable*				
3.7-9.8	Poorly Graded Gravel with Sand (GP): *Brown to light brown, dry to slightly moist, dense to medium dense, with fine to coarse-grained sand, fine to coarse gravel, and 4-inch minus cobbles.* *--Moderate calcium carbonate cementation and some silt content from 3.7 to 4.7 feet bgs.*	Extremely Gravelly Sand Unsuitable* (3.7 to 4.7) B-1** (4.7 to 9.8)				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

**Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-5 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 9.5 Feet bgs
Staked Location Information: Test Pit 54, Elevation 2748.64

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.0	Lean Clay (CL): *Dark brown, dry, very stiff, with fine-grained sand.* *--Organic material throughout.* *--Plow zone throughout.* *--Intermittent weak induration throughout.*	Clay Unsuitable				
1.0-3.8	Silt with Sand (ML): *Tan to light brown, dry, hard, with fine-grained sand.* *--Weak to moderate calcium carbonate cementation from 1.0 to 2.0 feet bgs.*	Silt Unsuitable* (1.0 to 2.0) C-1 (2.0 to 3.8)			4.5+	
3.8-7.5	Poorly Graded Gravel with Silt and Sand (GP-GM): *Brown, dry to slightly moist, dense to very dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch minus cobbles.* *--Weak calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
7.5-9.5	Poorly Graded Gravel with Sand (GP): *Brown, slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch minus cobbles.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
**Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-6 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.

Excavated by: Andersen Construction **Location:** See Site Map Plates

Depth to Water Table: Not Encountered **Total Depth:** 10.3 Feet bgs

Staked Location Information: Test Pit 67, Elevation 2752.44

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.4	Lean Clay (CL): *Dark brown, slightly moist, hard, with fine-grained sand.* *--Organic material throughout.* *--Plow zone to a depth of 1.0 foot bgs.*	Clay Unsuitable			4.5+	
1.4-5.7	Sandy Silt (ML): *Tan to light brown, dry, hard, with fine-grained sand.* *--Organic material to a depth of 1.7 feet bgs.* *--Weak to moderate calcium carbonate cementation from 1.4 to 4.5 feet bgs.*	Silt Loam Unsuitable* (1.4 to 4.5) B-2 (4.5 to 5.7)			4.5+	
5.7-7.8	Silty Sand (SM): *Brown, slightly moist, stiff to very stiff, with fine to medium-grained sand.* *--Sand content increases with depth.*	Loam B-2				
7.8-9.3	Silty Gravel (GM): *Brown, dry to slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles.*	Very Gravelly Loamy Sand B-2**				
9.3-10.3	Poorly Graded Gravel with Sand (GP): *Light brown, slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles.*	Extremely Gravelly Sand B-1***				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered one subgroup because it is very gravelly.
*** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-7 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 9.2 Feet bgs
Staked Location Information: Test Pit 68, Elevation 2755.29

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.0	Lean Clay (CL): *Dark brown, dry to slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 1.7 feet bgs..* *--Plow zone to a depth of 1.0 foot bgs.*	Clay Unsuitable			4.0-4.5	
2.0-7.0	Silt with Sand (ML): *Tan to light brown, dry, very stiff to hard, with fine-grained sand.* *--Weak to moderate calcium carbonate cementation from 2.0 to 4.0 feet bgs.* *--Intermittent weak cementation from 4.0 to 7.0 feet bgs.* *--Sand content increases with depth.*	Silt Unsuitable*				
7.0-9.2	Poorly Graded Sand with Gravel (SP): *Brown, dry to slightly moist, dense, with fine to coarse-grained sand, coarse gravel, and 4-inch minus cobbles.* *--Some silt content present in the upper 12 inches.*	Gravelly Sand A-2b**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered one subgroup because of the limited silt content.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-8 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 14.1 Feet bgs
Staked Location Information: Test Pit 66, Elevation 2753.43

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.4	Lean Clay (CL): *Dark brown, slightly moist, hard, with fine-grained sand.* *--Organic material throughout.* *--Plow zone throughout.*	Clay Unsuitable			4.5+	
1.4-5.5	Sandy Silt (ML): *Tan, dry, hard, with fine-grained sand.* *--Weak to moderate calcium carbonate cementation throughout.*	Silt Loam Unsuitable*				
5.5-10.1	Silty Sand (SM): *Tan, dry, dense to very dense, with fine-grained sand.* *--Weak calcium carbonate cementation from 5.5 to 7.2 feet bgs.* *--Gravel content present from 8.6 to 10.1 feet bgs.*	Loam Unsuitable (5.5 to 7.2) B-2 (7.2 to 10.1)	GS	6.5-6.8		A
10.1-14.1	Poorly Graded Sand with Gravel (SP): *Tan to light brown, slightly moist, medium dense to dense, with fine to coarse-grained sand, coarse gravel, and 8-inch minus cobbles.* *--Grades to poorly graded gravel with sand at depth.*	Gravelly Sand grading to Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

Lab Test ID	M	LL	PI	Sieve Analysis (% passing)				
-	%	-	-	#4	#10	#40	#100	#200
A	17.8	NP	NP	90	78	51	40	32.4

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-9 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 11.8 Feet bgs
Staked Location Information: Test Pit 65, Elevation 2752.16

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.5	Lean Clay (CL): *Dark brown, dry to slightly moist, hard, with fine-grained sand.* *--Organic material to a depth of 1.0 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable				
1.5-7.2	Sandy Silt (ML): *Tan, dry, hard, with fine-grained sand.* *--Moderate to strong calcium carbonate cementation throughout.* *--Sand content increases with depth*	Silt Loam Unsuitable*				
7.2-11.8	Silty Sand (SM): *Brown, slightly moist, dense to very dense, with fine to medium-grained sand.*	Loam B-2				
Below 11.8	Poorly Graded Gravel with Sand (GP): *Tan to light brown, dry to slightly moist, medium dense to dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch minus cobbles.* *--Refusal was met at 11.8 feet bgs as a result of space constraints from cementation in upper soil horizons.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-10 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 10.1 Feet bgs
Staked Location Information: Test Pit 55, Elevation 2750.06

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-0.7	Lean Clay (CL): *Dark brown, dry, hard, with fine-grained sand.* *--Organic material throughout.* *--Plow zone throughout.*	Clay Unsuitable			4.25-4.5	
0.7-5.5	Sandy Silt (ML): *Tan to light brown, dry, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 1.1 feet bgs.* *--Moderate to strong calcium carbonate cementation from 2.3 to 5.5 feet bgs.*	Silt Loam Unsuitable*			4.0-4.5	
5.5-10.1	Silty Sand (SM): *Brown, slightly moist, dense to very dense, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.*	Loam B-2				
Below 10.1	Poorly Graded Gravel with Sand (GP): *Tan to light brown, dry to slightly moist, medium dense to dense, with fine to coarse-grained sand, fine to coarse gravel, and 6-inch minus cobbles.* *--Refusal was met at 10.1 feet bgs as a result of space constraints from cementation in upper soil horizons.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-11 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 10.2 Feet bgs
Staked Location Information: Test Pit 56, Elevation 2751.84

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-3.0	Lean Clay with Sand (CL): *Brown, slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.5 foot bgs.* *--Plow zone to a depth of 1.0 foot bgs.*	Clay Unsuitable				
3.0-10.0	Sandy Silt (ML): *Tan, dry, very stiff to hard, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation from 3.0 to 4.4 feet bgs* *--Weak to strong calcium carbonate cementation from 4.4 to 10.0 feet bgs.*	Silt Loam Unsuitable*				
10.0-10.2	Silty Sand (SM): *Brown, dry to slightly moist, dense to very dense, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.* *--Refusal was met at 10.2 feet bgs as a result of space constraints from cementation in upper soil horizons.* *--It is anticipated that poorly graded gravel with sand sediments are present beneath this soil horizon.*	Loam B-2				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-12 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 10.3 Feet bgs
Staked Location Information: Test Pit 64, Elevation 2752.50

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.5	Lean Clay (CL): *Dark brown to brown, slightly moist, hard, with fine-grained sand.* *--Organic material to a depth of 0.5 foot bgs.* *--Plow zone to a depth of 1.0 foot bgs.*	Clay Unsuitable			4.5	
1.5-9.8	Silt with Sand (ML): *Tan to light brown, dry, hard, with fine-grained sand.* *--Moderate calcium carbonate cementation from 3.0 to 4.3 feet bgs* *--Weak to moderate calcium carbonate cementation from 4.3 to 9.8 feet bgs.* *--Sand content increases with depth.*	Silt Loam Unsuitable*				
9.8-10.3	Silty Sand (SM): *Brown, dry to slightly moist, dense to very dense, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.* *--Refusal was met at 10.3 feet bgs as a result of space constraints from cementation in upper soil horizons.* *--It is anticipated that poorly graded gravel with sand sediments are present beneath this soil horizon.*	Loam B-2				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-13 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 11.6 Feet bgs
Staked Location Information: Test Pit 63, Elevation 2754.36

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.2	Lean Clay (CL): *Dark brown to brown, slightly moist, hard, with fine-grained sand.* *--Organic material to a depth of 0.4 foot bgs.* *--Plow zone to a depth of 1.3 feet bgs.*	Clay Unsuitable			4.25-4.5	
2.2-7.5	Silt with Sand (ML): *Tan to light brown, dry, hard, with fine-grained sand.* *--Weak calcium carbonate cementation from 2.2 to 4.0 feet bgs.* *--Moderate to strong calcium carbonate cementation from 4.0 to 7.5 feet bgs*	Silt Loam Unsuitable*				
7.5-11.6	Silty Sand (SM): *Brown, slightly moist, dense to very dense, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.* *--Refusal was met at 11.6 feet bgs as a result of space constraints from cementation in upper soil horizons.* *--It is anticipated that poorly graded gravel with sand sediments are present beneath this soil horizon.*	Loam B-2				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-14 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 11.6 Feet bgs
Staked Location Information: Test Pit 62, Elevation 2752.25

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.4	Lean Clay (CL): *Dark brown to brown, slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.4 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable	Bulk	0.8-1.0	3.75-4.5	B R-value
1.4-6.8	Sandy Silt (ML): *Tan, dry, hard, with fine-grained sand.* *--Moderate calcium carbonate cementation from 2.1 to 6.8 feet bgs*	Silt Loam Unsuitable*			4.5+	
6.8-8.0	Silty Sand (SM): *Brown, slightly moist, dense, with fine to medium-grained sand.*	Loam B-2				
8.0-10.1	Silty Gravel (GM): *Brown, slightly moist, dense to very dense, with fine to medium-grained sand.* *--Weak calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
10.1-12.8	Poorly Graded Gravel with Sand (GP): *Light brown, slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch minus cobbles.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
**Soil has been lowered two subgroups because it is extremely gravelly.

Lab Test ID	M	LL	PI	Sieve Analysis (% passing)				
-	%	-	-	#4	#10	#40	#100	#200
A	11.1	40	27	99	99	97	92	85.9

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-15 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 7.8 Feet bgs
Staked Location Information: Test Pit 61, Elevation 2750.56

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.8	Lean Clay (CL): *Dark brown to brown, slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.3 foot bgs.* *--Plow zone to a depth of 0.8 foot bgs.*	Clay Unsuitable			3.75-4.5	
1.8-5.4	Silt with Sand (ML): *Tan, dry, hard, with fine-grained sand.* *--Moderate calcium carbonate cementation throughout.*	Silt Unsuitable*				
5.4-7.8	Silty Sand (SM): *Brown, slightly moist, dense, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation throughout.*	Loam B-2				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-16 **Date Advanced:** 2 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 7.8 Feet bgs
Staked Location Information: Test Pit 61, Elevation 2760.39

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.6	Lean Clay (CL): *Brown, dry to slightly moist, stiff to very stiff, with fine-grained sand.* *--Organic material to a depth of 0.3 foot bgs.* *--Plow zone to a depth of 0.8 foot bgs.*	Clay Unsuitable			1.5-4.0	
1.6-4.0	Silt with Sand (ML): *Tan, dry, hard, with fine-grained sand.* *--Moderate calcium carbonate cementation throughout.* *--Limited 4-inch minus cobbles noted in the bottom portion of this horizon.*	Silt Unsuitable*				
4.0-6.0	Silty Gravel (GM): *Tan to light brown, slightly moist, dense to very dense, with fine to medium-grained sand.* *--Weak calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
6.0-7.4	Poorly Graded Gravel with Sand (GP): *Brown to light brown, slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-17 **Date Advanced:** 3 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 14.0 Feet bgs
Staked Location Information: Test Pit 59, Elevation 2759.74

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.3	Lean Clay (CL): *Brown, dry to slightly moist, hard, with fine-grained sand.* *--Organic material to a depth of 0.4 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable			4.5+	
1.3-4.0	Silt with Sand (ML): *Tan, dry, hard, with fine-grained sand.* *--Very strong calcium carbonate cementation throughout.*	Silt Unsuitable*			4.5+	
4.0-6.5	Silty Gravel (GM): *Light brown, slightly moist, very dense, with fine to medium-grained sand.* *--Weak to moderate calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
6.5-14.0	Poorly Graded Gravel with Sand (GP): *Brown, slightly moist, dense, with fine to medium-grained sand, fine to coarse gravel, and 10-inch minus cobbles.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-18 **Date Advanced:** 3 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 10.9 Feet bgs
Staked Location Information: Test Pit 58, Elevation 2756.65

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-0.9	Lean Clay (CL): *Dark brown, slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.3 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable			2.25-4.5	
0.9-8.5	Silt with Sand (ML): *Brown to light brown, dry, hard, with fine-grained sand.* *--Moderate to strong calcium carbonate cementation from 3.5 to 8.5 feet bgs.*	Silt C-1 (0.9 to 3.5) Unsuitable* (3.5 to 10.9)			4.5+	
8.5-10.9	Silty Sand (SM): *Light brown, dry, very dense, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation from 8.5 to 10.0 feet bgs.* *--Very strong calcium carbonate cementation from 10.0 to 10.9 feet bgs.* *--Refusal on very strong calcium carbonate cementation.*	Loam Unsuitable*				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-19 **Date Advanced:** 3 Oct 2017 **Logged by:** Monica Saculles, P.E.

Excavated by: Andersen Construction **Location:** See Site Map Plates

Depth to Water Table: Not Encountered **Total Depth:** 9.4 Feet bgs

Staked Location Information: None, extra test pit advanced per CHDH request. Latitude: 43.54193, Longitude: -116.35827

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.0	Lean Clay (CL): *Dark brown, slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.3 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable			2.25-4.5	
1.0-6.6	Silt with Sand (ML): *Brown to tan, dry, very stiff to hard, with fine-grained sand.* *--Moderate to strong calcium carbonate cementation from 2.7 to 6.6 feet bgs.*	Silt C-1 (1.0 to 2.7) Unsuitable* (2.7 to 6.6)				
6.6-9.4	Poorly Graded Gravel with Sand (GP): *Brown, dry, very dense to dense, with fine to coarse-grained sand, fine to coarse gravel, and 6-inch minus cobbles.* *--Occasional zones of poorly graded sand with gravel.* *--Grades to medium dense at roughly 8 feet bgs.*	Very Gravelly to Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.

** Soil has been lowered two subgroups because it is extremely gravelly.

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-20 **Date Advanced:** 3 Oct 2017 **Logged by:** Monica Saculles, P.E.
Excavated by: Andersen Construction **Location:** See Site Map Plates
Depth to Water Table: Not Encountered **Total Depth:** 13.0 Feet bgs
Staked Location Information: Test Pit 59, Elevation 2754.88

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	USDA Soil Classification and Design Soil Subgroup	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.1	Lean Clay (CL): *Dark brown, dry to slightly moist, very stiff to hard, with fine-grained sand.* *--Organic material to a depth of 0.5 foot bgs.* *--Plow zone throughout.*	Clay Unsuitable			3.0-4.5	
1.1-6.0	Sandy Silt (ML): *Tan to light brown, dry, very stiff to hard, with fine-grained sand.* *--Intermittent weak calcium carbonate cementation from 1.1 to 1.9 feet bgs.* *--Moderate to strong calcium carbonate cementation from 1.9 to 6.0 feet bgs.* *--Occasional 4-inch minus cobbles present from 5.0 to 6.0 feet bgs.*	Silt Loam Unsuitable*				
6.0-8.2	Silty Gravel (GM): *Brown, dry, dense to very dense, with fine to coarse-grained sand, coarse gravel, and 12-inch minus cobbles.* *--Weak calcium carbonate cementation throughout.*	Very Gravelly Loamy Sand Unsuitable*				
8.2-13.0	Poorly Graded Gravel with Sand (GP): *Light brown, dry to slightly moist, dense, with fine to coarse-grained sand, fine to coarse gravel, and 12-inch minus cobbles.*	Extremely Gravelly Sand B-1**				

* Soil is considered unsuitable because of the presence of calcium carbonate cementation.
** Soil has been lowered two subgroups because it is extremely gravelly.

GRAVEL EQUIVALENT METHOD – PAVEMENT THICKNESS DESIGN PROCEDURES

Pavement Section Design Location: The Keep Subdivision, Residential Roadways

Average Daily Traffic Count:		All Lanes & Both Directions	
Design Life:	20	Years	
Traffic Index:	6.00		
Climate Factor:	1	**R-Value of Subgrade:**	4.00
Subgrade CBR Value:	2	**Subgrade Mr:**	3,000
R-Value of Aggregate Base:	80		
R-Value of Granular Borrow:	60		
Subgrade R-Value:	4		
Expansion Pressure of Subgrade:	0.50		
Unit Weight of Base Materials:	130		
Total Design Life 18 kip ESAL's:	33,131		
ASPHALTIC CONCRETE:			
Gravel Equivalent, Calculated:	0.384		
Thickness:	0.1969231	Use = 2.5 Inches	
Gravel Equivalent, ACTUAL:	0.41		
CRUSHED AGGREGATE BASE:			
Gravel Equivalent (Ballast):	0.768		
Thickness:	0.329	Use = 4 Inches	
Gravel Equivalent, ACTUAL:	0.773		
SUBBASE:			
Gravel Equivalent (Ballast):	1.843		
Thickness:	1.070	Use = 14 Inches	
Gravel Equivalent, ACTUAL:	1.940		
TOTAL Thickness:	1.708		
Thickness Required by Exp. Pressure:	0.554		

	Design Depth Inches	ACHD Substitution Ratios
Asphaltic Concrete (at least 2.5):	**2.50**	1.95
Asphalt Treated Base (at least 4.2):	**0.00**	
Cement Treated Base (at least 4.2):	**0.00**	
Crushed Aggregate Base (at least 4.2):	**4.00**	1.10
Subbase (at least 4.2):	**14.00**	1.00

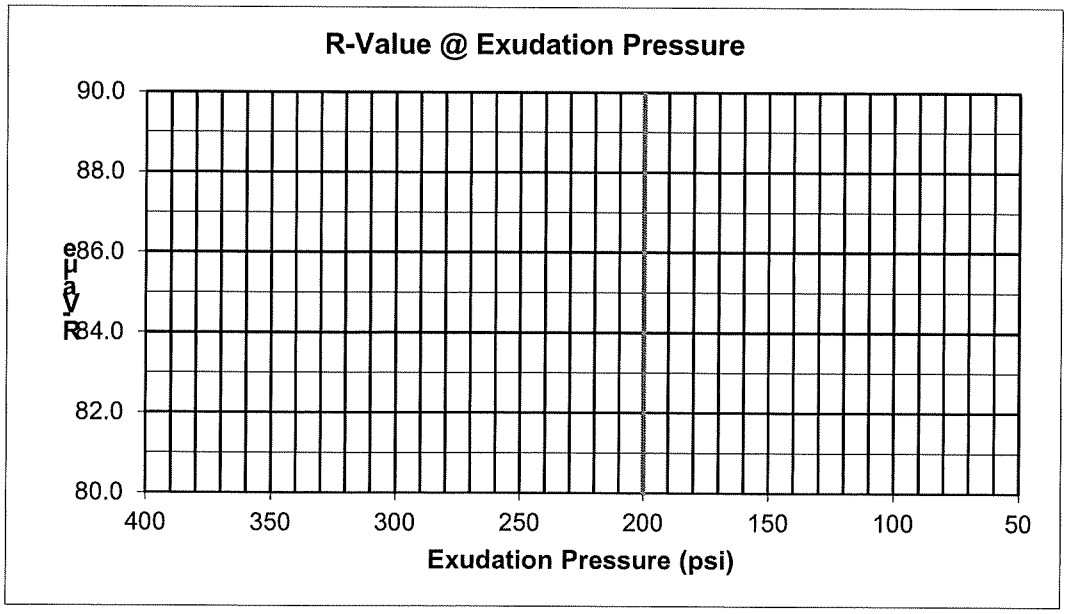
R-VALUE LABORATORY TEST DATA

Source and Description:	TP 14: 0.8-1.0; Lean Clay						
Date Obtained:	October 2, 2017						
Sample ID:	17-7821						
Sampling and Preparation:	ASTM D75:	X	AASHTO T2:		ASTM D421:	X	AASHTO T87:
Test Standard:	ASTM D2844:		AASHTO T190:		Idaho T8:	X	

Sample	A	B	C
Dry Density (lb/ft^3)	NA	NA	NA
Moisture Content (%)	NA	NA	NA
Expansion Pressure (psi)	NA	NA	NA
Exudation Pressure (psi)	NA	NA	NA
R-Value	NA	NA	NA

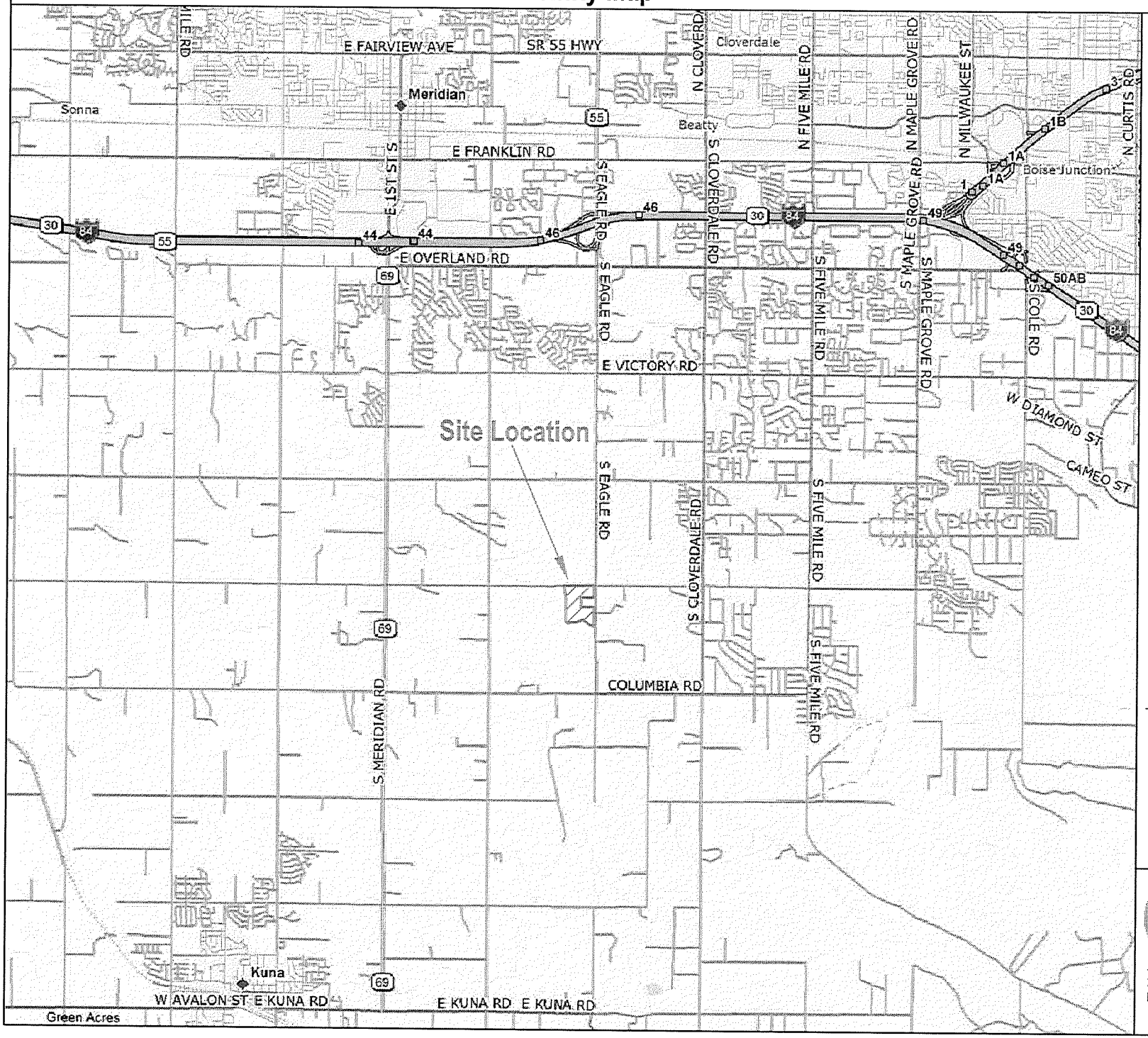
R-Value @ 200 psi Exudation Pressure = Less than 5**

** ASTM D2844 Note 2: Occasionally, material from very plastic clay-test specimens will extrude from under the mold and around the follower ram during the loading operation. If this occurs when the 800-psi point is reached and fewer than five lights are lighted, the soil should be reported as less than 5 R-value.



Vicinity Map

Plate 1



MAP NOTES:

- Delorme Street Atlas
- Not to Scale

LEGEND

Approximate Site Location

The Keep Subdivision

Eagle Road and Lake Hazel Road
Meridian, ID

Modified from DeLorme by: MHS
20 October 2017
Drawing: B171395g

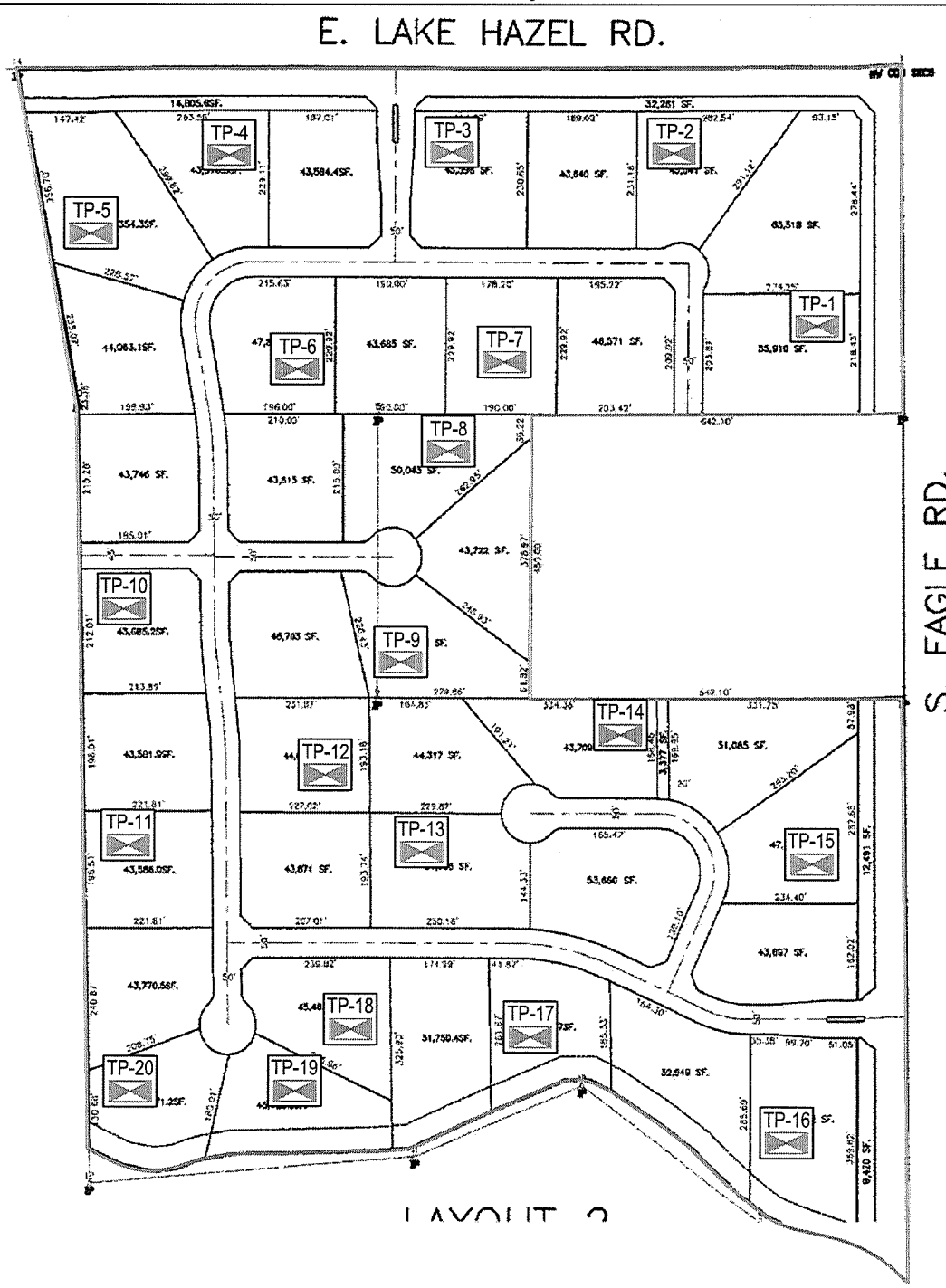
MATERIALS TESTING & INSPECTION

2791 S. Victory View Way
Boise, ID 83709-2835

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

Site Map

Plate 2



NOTES:

- Not to Scale

LEGEND

Approximate Site Boundary

Approximate MTI Test Pit Location

N

The Keep Subdivision

Eagle Road and Lake Hazel Road
Meridian, ID

Modified by: MHS
20 October 2017
Drawing: B171395g

MATERIALS TESTING & INSPECTION

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