DESIGN REVIEW

Permit info: DSRFY2019-11

Application Date: 5/22/2019 Rec'd by: MK

FOR OFFICE USE ONLY

6015 Glenwood Street ▪ Garden City, ID 83714 ▪ 208.472.2921
▪ www.gardencityidaho.org ▪ planning@gardencityidaho.org

APPLICANT	PROPERTY OWNER
Name: Sean Conner	Name: John Evans, Mayor
Company: The Land Group, Inc.	Company: Garden City
Address: 462 E. Shore Drive Ste 100	Address: 6015 N. Glenwood St
City: Eagle	City: Garden City
State: Idaho Zip: 83616	State: Idaho Zip: 83714
Tel.: 208.939.4041	Tel.: 208.472.2900
E-mail: sean@thelandgroupinc.com	E-mail: jevans@gardencityidaho.org

PROPERTY AND DESIGN INFORMATION

This application is a request to: ☒ **Construct New** ☐ **Addition** ☐ **Subdivision**

Site Address: 3858 N. Reed St.		
Subdivision Name: N/A	**Lot:** N/A	**Block:** N/A
Tax Parcel Number: R2734560310	**Zoning:** R-3	**Total Acres:** 1.5
Proposed Use: Public Green Space	**Floodplain:** (Yes)	No

OBJECTIVES 8-4C

1. How does the design of the structure advance an urban form through its relationship to the street, the pedestrian and adjacent properties?
2. How does the design maximize the opportunities for safe and comfortable pedestrian accessibility and minimize the effects of parking and vehicular circulation?
3. What are the building materials?
4. What are the existing notable site features and how does the design respect them?
5. Is the building consistent with the adopted streetscape?

Bike and Pedestrian: How have bike and pedestrian circulation been arranged with respect to adjacent facilities, internal circulation, and potential vehicular conflicts? Is there sidewalk? How far away are the nearest transit facilities and is there safe and comfortable access to the facilities?

Parking and parking lot standards: Is there a tree provided for every 5 parking stalls? Is there bike parking provided? Is the parking adequately screened from adjacent uses and the street? Is there any stall that is located more than 100' from a shade tree?

Community Interaction: How does the development incorporate into the envisioned neighborhood? How does the proposed project support a compact development pattern that enables intensification of development and changes over time? How does the proposed design support a development

pattern in nodes rather than strip commercial along arterial corridors? How does the project promote a place where people want to be? If not exempt 8-4G sustainability, how many points will the project have, as totaled from the sustainability checklist?

Landscaping: Is there more than 5% of the site dedicated to landscaping? Is there one class II or III tree provided for every 50' of street frontage? Will any trees be removed from the site? What kind of irrigation will be provided? Is the landscaping compatible with local climatic conditions?

Building Design: How does the building provide visual interest and positively contribute to the overall urban fabric of the community? What is the Floor to Area ratio? Is there relief incorporated into facades and or rooflines greater than 50'? What are the setbacks? How are the outdoor service and equipment areas screened? If there are multiple structures, are the setbacks consistent? Are there any "green building" concepts are incorporated into the project?

I consent to this application and hereby certify that information contained on this application and in the accompanying materials is correct to the best of my knowledge. I agree to be responsible for all application materials, fees and application correspondence with the City. I will hold harmless and indemnify the City of Garden City from any and all claims and/or causes of action from or an outcome of the issuance of a permit from the City.

Signature of the Applicant (date)	**Signature of the Owner (date)**

APPLICATION INFORMATION REQUIRED

Note:
AN ELECTRONIC COPY OF THE ENTIRE APPLICATION SUBMITTAL REQUIRED
INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED UNDER ANY CIRCUMSTANCES

ONE (1) HARD COPY OF EACH CHECKLIST ITEM REQUIRED:

- [x] Compliance Statement and Statement of Intent
- [x] Neighborhood Map
- [x] Site Plan
- [x] Landscape Plan
- [x] Schematic Drawing
- [x] Lighting Plan
- [x] Topographic Survey
- [x] Grading Plan
- [ ] Will Serve Letter **If required, must submit a Fire Flow Request
- [ ] Ada County Approved Addresses
- [ ] Waiver Request of Application Materials
- [x] Affidavit of Legal Interest
- [ ] Sustainability Checklist *if applicable

☑ PLEASE CHECK THE FOLLOWING:

INFORMATION REQUIRED ON COMPLIANCE STATEMENT AND STATEMENT OF INTENT:

- ☐ Statement explaining how the proposed structure(s) is compliant with the standards of review for the proposed application
- ☐ Purpose, scope, and intent of project
- ☐ Information concerning noxious uses, noise, vibration, and any other aspects of the use or structure that may impact adjacent properties or the surrounding community

INFORMATION REQUIRED ON NEIGHBORHOOD MAP:

- ☐ 8 ½" x 11" size minimum
- ☐ Location of contiguous lots and lot(s) immediately across from any public or private street, building envelopes and/or existing buildings and structures at a scale not less than one inch equals one hundred feet (1" = 100')
- ☐ Impact of the proposed siting on existing buildings, structures, and/or building envelopes

INFORMATION REQUIRED ON SITE PLAN:

- C2.00 ☒ Scale not less than 1" = 20', legend, and north arrow.
- C2.00 ☒ Property boundary, dimensions, setbacks and parcel size.
- C2.00 ☒ Location of the proposed building, improvement, sign, fence or other structure, and the relationship to the platted building envelope and/or building zone
- A1.00 ☒ Building envelope dimensions with the center of the envelope location established in relation to the property lines
- C2.00 ☒ Adjacent public and private street right of way lines
- A1.00 ☒ Total square footage of all proposed structures calculated for each floor. If the application is for an addition or alteration to an existing building or structure, then the new or altered portions shall be clearly indicated on the plans and the square footage of new or altered portion and the existing building shall be included in the calculations
- N/A ☐ For uses classified as drive-through, the site plan shall demonstrate safe pedestrian and vehicular access and circulation on the site and between adjacent properties as required in Section 8-2C-13 of Title 8.
- N/A ☐ The site plan shall demonstrate safe vehicular access as required in 8-4E-4
- N/A ☐ Driveways, access to public streets, parking with stalls, loading areas.
- C2.00 ☒ Sidewalks, bike and pedestrian paths.
- C2.00 ☒ Berms, walls, screens, hedges and fencing.
- Survey ☒ Location and width of easements, canals, ditches, drainage areas.
- N/A ☐ Location, dimensions and type of signs.
- N/A ☐ Trash storage and mechanical equipment and screening.
- N/A ☐ Parking including noted number of regular, handicap and bike parking as well as dimensions of spaces and drive aisles depicted on plan
- C2.00 ☒ Log depicting square footage of impervious surface, building and landscaping
- N/A ☐ Location and height of fences and exterior walls
- N/A ☐ Location and dimensions of outdoor storage areas
- C5.00 ☒ Location of utilities and outdoor serviced equipment and areas
- C2.00 ☒ Location of any proposed public art, exterior site furniture, exterior lighting, signage

INFORMATION REQUIRED ON LANDSCAPE PLAN:

L1.00 ☒ Scale the same as the site plan.
L1.00 ☒ Type, size, and location of all existing and proposed plants, trees, and other landscape materials.
L1.10 ☒ Size, location and species of existing vegetation labeled to remain or to be removed.
☒ All areas to be covered by automatic irrigation, including location of proposed irrigation lines.
N/A ☐ Cross section through any special features, berms, and retaining walls.
L1.00 ☒ A plant list of the variety, size, and quantity of all proposed vegetation
L1.00 ☒ Log of square footage of landscaping materials corresponding to location
C5.00 ☒ Locations and dimensions of open space and proposed storm water systems

INFORMATION REQUIRED ON SCHEMATIC DRAWINGS (ELEVATIONS):

A1.00 ☒ Scale not less than 1/8 inch = 1 foot (1/8" = 1')
A1.00 ☒ Floor plans; elevations, including recorded grade lines; or cross sections that describe the highest points of all structures and/or buildings, showing relationship to recorded grade existing prior to any site preparation, grading or filing
N/A ☐ Decks, retaining walls, architectural screen walls, solid walls, and other existing and proposed landscape features shall be shown in elevations and sections with the details to show the completed appearance of those structures
A1.00 ☒ Overall dimensions of all proposed structures
A1.00 ☒ Specifications on exterior surface materials and color
N/A ☐ Sample materials (as determined by the staff)

INFORMATION REQUIRED ON LIGHTING PLAN:

N/A ☐ 11" x 17" size minimum
N/A ☐ Location, type, height, lumen output, and luminance levels of all exterior lighting
N/A ☐ Refer to Garden City Code 8-4A-6 for outdoor lighting requirements
N/A ☐ Location of municipal street lights

INFORMATION FOR TOPOGRAPHIC SURVEY:

☒ The topographic map is a map of the application site and adjoining parcels prepared by an engineer and/or land surveyor, and at a scale of not less than one inch (1") to twenty feet (20').
☒ If the site has been known to have been altered over time, then the applicant shall provide evidence of the natural topography of the site

INFORMATION REQUIRED ON GRADING PLAN:

☒ 11" x 17" size minimum
☒ Scale not less than one inch equals twenty feet (1" = 20')
☒ Two foot (2') contours for the entire proposal site
☒ One foot (1') contours for details, including all planimetric features
☒ Existing site features, including existing structures, trees, streams, canals, and floodplain hazard areas
SEE TOPOGRAPHIC SURVEY ☒ Existing easement and utility locations
☒ Approximate limiting dimensions, elevations, and finish contours to be achieved by the contemplated grading within the project, showing all proposed cut and fill slopes, drainage channels, and related construction; and finish and spot grade elevations for all wall and fence construction, and paved and recreational surface
N/A ☐ Slope and soil stabilization and re-vegetation plan, including identification of areas where existing or natural vegetation will be removed and the proposed method of re-vegetating. Show all areas of disturbance and construction fencing location; re-vegetation is required for all disturbed areas
C5.00 ☐ Proposed storm water systems

INFORMATION REQUIRED MASTER SIGN PLAN:

Required for developments of two or more buildings:

N/A ☐ **Location, elevations, and materials of proposed signage**

INFORMATION REQUIRED FOR IRRIGATION/DITCH INFORMATION FORM:

Required if irrigation canal/irrigation ditch runs through property or along property lines:

N/A ☐ **Letter from company indicating approval**

INFORMATION REQUIRED FOR WAIVER REQUEST OF APPLICATION MATERIALS:

N/A ☐ **Statement must include a list of the application materials to be waived and an explanation for the request.**

GARDEN CITY
NESTLED BY THE RIVER

6015 Glenwood Street ▪ Garden City, Idaho 83714
Phone 208 - 472-2921 ▪ Fax 208 - 472-2926 ▪
www.gardencityidaho.org

Affidavit of Legal Interest

State of Idaho)
)SS
County of Ada)

I, Garden City (Name), 6015 N Glenwood St (Address)

Garden City (City), Idaho 83714 (State and Zip)

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 The Land Group, Inc (Name), 462 E. Shore Drive, Ste 100 Eagle ID 83616 (Address)
   to submit the accompanying application pertaining to that property.

2. I agree to indemnify, defend and hold the City of Garden City 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 Garden City staff to enter the subject property for the purpose of site inspections related to processing said applications.

Dated this 21ST day of May, 2019

John L. Evans
Signature

Subscribed and sworn to before me the day and year first above written

Lisa M. Leiby
Notary Public for Idaho

LISA M. LEIBY
COMMISSION #24545
NOTARY PUBLIC
STATE OF IDAHO

Residing at: Meridian, ID

My Commission expires 8/31/2019

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LISA M. LEIBY
COMMISSION #24545
NOTARY PUBLIC
STATE OF IDAHO

Residing at: Meridian, ID

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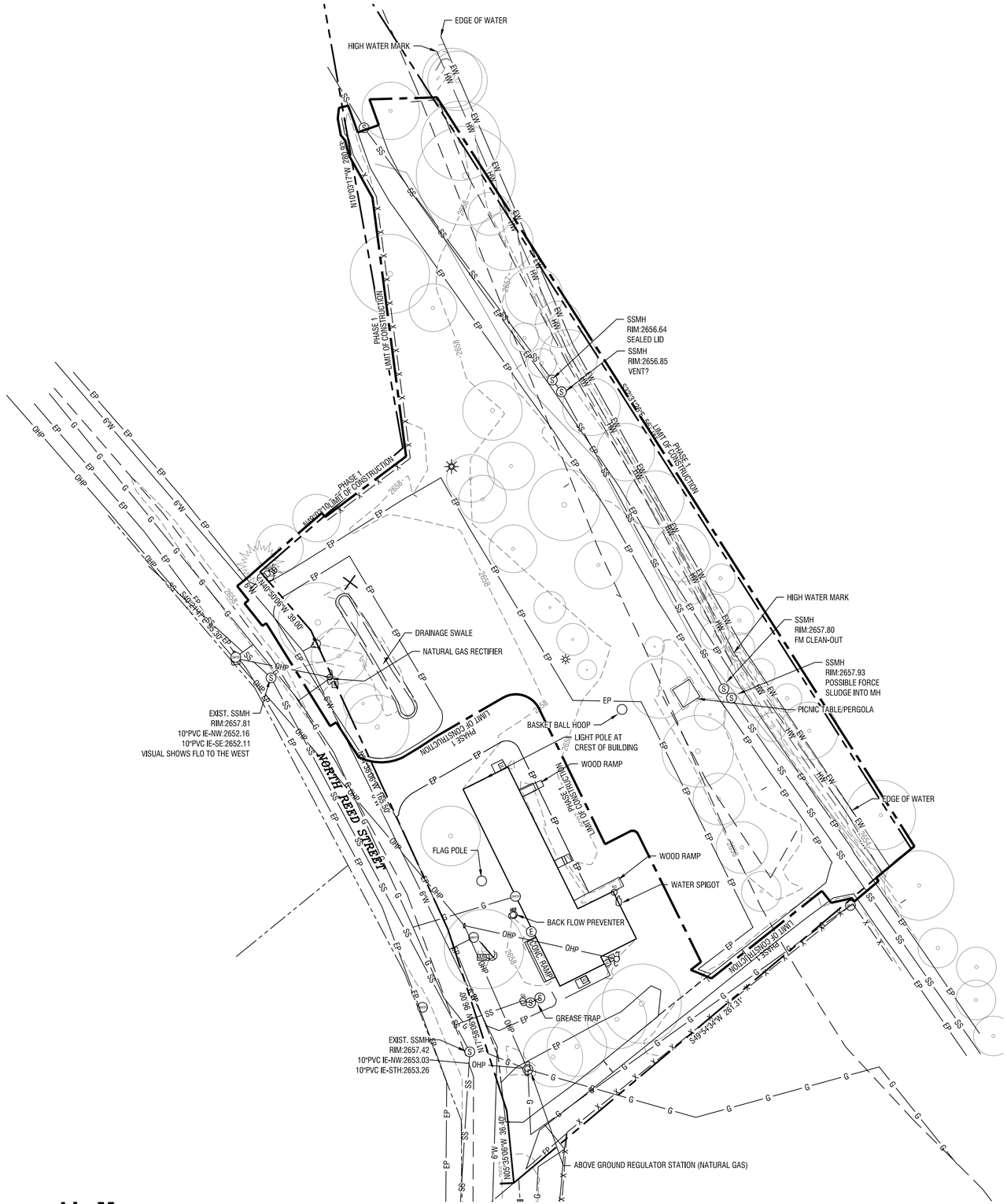
Topographic Map
for
Garden City Urban Renewal

Located in a portion of the NE 1/4 of Section 5
Township 3 North, Range 2 East, Boise Meridian
Garden City, Ada County, Idaho
2017



Legend

- FOUND 1/2" MONUMENT
- FOUND 5/8" MONUMENT
- CALCULATED POINT
- AIR CONDITIONING UNIT
- SANITARY SEWER MANHOLE
- CLEAN OUT
- SQUARE INLET
- IRRIGATION VALVE
- POWER POLE
- LIGHT
- GUY WIRE
- GAS METER
- WELL
- WATER METER
- WATER VALVE
- FROST FREE HYDRANT
- FIRE HYDRANT
- DECIDUOUS TREE
- PROPERTY BOUNDARY LINE
- ADJACENT PROPERTY LINE
- EDGE OF WATER
- HIGH WATER LINE
- FENCE LINE
- EDGE OF ASPHALT
- SANITARY SEWER LINE
- GAS LINE
- OVERHEAD POWER LINE
- OVERHEAD TELEPHONE LINE
- WATER LINE
- EXISTING GROUND CONTOUR

Survey Notes:

1. UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE LOCATIONS SHOWN HEREON ARE BASED UPON ABOVE GROUND EVIDENCE AND UTILITY COMPANY FACILITY MAPS. THE SURVEYOR MAKES NO GUARANTEE OF THE ACCURACY OF LOCATION OF UNDERGROUND UTILITIES.

Topographic Map

Horizontal Scale: 1" = 30'

0 30' 60'

THE LAND GROUP

HERON PARK - PHASE 2
Redevelopment Project

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Topographic Map

C1.10

File Location: g:\2016\116079\cad_phase 2\116079 c1.10 topo survey.dwg
Last Saved By: Jeff Wilson
Date Plotted: Wednesday, May 22 2019 at 02:30 PM

THE LAND GROUP

Material Legend:

[pattern]	STANDARD CONCRETE FLATWORK - SEE DETAIL 1/C2.50.	[pattern]	LANDSCAPE AREAS. REFER TO LANDSCAPE SHEET L1.00 FOR MORE INFORMATION.
[pattern]	ASPHALT SURFACE REPAIR - REFER TO KEYNOTES FOR MORE INFORMATION.	[pattern]	3/4" CRUSHED AGGREGATE GRAVEL SHOULDER PER ACHD STANDARDS. REFER TO ACHD STORMWATER DESIGN GUIDELINES, STANDARD DRAWING 05

Keynotes:

(#) CALLOUT NUMBERS COORDINATED TO NUMBERED NOTES BELOW.

1. PICNIC SHELTER BY POLIGON, SEE SPECIFICATION SECTION 323300.
2. RESTROOM BUILDING BY CXT, SEE SPECIFICATION SECTION 323300 AND NOTES THIS SHEET FOR ADDITIONAL INFORMATION.
3. PICNIC TABLES, SEE SPECIFICATION SECTION 323300.
4. CONCRETE REINFORCEMENT AT SHELTER POSTS, SEE DETAIL 4/C2.50.
5. FREEZELESS YARD HYDRANT, SEE SPECIFICATION SECTION 323300.
6. CONCRETE FLATWORK AT DOORWAY, SEE DETAIL 2/C2.50.
7. PROVIDE TYPE 'P' STREET CUT AND SURFACE REPAIR IN ACHD RIGHT-OF-WAY PER ISPWC SD-303 (ACHD SUPP.), MATCH EXISTING PAVEMENT SECTION.
8. MATCH EXISTING PAVEMENT SECTION. REFER TO GRADING PLAN FOR ELEVATIONS AND DETAIL 6/C2.50.
9. SWALE BASIN, REFER TO GRADING PLAN AND DETAIL 5/C2.50.
10. STORM DRAINAGE FACILITY REFER TO DRAINAGE & UTILITY PLAN.
11. LANDSCAPE BERM REFER TO GRADING PLAN.
12. INSTALL NEW GUY ANCHORS AS REQUIRED, COORDINATE WITH IDAHO POWER (SHOWN APPROX.)
13. CONCRETE MOW CURB, SEE DETAIL 8/C2.50.
    13.1. CONTRACTOR SHALL TRANSITION EXISTING CURB TO SHELTER FINISH GRADE WITH SMOOTH AND CONTINUOUS CURVES.
14. BIKE RACK PER SPECIFICATION SECTION 323300.

CXT Restroom Building:

NEW PRE-ENGINEERED RESTROOM BUILDING INFORMATION IS AS FOLLOWS:

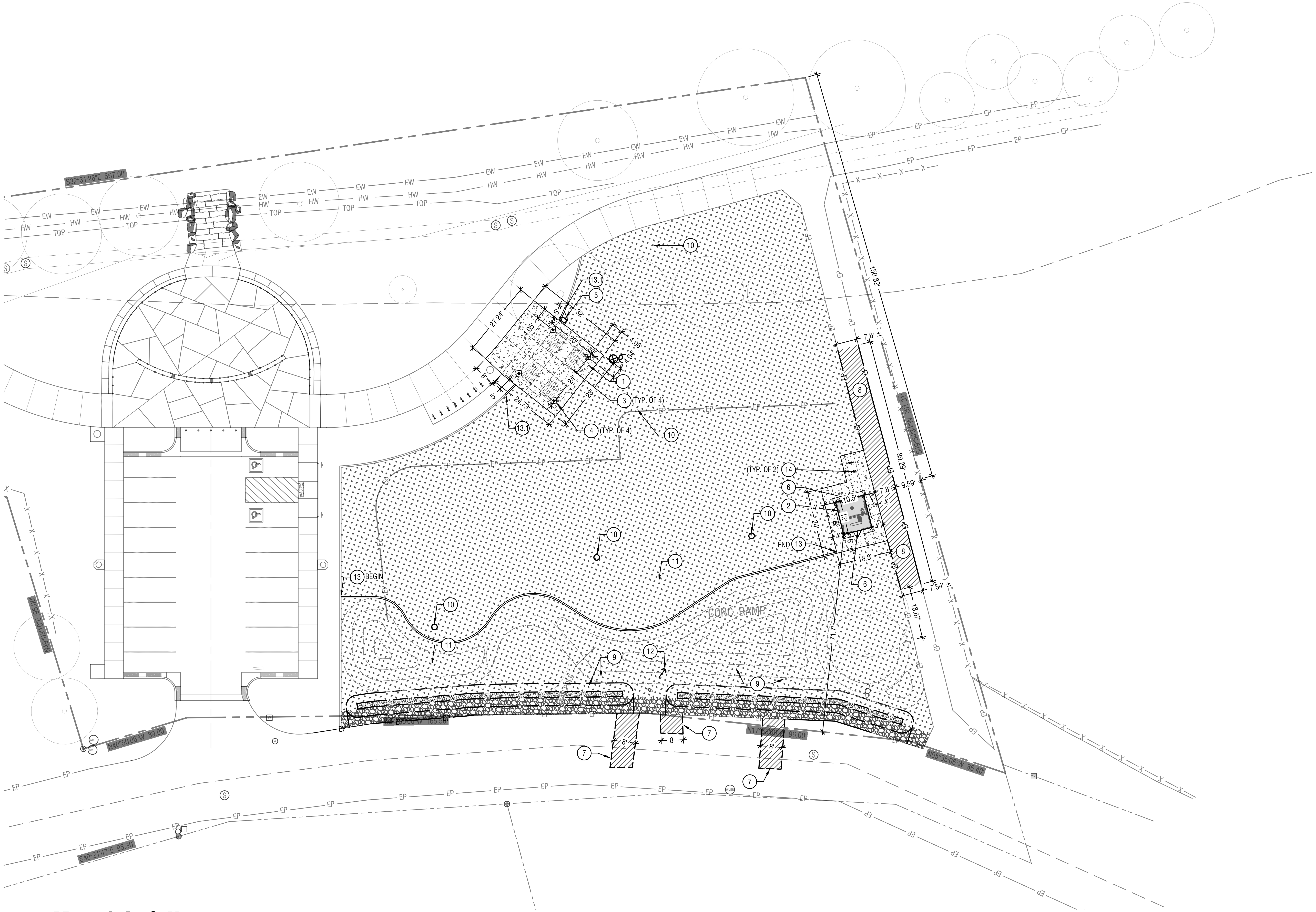
1. BUILDING IS FURNISHED AND INSTALLED BY CONTRACTOR.
2. MODEL TO BE "OZARK 1" BY CXT PRECAST PRODUCTS.
3. BUILDING IS FACTORY ASSEMBLED, PRE-WIRED AND PRE-PLUMBED.
4. CONTRACTOR SHALL INSTALL BUILDING PER MANUFACTURERS' SPECIFICATIONS, INCLUDING PREPARATION OF SUB BASE AND SUB GRADE.
5. CONTRACTOR TO EXTEND WATER, SEWER AND ELECTRICAL UTILITIES TO THE BUILDING LOCATION AND STUB UP THROUGH THE PREPARED BASE MATERIAL TO MATCH UP WITH THE UTILITY ACCESS HOLE WITHIN THE FLOOR OF THE BUILDING CHASE AREA. COORDINATE WITH UTILITY PLAN.
6. CONTRACTOR SHALL GROUT BLOCKOUTS AT UTILITY CONNECTIONS.
7. CONTRACTOR SHALL COORDINATE WITH CXT WITH REGARD TO TIMING AND METHOD OF DELIVERY.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF BUILDING INSTALLATION INCLUDING ALL UTILITY CONNECTIONS. THE CONTRACTOR SHALL ENSURE ALL BUILDING FUNCTIONS ARE FULLY OPERATIONAL. CXT MANUFACTURER WILL PROVIDE DELIVERY ONLY.
9. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE VERTICAL CLEARANCE OF 15' AND HORIZONTAL CLEARANCE OF 14' ALONG ALL ACCESS ROUTES ON THE PROJECT SITE.
10. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ACCESS ON A MINIMUM OF TWO ADJACENT SIDES OF THE BUILDING PAD SO THAT THE DELIVERY TRUCK AND CRANE ARE ABLE TO PARK WITHIN 2-FEET OF THE PREPARED PAD ON TWO SIDES.
11. DUE TO THE WEIGHT AND LENGTH OF THE TRANSPORT TRUCK AND CRANE NEEDED TO HAUL AND SET THE BUILDING IT IS POSSIBLE THAT ABOVE AND BELOW GROUND SITE IMPROVEMENTS IN THE PROJECT AREA COULD BE DAMAGED. THE CONTRACTOR SHALL TAKE ALL STEPS POSSIBLE TO MINIMIZE THE POTENTIAL FOR DAMAGE AND SHALL CORRECT ALL DAMAGED IMPROVEMENTS AT NOT ADDITIONAL COST TO THE OWNER.

CXT Restroom Building Calculations:

TOTAL SQUARE FOOTAGE OF BUILDING	126 SQ. FT.

Site Calculations:

TOTAL SQUARE FOOTAGE OF SITE	±82787.29 SQ. FT.
TOTAL SQUARE FOOTAGE OF PROJECT AREA	±30032.50 SQ. FT.
TOTAL SQUARE FOOTAGE OF LANDSCAPE	±27350.26 SQ. FT.
TOTAL SQUARE FOOTAGE OF IMPERVIOUS AREA	± 2351.39 XX SQ. FT.



Materials & Keynotes

Horizontal Scale: 1" = 20'

0 20' 40'

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Last Plotted By: james leo
Date Plotted: Wednesday, May 22 2019 at 02:39 PM

HERON PARK - PHASE 2 REDEVELOPMENT PROJECT

3858 N. REED ST.
Garden City, Idaho 83714

Revisions

1.

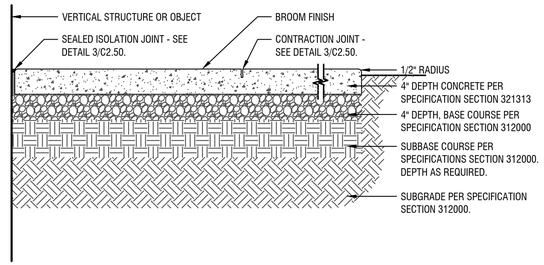
STATE OF IDAHO
DOUGLAS A. RUSSELL JR.
LA-251
LICENSED LANDSCAPE ARCHITECT

05/22/2019

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Materials & Keynotes

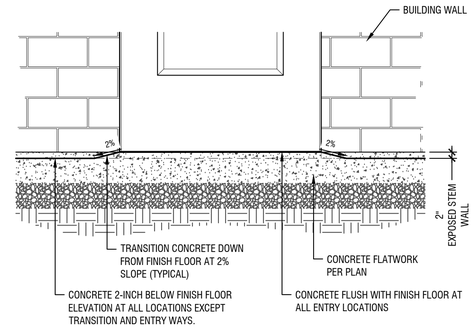
C2.00



NOTES:
1. JOINTS SHALL BE SPACED EVENLY THROUGHOUT LENGTH OF WALK, AS SHOWN ON DRAWINGS.
2. SEE SPECIFICATION SECTION 321313.

1 Standard Concrete Flatwork

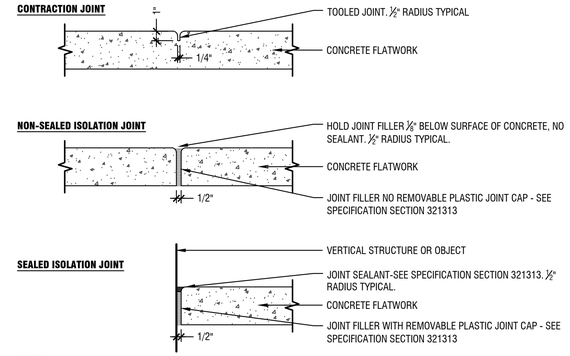
Scale: 1" = 1'



NOTES:
1. MAINTAIN 2" OF EXPOSED STEM WALL AT ALL LOCATION EXCEPT ENTRY WAYS AND TRANSITIONS.
2. REFER TO SITE GRADING SHEET C4.00 FOR MORE INFORMATION.

2 Concrete Flatwork at Doorway

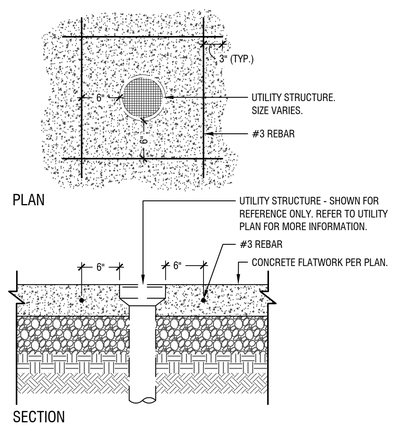
Scale: NTS



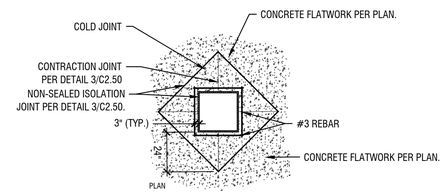
NOTES:
1. SEE SPECIFICATION SECTION 321313.
2. SEE LAYOUT PLANS FOR JOINT PATTERN AND LOCATION.
3. USE ISOLATION JOINTS AT ALL LOCATIONS WHERE DIFFERENTIAL MOVEMENT BETWEEN THE PAVEMENT AND A STRUCTURE MAY OCCUR.
4. PROVIDE ISOLATION JOINT AT ALL ELECTRICAL FIXTURE BASES AND UTILITY STRUCTURES UNLESS NOTED OTHERWISE.
5. JOINT SEALANT TO ONLY BE INSTALLED ADJACENT TO BUILDING.

3 Concrete Control Joints

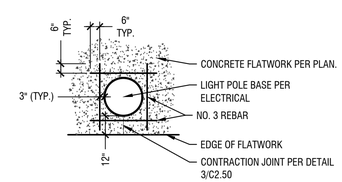
Scale: 1-1/2" = 1'



REINFORCEMENT AT STRUCTURE



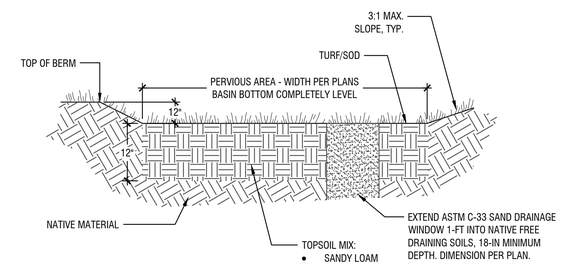
REINFORCEMENT AT BUILDING COLUMN



REINFORCEMENT AT LIGHT POLE

4 Concrete Reinforcment

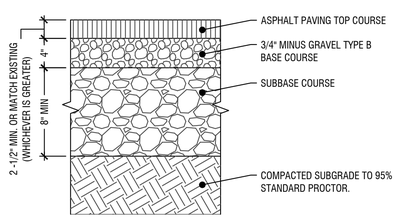
Scale: NTS



NOTES:
1. COMPACTION OF THE SWALE BASIN SHALL BE AVOIDED. IN THE EVENT OF COMPACTION BY HEAVY EQUIPMENT, THE SWALE BASIN SHALL BE TILLED TO ALLOW INFILTRATION.
2. TOP OF BERM TO BE LEVEL TO PREVENT STORMWATER RUNOFF FROM LEAVING THE BASIN.

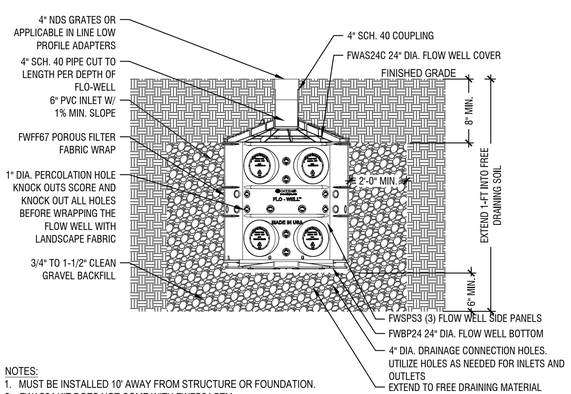
5 Swale Basin

Scale: NTS



6 Light Duty Asphalt Section

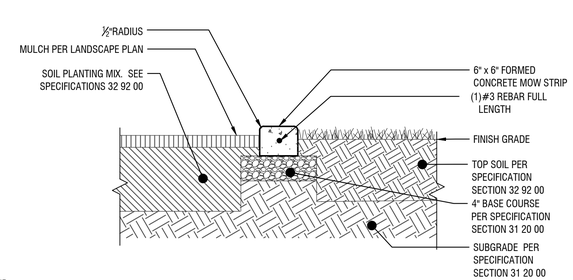
Scale: NTS



NOTES:
1. MUST BE INSTALLED 10' AWAY FROM STRUCTURE OR FOUNDATION.
2. FWAS24 KIT DOES NOT COME WITH FWPB24 BTM.
3. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. DO NOT SCALE DRAWING.

7 NDS FLO-WELL Dry Well System

Scale: NTS



8 Concrete Mow Strip

Scale: NTS

THE LAND GROUP

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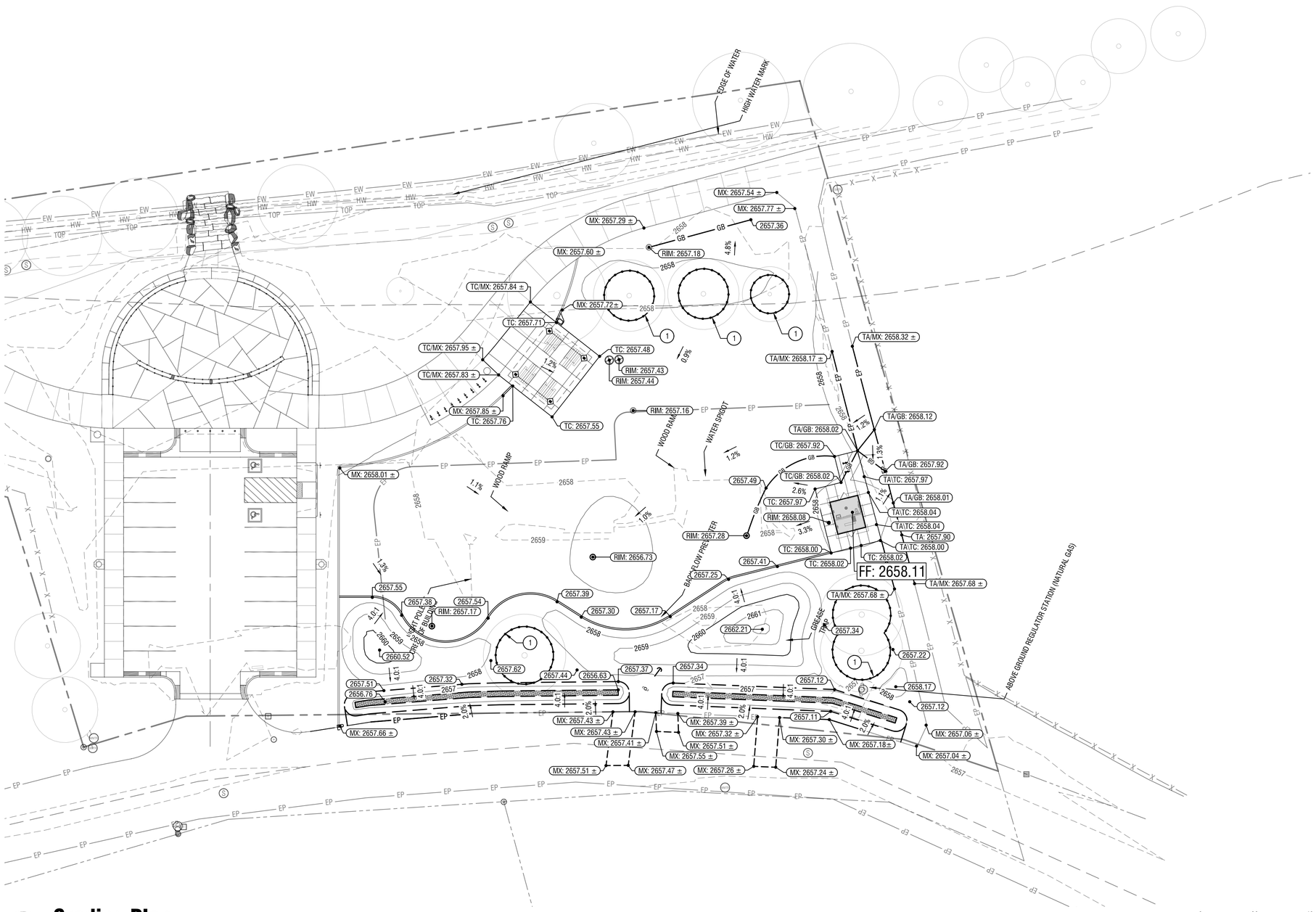
LICENSED LANDSCAPE ARCHITECT
LA-251
05/22/2019

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Site Details

C2.50

File Location: g:\2016\116079\cad_phase 2\116079 c2.250 site details.dwg
Last Saved By: Douglas A. Russell
Date Plotted: Wednesday, May 22 2019 at 02:30 PM



Grading Plan

Horizontal Scale: 1" = 20'

Sheet Notes:

1. CONTRACTOR SHALL COMPLY WITH GENERAL NOTES, PLAN SHEET C0.00.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC) SPECIFICATIONS AND DRAWINGS.
3. EXISTING AND PROPOSED CONTOURS ARE AT A 1-FT INTERVAL.
4. SLOPE IN THE DIRECTION OF TRAVEL ON ALL SIDEWALKS SHALL NOT EXCEED 5%. CROSS SLOPE SHALL NOT EXCEED 2% NO TOLERANCE ALLOWED. SLOPES WITHIN PEDESTRIAN RAMPS SHALL NOT EXCEED 12:1 SLOPE IN ANY DIRECTION. FLATWORK ADJACENT TO BUILDINGS SHALL NOT EXCEED 2.0% CROSS SLOPE OR HAVE CROSS SLOPE LESS THAN 1.0%.
5. SPOT ELEVATIONS INDICATE FINISHED GRADE SURFACE UNLESS NOTED OTHERWISE AS FOLLOWS:
   - 5.1. FF = FINISH FLOOR
   - 5.2. MX = MATCH EXISTING
   - 5.3. TA = TOP OF ASPHALT
   - 5.4. TC = TOP OF CONCRETE
   - 5.5. RIM = RIM OF STRUCTURE
6. SET FLAT WORK ADJACENT TO BUILDING FLUSH WITH FINISH FLOOR AT DOOR OPENING AND UNIFORMLY TRANSITION TO REVEAL 2" OF STEM WALL UNLESS INDICATED OTHERWISE. SLOPES SHALL NOT EXCEED 2% IN ANY DIRECTION ADJACENT TO THE BUILDING.
7. ASPHALT REPAIR ASSOCIATED WITH PROPOSED WET AND DRY UTILITY TRENCHING AND INSTALLATION WITHIN EXISTING ASPHALT AREAS SHALL MATCH EXISTING GRADES, SLOPES AND MAINTAIN EXISTING DRAINAGE PATTERNS.
8. ENSURE POSITIVE DRAINAGE TO ALL DRAINAGE STRUCTURES WITH GRATED LIDS.

Keynotes:

1. PRESERVE EXISTING GRADES AROUND TREE TO REMAIN, PROVIDE AND INSTALL TEMPORARY FENCING, SHOWN AT APPROX. 70 PERCENT OF TREE CANOPY.

Legend:

GRADE BREAK — GB — GB —

THE LAND GROUP

HERON PARK - PHASE 2 REDEVELOPMENT PROJECT

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

PROFESSIONAL ENGINEER REGISTERED 11568 05/22/2019 STATE OF IDAHO JAMES W. GUTE

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Grading Plan

C4.00

File Location: g:\2016\116079\cad_phase 2\116079 c4.00 grading plan.dwg
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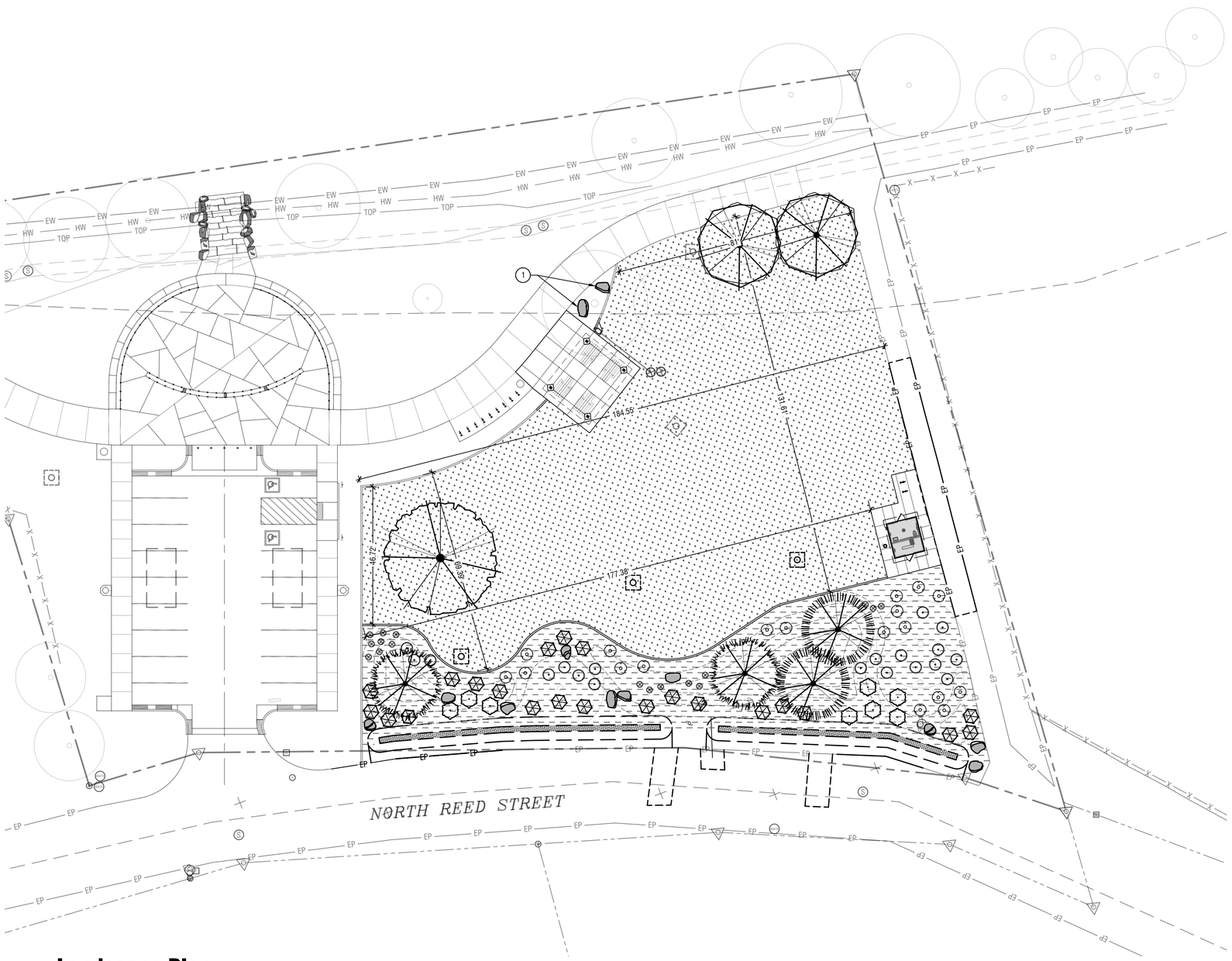


Landscape Plan

Horizontal Scale: 1" = 20'

0 20' 40'

PLANT SCHEDULE				
TREES	BOTANICAL NAME / COMMON NAME	SIZE	CONTAINER	QTY
BR	BETULA NIGRA / RIVER BIRCH CLASS: II. MATURITY: 50` H X 50` W	B & B	2"	2
CB2	CEDRUS ATLANTICA `GLAUCA` / BLUE ATLAS CEDAR CLASS: CONIFER. MATURITY: 40` H X 25`W	10` HT.	B&B	2
CD	CEDRUS DEODARA / DEODAR CEDAR CLASS: CONIFER. MATURITY: 30`H X 25`W	10` HT.	B&B	2
QP	QUERCUS PALUSTRIS / PIN OAK CLASS: III. MATURITY: 60` H X 40`W	3" CAL.	B&B	1
SHRUBS	BOTANICAL NAME / COMMON NAME	SIZE	CONTAINER	QTY
BB	BOUTELOUA GRACILIS `BLONDE AMBITION` / BLUE GRAMA	1 GAL		18
CR2	CHRYSOTHAMNUS NAUSEOSUS / RUBBER RABBITBRUSH	1 GAL		22
LH	LAVANDULA ANGUSTIFOLIA `HIDCOTE SUPERIOR` / HIDCOTE SUPERIOR LAVENDER	1 GAL		17
MC	MAHONIA AQUIFOLIUM `COMPACTA` / COMPACT OREGON GRAPE	1 GAL		19
PV	PHILADELPHUS X VIRGINALIS / MOCK ORANGE	5 GAL		8

Material Legend:

- TURF SOD PER SPECIFICATION SECTION 329200. (±18194.85 SQ. FT.)
- ROCK MULCH TO MATCH EXISTING, 4" DEPTH. (±7526.1 SQ. FT.)
- LARGE BOULDERS, MATCH EXISTING, 3'-4' DIA. TYP. SEE DETAIL 4/L1.50. REFERENCE SPEC SECTION 329300.
- EXISTING TREE - RETAIN AND PROTECT

Landscape Notes:

A. CONTRACTOR SHALL REPORT TO LANDSCAPE ARCHITECT ALL CONDITIONS WHICH IMPAIR AND/OR PREVENT THE PROPER EXECUTION OF THIS WORK, PRIOR TO BEGINNING WORK.

B. FINISH GRADES TO BE SMOOTH AND EVEN GRADIENTS WITH POSITIVE DRAINAGE IN ACCORDANCE WITH SITE GRADING PLAN. REMOVE RIDGES AND FILL DEPRESSIONS, AS REQUIRED TO MEET FINISH GRADES. PLACE 4" OF ROCK MULCH OVER SUBGRADE SOIL TO ACHIEVE FINISH GRADE. FINISH GRADE RELATED TO ADJACENT SITE ELEMENTS SHALL BE:

B.A. 1-INCH BELOW TOP OF ADJACENT PAVEMENT, VALVE BOX, VAULT, ETC.

B.B. 3-INCHES BELOW TOP OF CURB UNLESS NOTED OTHERWISE.

C. ALL PLANTING BEDS SHALL HAVE A MINIMUM OF 18" OF TOPSOIL, SOD AREAS A MINIMUM OF 12" OF TOPSOIL. SPREAD, COMPACT AND FINE GRADE TOPSOIL TO A SMOOTH AND UNIFORM GRADE.

D. RE-USE EXISTING SURFACE TOPSOIL WHERE POSSIBLE. VERIFY SUITABILITY OF SURFACE SOIL TO PRODUCE TOPSOIL MEETING REQUIREMENTS AND AMEND WHEN NECESSARY. TOPSOIL SHALL BE A LOOSE, FRIABLE, SANDY LOAM, CLEAN AND FREE OF TOXIC MATERIALS, NOXIOUS WEEDS, WEED SEEDS, ROCKS, GRASS OR OTHER FOREIGN MATERIAL AND A PH OF 5.5 TO 7.0. IF ON-SITE TOPSOIL DOES NOT MEET THESE MINIMUM STANDARDS, CONTRACTORS ARE RESPONSIBLE TO EITHER: A) PROVIDE APPROVED IMPORTED TOPSOIL, OR B.) IMPROVE ON-SITE TOPSOIL WITH METHODS APPROVED BY LANDSCAPE ARCHITECT. SUPPLEMENT WITH IMPORTED TOPSOIL WHEN QUANTITIES ARE INSUFFICIENT. CLEAN TOPSOIL OF ROOTS, PLANTS, SODS, STONES, CLAY LUMPS AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH.

E. IF IMPORTED TOPSOIL FROM OFF-SITE SOURCES IS REQUIRED, PROVIDE NEW TOPSOIL THAT IS FERTILE, FRIABLE, NATURAL LOAM, SURFACE SOIL, REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH, WEEDS AND OTHER LITTER, AND FREE OF ROOTS, STUMPS, STONES LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH.

F. OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4 INCHES.

G. ALL LANDSCAPE AREAS SHALL BE WEED FREE AT THE TIME OF LANDSCAPE INSTALLATION.REMOVE ALL ROOTS, WEEDS, ROCKS AND FOREIGN MATERIAL ON THE SURFACE.

H. NEW TREE PLANTING, SEE DETAIL 1 & 2/L1.50. CONTRACTOR SHALL STAKE ALL TREES DEEMED NECESSARY, I.E..... FROM BEING BLOWN OVER, PLANTED WITH LOOSE ROOT BALL, ETC. CONTRACTOR'S OPTION.

I. NEW SHRUB PLANTING. SEE DETAIL 3/L1.50.

J. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN NURSERYMAN STANDARDS FOR TYPE AND SIZE SHOWN. PLANTS WILL BE REJECTED IF NOT IN A SOUND AND HEALTHY CONDITION.

K. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION. REPLACE ALL PLANT MATERIAL FOUND DEAD OR NOT IN A HEALTHY CONDITION IMMEDIATELY WITH THE SAME SIZE AND SPECIES AT NO COST TO THE OWNER.

L. TREE PIT BACKFILL PLANTING MIX: BLEND TOPSOIL AND SOIL AMENDMENTS AND FERTILIZER FOR TREE PIT BACKFILL AT THE FOLLOWING RATES. BLEND AMENDMENTS THOROUGHLY WITH SOIL BACKFILL. TREE PITS SHALL BE 5'x5'x1.5' (37.5 CF/ 1.5 CY).

L.A. APPLICATION RATES:

L.A.A. HUMIC ACID: 25 LBS PER TREE PIT

L.A.B. COMMERCIAL GRADE COMPOST - 10 CUBIC FEET PER TREE PIT

L.A.C. PLANTING TABLET FERTILIZER - 4 TABLETS PER TREE PIT

L.A.D. CALCIFIED DIATOMACEOUS EARTH - 75 LBS PER TREE PIT

M. SHRUB PIT BACKFILL PLANTING MIX: BLEND TOPSOIL AND SOIL AMENDMENTS AND FERTILIZER FOR SHRUB PIT BACKFILL AT THE FOLLOWING RATES. BLEND AMENDMENTS WITH THOROUGHLY WITH SOIL BACKFILL. SHRUB PITS SHALL BE 2.5'x2.5'x1' (6.25 CF/ 0.25 CY).

M.A. APPLICATION RATES:

M.A.A. HUMIC ACID: 2 LBS PER SHRUB PIT

M.A.B. COMMERCIAL GRADE COMPOST - 2 CUBIC FEET PER SHRUB PIT

M.A.C. PLANTING TABLET FERTILIZER - 2 TABLETS PER SHRUB PIT

M.A.D. CALCIFIED DIATOMACEOUS EARTH - 15 LBS PER SHRUB PIT

N. IMMEDIATELY CLEAN UP ANY TOPSOIL OR OTHER DEBRIS ON THE SITE CREATED FROM LANDSCAPE OPERATIONS AND DISPOSE OF PROPERLY OFF SITE.

O. CONTRACTOR SHALL SUBMIT MATERIAL SAMPLES FOR LANDSCAPE ROCK MULCH TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO PROCUREMENT. LANDSCAPE BOULDERS, PHOTO SUBMITTAL IS ADEQUATE. FOR ROCK MULCH, SUBMIT 1 GALLON BAG SAMPLE TO OWNER.

P. ALL LANDSCAPE AREAS TO BE IRRIGATED BY AN UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM. SAID IRRIGATION SYSTEM SHALL PROVIDE 100% COVERAGE.

Keynotes:

(#) CALLOUT NUMBERS COORDINATED TO NUMBERED NOTES BELOW.

1. CONTRACTOR SHALL RELOCATE EXISTING BOULDERS THAT INTERFERE WITH SHADE STRUCTURE LOCATION TO THIS GENERAL AREA..

THE LAND GROUP

HERON PARK - PHASE 2 REDEVELOPMENT PROJECT

3858 N. REED ST.
Garden City, Idaho 83714

Revisions

1.

STATE OF IDAHO
DOUGLAS A. RUSSELL
LA-251
LICENSED LANDSCAPE ARCHITECT

05/22/2019

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Landscape Plan

L1.00

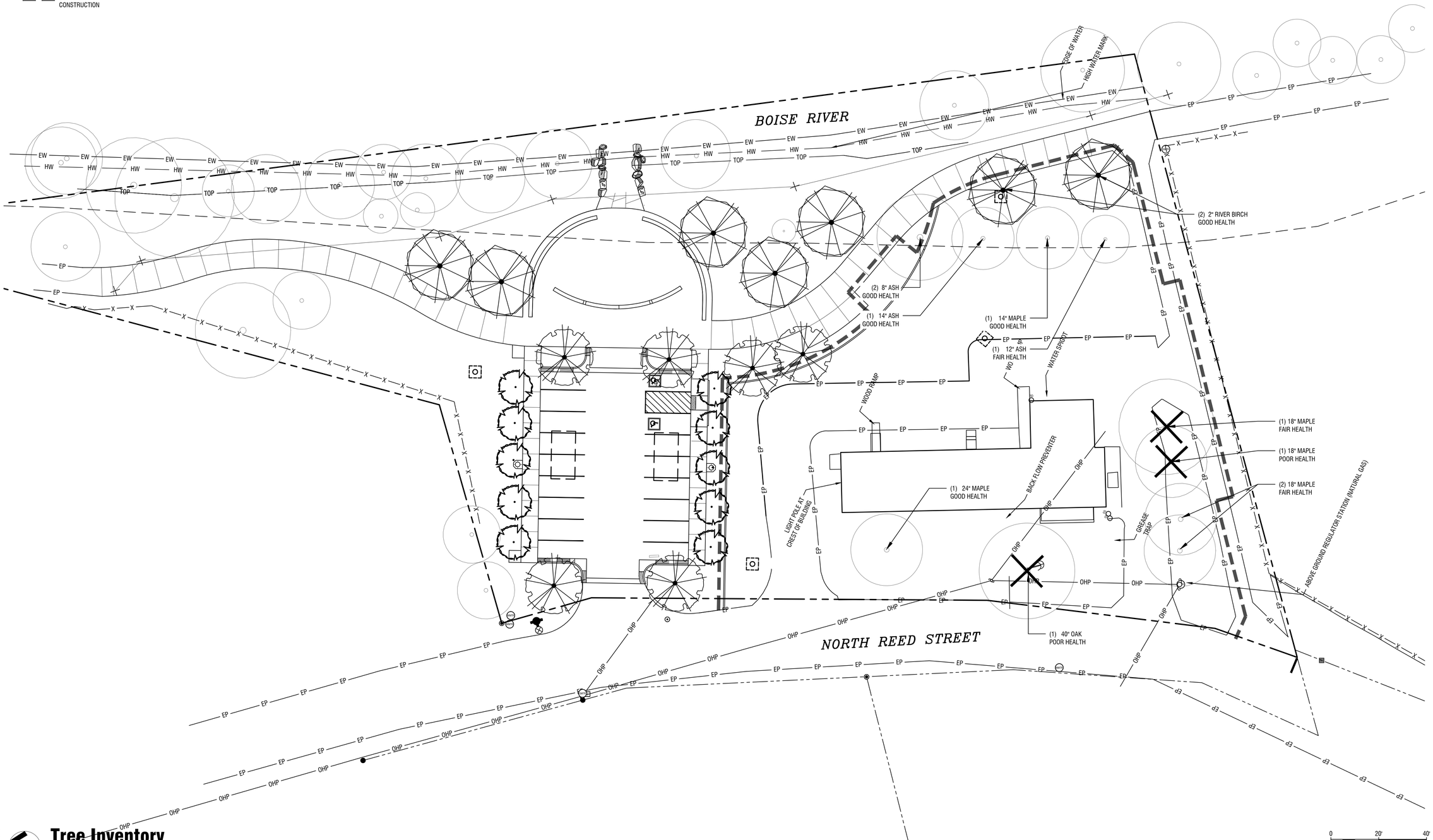
Sheet Notes

A. ALL TREE DIMENSIONS ARE APPROXIMATION.
B. CONTRACTOR SHALL VERIFY TREE LOCATION PRIOR TO CONSTRUCTION.

RETAIN AND PROTECT EXISTING TREE, INSTALL PROTECTIVE FENCE AROUND TREE.

REMOVE AND DISPOSE OF EXISTING TREE, GRIND AND REMOVE STUMP AND LARGE ROOTS.

LIMITS OF CONSTRUCTION



Tree Inventory

Horizontal Scale: 1" = 20'

0 20' 40'

THE LAND GROUP

HERON PARK - PHASE 2 Redevelopment Project

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

STATE OF IDAHO
DOUGLAS A. RUSSELL
LICENSED LANDSCAPE ARCHITECT
LA-251

05/22/2019

Project No.:	118079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Tree Inventory

L1.10

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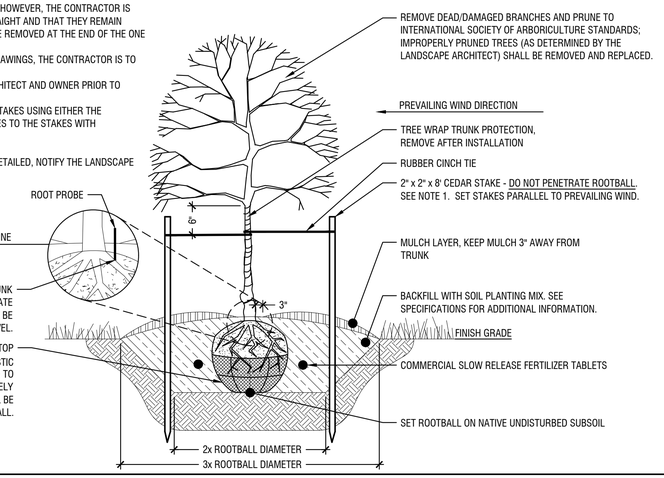
Date Plotted: Wednesday, May 22, 2019 at 02:40 PM

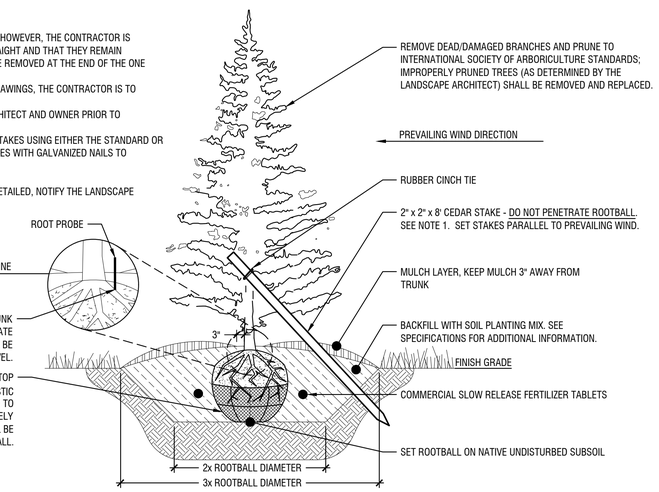
NOTES:
1. THE STAKING OF TREES IS TO BE THE CONTRACTOR'S OPTION; HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR A MINIMUM OF 1 YEAR. ALL STAKING SHALL BE REMOVED AT THE END OF THE ONE YEAR WARRANTY PERIOD.
2. IN THE EVENT OF A QUESTION OR LACK OF CLARITY ON THE DRAWINGS, THE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
3. LANDSCAPE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO INSTALLATION OF PLANT MATERIAL.
4. WRAP RUBBER CINCH TIES AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR FIGURE EIGHT TYING METHOD. SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT SLIPPAGE.
5. WATER TREE TWICE WITHIN THE FIRST 24 HOURS.
6. IN THE EVENT HARDPAN SOILS PREVENT TREE PLANTING AS DETAILED, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.



1 Deciduous Tree Planting

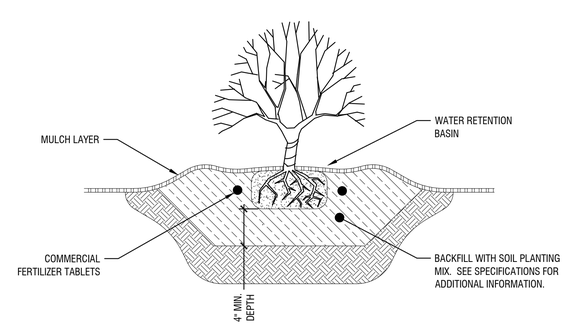
Scale: NTS

NOTES:
1. THE STAKING OF TREES IS TO BE THE CONTRACTOR'S OPTION; HOWEVER, THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT ALL TREES ARE PLANTED STRAIGHT AND THAT THEY REMAIN STRAIGHT FOR A MINIMUM OF 1 YEAR. ALL STAKING SHALL BE REMOVED AT THE END OF THE ONE YEAR WARRANTY PERIOD.
2. IN THE EVENT OF A QUESTION OR LACK OF CLARITY ON THE DRAWINGS, THE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
3. LANDSCAPE CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO INSTALLATION OF PLANT MATERIAL.
4. WRAP RUBBER CINCH TIES AROUND THE TREE TRUNKS AND STAKES USING EITHER THE STANDARD OR FIGURE EIGHT TYING METHOD. SECURE THE TIES TO THE STAKES WITH GALVANIZED NAILS TO PREVENT SLIPPAGE.
5. WATER TREE TWICE WITHIN THE FIRST 24 HOURS.
6. IN THE EVENT HARDPAN SOILS PREVENT TREE PLANTING AS DETAILED, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.



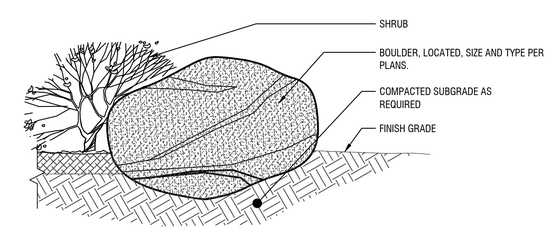
2 Coniferous Tree Planting

Scale: NTS



3 Shrub Planting

Scale: NTS



NOTES:
1. NOTIFY LANDSCAPE ARCHITECT WHEN PLACING BOULDERS FOR APPROVAL.
2. PLACE BOULDERS PRIOR TO INSTALLATION OF IRRIGATION SYSTEM.
3. CLEAN ALL BOULDERS OF DIRT AND LOOSE DEBRIS.
4. WHEN PLACING BOULDERS, BURY 1/4 TO 1/3 OF BOULDER BELOW FINISH GRADE.
5. DO NOT SCAR OR DAMAGE BOULDERS.

4 Boulder Installation

Scale: NTS

THE LAND GROUP

HERON PARK - PHASE 2 REDEVELOPMENT PROJECT

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

STATE OF IDAHO
DOUGLAS A. RUSSELL
LA-251
LICENSED LANDSCAPE ARCHITECT
05/22/2019

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

Landscape Details

L1.50

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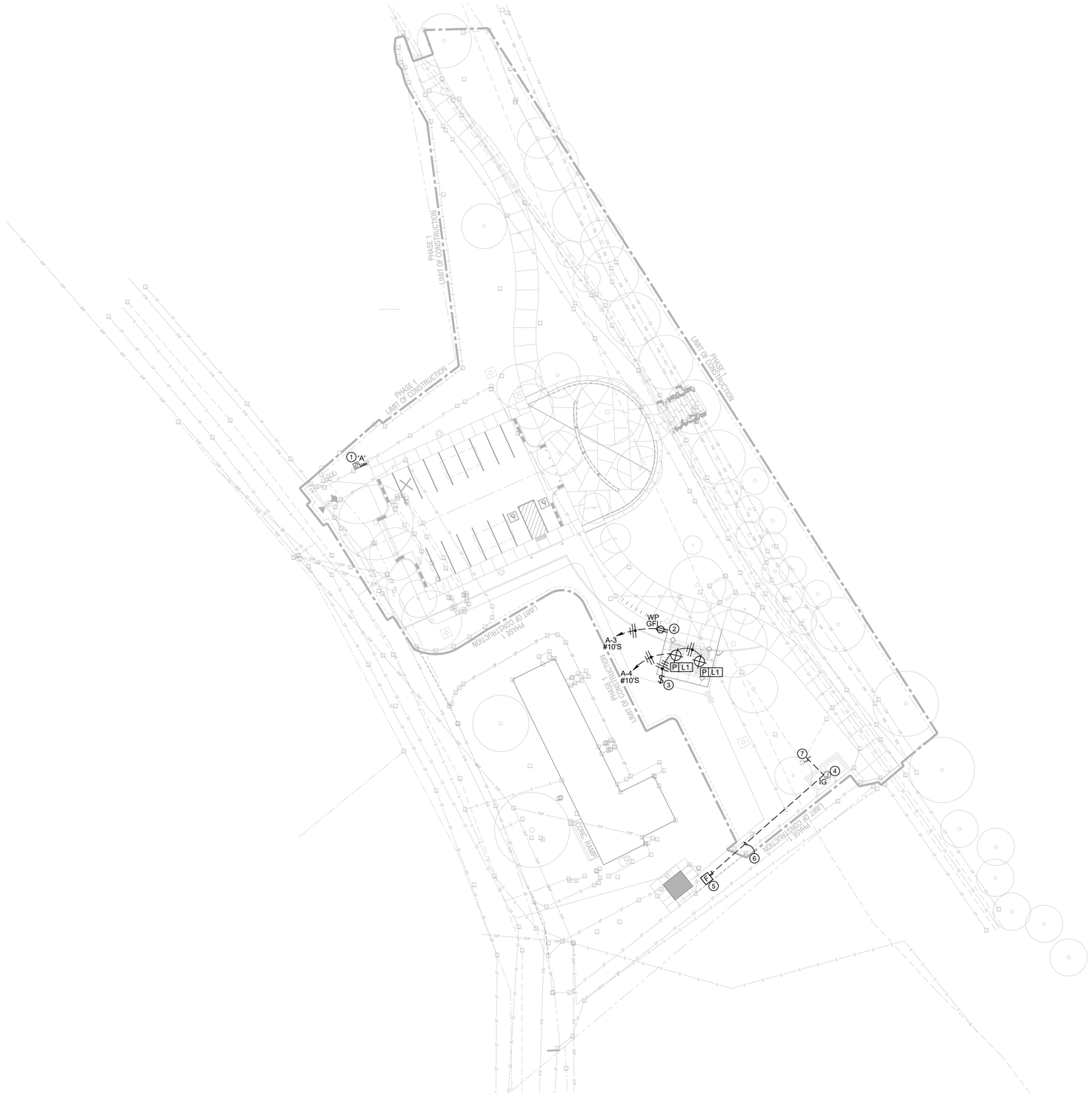


GENERAL NOTES:

1 COORDINATE ALL UNDERGROUND SITE WORK WITH OTHER DISCIPLINES TO AVOID REWORK.

2 ALL UNDERGROUND CONDUIT SHALL BE 1" SCHEDULE 40 PVC; UNLESS NOTED OTHERWISE.

KEYED NOTES:

1 EXISTING METERED PEDESTAL AND BRANCH PANEL BOARD.

2 FURNISH AND INSTALL RECEPTACLE IN LOCKABLE, HINGED, NEMA 3R RATED ENCLOSURE. COORDINATE LOCATION OF RECEPTACLE AND ENCLOSURE WITH BUILDING STRUCTURE PRIOR TO ROUGH-IN.

3 FURNISH AND INSTALL LIGHTING CONTROL IN LOCKABLE, HINGED, NEMA 3R RATED ENCLOSURE. COORDINATE LOCATION OF LIGHTING CONTROL AND ENCLOSURE WITH BUILDING STRUCTURE PRIOR TO ROUGH-IN.

4 FIELD LOCATE EXISTING JUNCTION BOX AND CONDUIT ROUTED TO PANEL 'A' INSTALLED IN PREVIOUS PHASE OF PROJECT.

5 NEW RESTROOM BUILDING TO BE PROVIDED WITH BRANCH PANEL BOARD FURNISH AND INSTALL SERVICE ENTRANCE RATED FUSED DISCONNECT. COORDINATE LOCATION WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. SEE ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION ON SHEET E3.0.

6 FURNISH AND INSTALL NEW UNDERGROUND CONDUIT AND CONDUCTORS. SEE ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION ON SHEET E3.0.

7 FIELD LOCATE EXISTING UNDERGROUND CONDUIT INSTALLED ON PREVIOUS PHASE. UTILIZE CONDUIT FOR ROUTING OF NEW CONDUCTORS TO THE EXISTING PEDESTAL. SEE ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION ON SHEET E3.0.

THE LAND GROUP

HERON PARK - PHASE 2 REDEVELOPMENT PROJECT

3858 N. Reed St.
Garden City, Idaho 83714

Revisions

PROFESSIONAL ENGINEER REGISTERED 10609 STATE OF IDAHO JON W. VAN STONE 5/22/19

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

ELECTRICAL SITE PLAN

E1.0

ELECTRICAL SITE PLAN

HORIZONTAL SCALE: 1" = 30'-0"

0 30' 60'

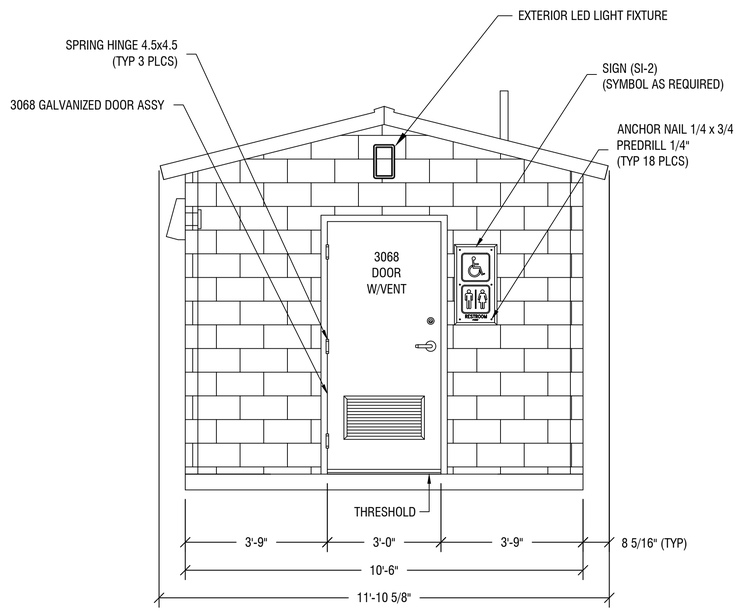
e2co electricalengineeringcompany
engineering 4 tomorrow
world wide web: e2co.com
800 s. industry way, suite 350
meridian, idaho 83642
phone: 208.378.4450
fax: 208.378.4451
e2co project #: 19098

File location: [project drive]\projects\19098 heron park phase 2\dwg\19098-e3.0.dwg
Last Modified by: jon.vanstone
Date Plotted: Friday, April 19 2019 at 08:09 AM

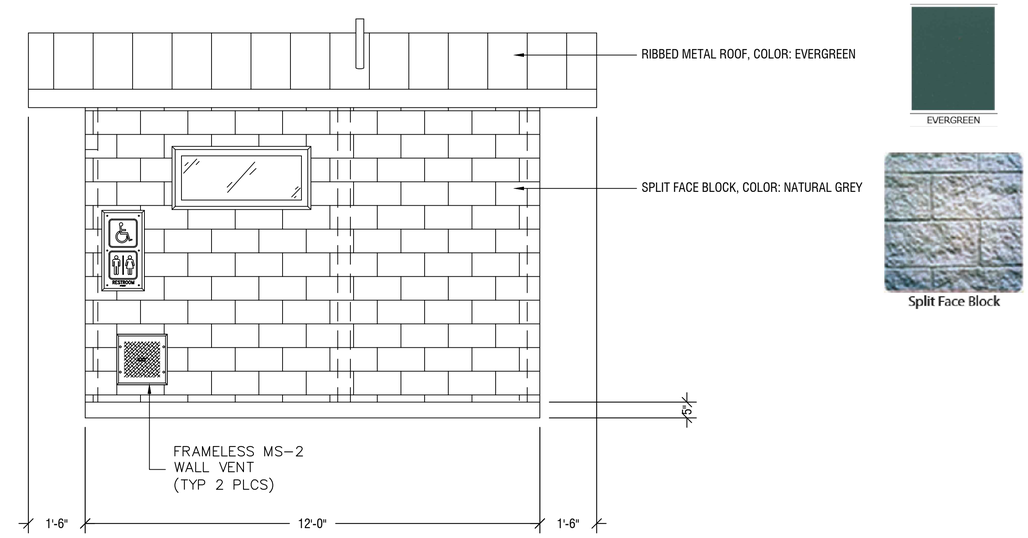
HERON PARK, GARDEN CITY, IDAHO

RESTROOM BULDING |05.06.18

The Land Group Inc.
PN:116079



LEFT END ELEVATION



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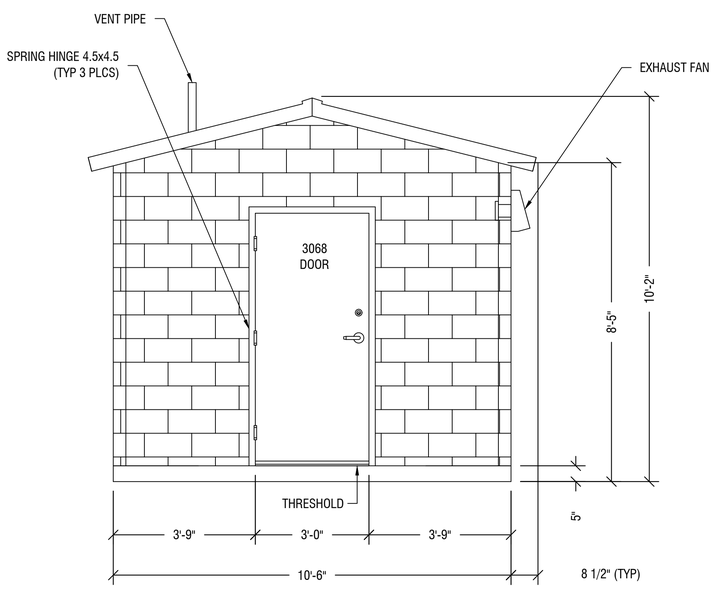
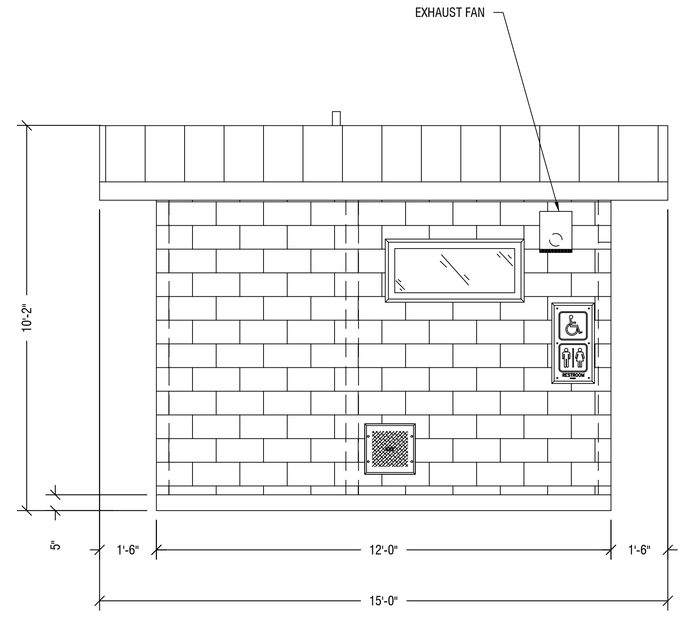


BACK ELEVATION



LEFT END ELEVATION

Exterior Elevations

Horizontal Scale: 1/2" = 1'-0"

0 2'-0" 4'-0"

FOR REFERENCE ONLY

THE LAND GROUP

HERON PARK - PHASE 2
Redevelopment Project

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

NOT FOR CONSTRUCTION

Project No.:	118079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

CXT Building Exterior Elevations

A1.00

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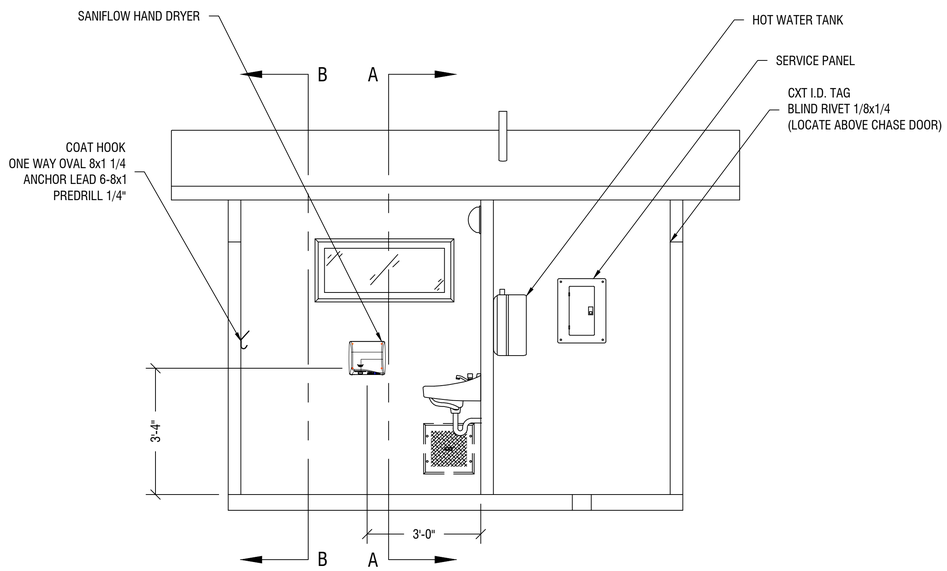
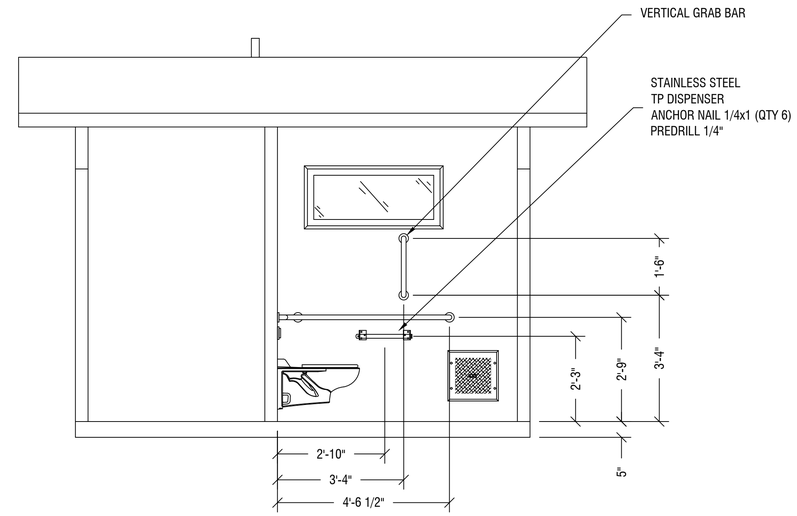


SECTION C - C



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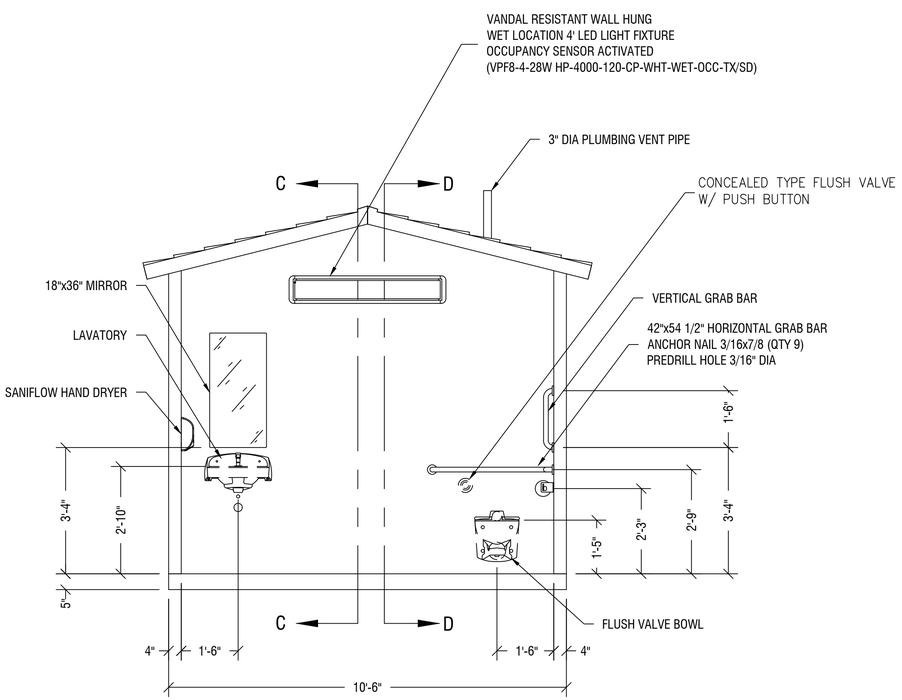
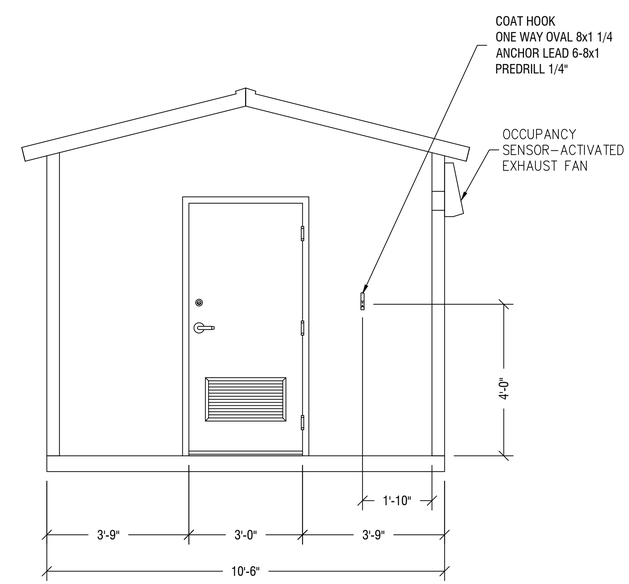


SECTION A - A



SECTION B - B

Interior Elevations

Horizontal Scale: 1/2" = 1'-0"

0 2'-0" 4'-0"

FOR REFERENCE ONLY

THE LAND GROUP

HERON PARK - PHASE 2
Redevelopment Project

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

NOT FOR CONSTRUCTION

Project No.:	115079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

CXT Building Interior Elevations

A1.01

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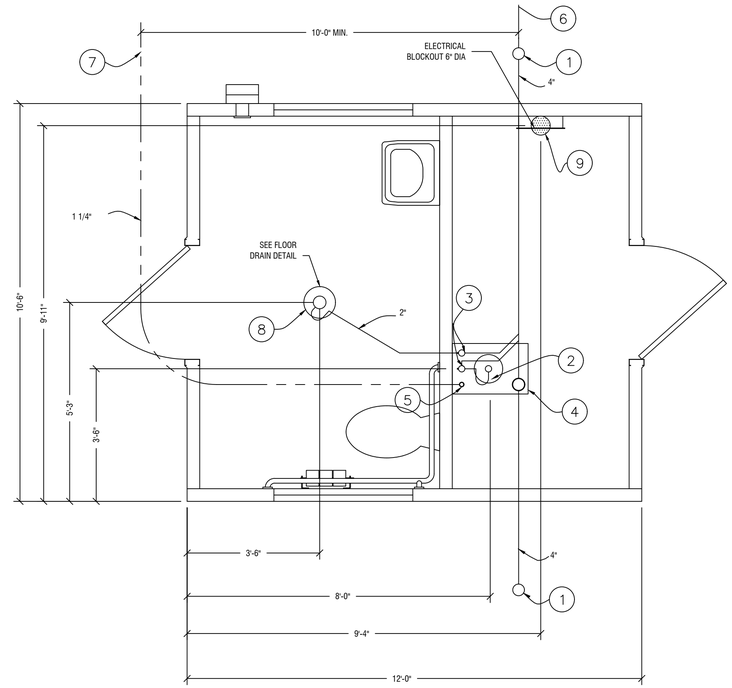
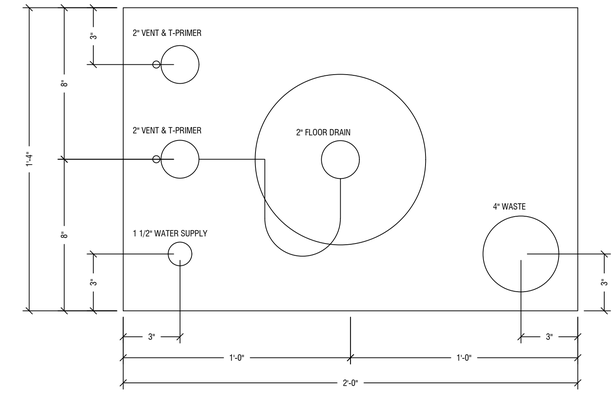
Last Saved By: Jeff Gillespie
Date Plotted: Wednesday, May 22 2019 at 02:46 PM



BELOW FLOOR PIPING - KEY NOTES

1. 4" CLEAN OUT TO GRADE.
2. 2" FLOOR DRAIN. FIELD INSTALLED W/ TRAP PRIMER SYSTEM IF OPTION IS ACCEPTED, INSTALL AS SHOWN W/ VENT & WASTE PIPE. (24"x16" BLOCKOUT)
3. 2" VENT EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, (1 FOR EA FLOOR DRAIN IF FLOOR DRAIN OPTION ACCEPTED) PROVIDE TEST PLUG. (24"x16" BLOCKOUT)
4. 4" WASTE PIPE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (24"x16" BLOCKOUT)
5. 1 1/2" TYPE K ANNEALED 'SOFT' COPPER WATER SERVICE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST CAP AT END. (24"x16" BLOCKOUT)
6. 30" MIN. BURY, PROVIDE TRACER TAPE.
7. MIN. BURY PER LOCAL REQUIREMENTS TO PROTECT AGAINST FREEZING AND DAMAGE.
8. 2" FLOOR DRAIN. FIELD INSTALLED W/ TRAP PRIMER SYSTEM IF OPTION IS ACCEPTED, INSTALL AS SHOWN W/ VENT & WASTE PIPE. (10" DIA BLOCKOUT)
9. ELECTRICAL STUB UP, (6" DIA BLOCKOUT)



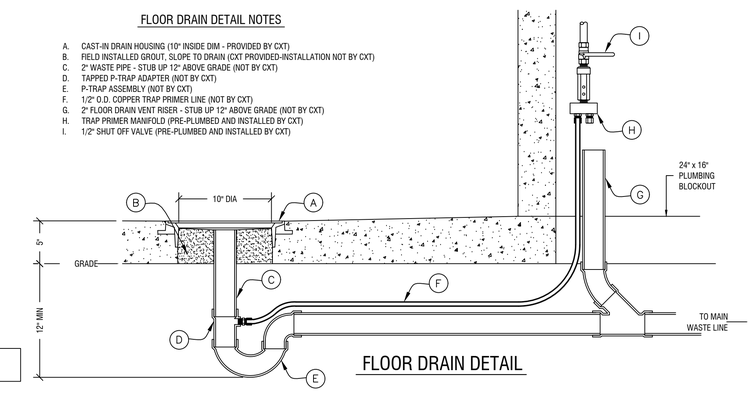
2'-0" x 1'-4" BLOCKOUT DETAIL

PIPING LEGEND

- 1-1/4" TYPE "K" ANNEALED "SOFT" COPPER WATER SERVICE
- BELOW FLOOR WASTE PIPING SCH 40 ABS TYPE DWV
- BELOW FLOOR VENT PIPING SCH 40 ABS TYPE DWV

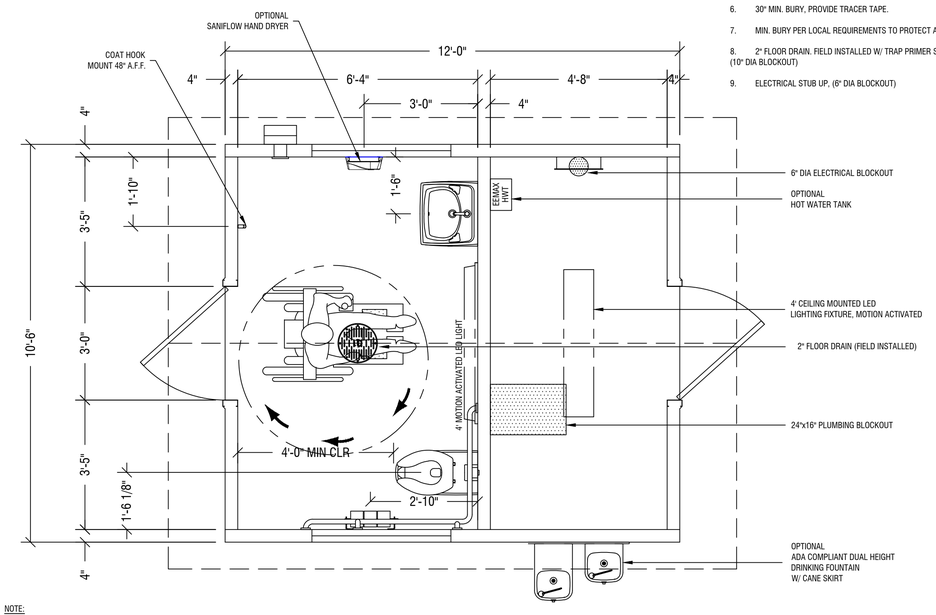
FLOOR DRAIN DETAIL NOTES

A. CAST-IN DRAIN HOUSING (10" INSIDE DIM - PROVIDED BY CXT)
B. FIELD INSTALLED GROUT, SLOPE TO DRAIN (CXT PROVIDED-INSTALLATION NOT BY CXT)
C. 2" WASTE PIPE - STUB UP 12" ABOVE GRADE (NOT BY CXT)
D. TAPPED P-TRAP ADAPTER (NOT BY CXT)
E. P-TRAP ASSEMBLY (NOT BY CXT)
F. 1/2" O.D. COPPER TRAP PRIMER LINE (NOT BY CXT)
G. 2" FLOOR DRAIN VENT RISER - STUB UP 12" ABOVE GRADE (NOT BY CXT)
H. TRAP PRIMER MANIFOLD (PRE-PLUMBED AND INSTALLED BY CXT)
I. 1/2" SHUT OFF VALVE (PRE-PLUMBED AND INSTALLED BY CXT)



ALL PIPING INDICATED ON THIS SHEET IS NOT BY CXT

FLOOR DRAIN DETAIL



NOTE:

ELECTRICAL AND PLUMBING COMPONENTS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. SEE SHEETS OZ 1-16 THRU OZ 1-19 FOR COMPLETE SYSTEM DESCRIPTIONS.

FLOOR PLAN

Building Floor Plan

Horizontal Scale: 1/2" = 1'-0"

0 2'-0" 4'-0"

FOR REFERENCE ONLY

THE LAND GROUP

HERON PARK - PHASE 2 Redevelopment Project

3858 N. REED ST.
Garden City, Idaho 83714

Revisions
1.

NOT FOR CONSTRUCTION

Project No.:	116079
Date of Issuance:	5/22/2019
Project Milestone:	Phase 2

CXT Building
Building Floor Plan

A1.02

File Location: g:\2016\116079\cad_phase 2\116079 dr v08 cxt building.dwg
Last Modified By: Jeff Hatch
Date Plotted: Wednesday, May 22,2019 at 02:40 PM

THE LAND GROUP

May 22, 2019

Christian Samples
Associate Planner
6015 N. Glenwood Street
Garden City, ID 83714

RE: Heron Park Redevelopment Project – Phase 2 | 3858 N. Reed St, Garden City, ID

Dear Christian,

Attached to this letter is an application for Design Review for Heron Park Phase 2 Project. Heron Park Phase 2 is a continuation of the redevelopment of Heron Park Phase 1. This local neighborhood park is adjacent to the Boise River and located along the southerly bank of the Boise River, approximately .42 miles downstream of the pedestrian bridge at Esther Simplot Park in Boise, Ada County, Idaho. It is immediately west of the Ada County Highway District's storage yard on Reed Street and, while not affiliated in any way, it is located within reach of the J.A. Kathryn Albertson Family Foundation Whitewater Park Phase II Project.

The proposed development follows the standard of review for the proposed application. This project will consist of the renovation of an existing park including removal of existing asphalt, concrete building slab and stairs, installation of picnic shelter, a new 158 square foot restroom building, and new landscaping. The restroom building and picnic shelter will be designed and constructed using low maintenance, long-lasting quality building materials, specifically using split face block and ribbed metal roofing. Please see site plan, landscape plan, and schematic drawings for material detail and dimensions. The total disturbed area will be approximately 0.69 acres. The design of Heron Park Phase 2 will accomplish a design that is intended to maintain the natural resource value of the Boise River corridor.

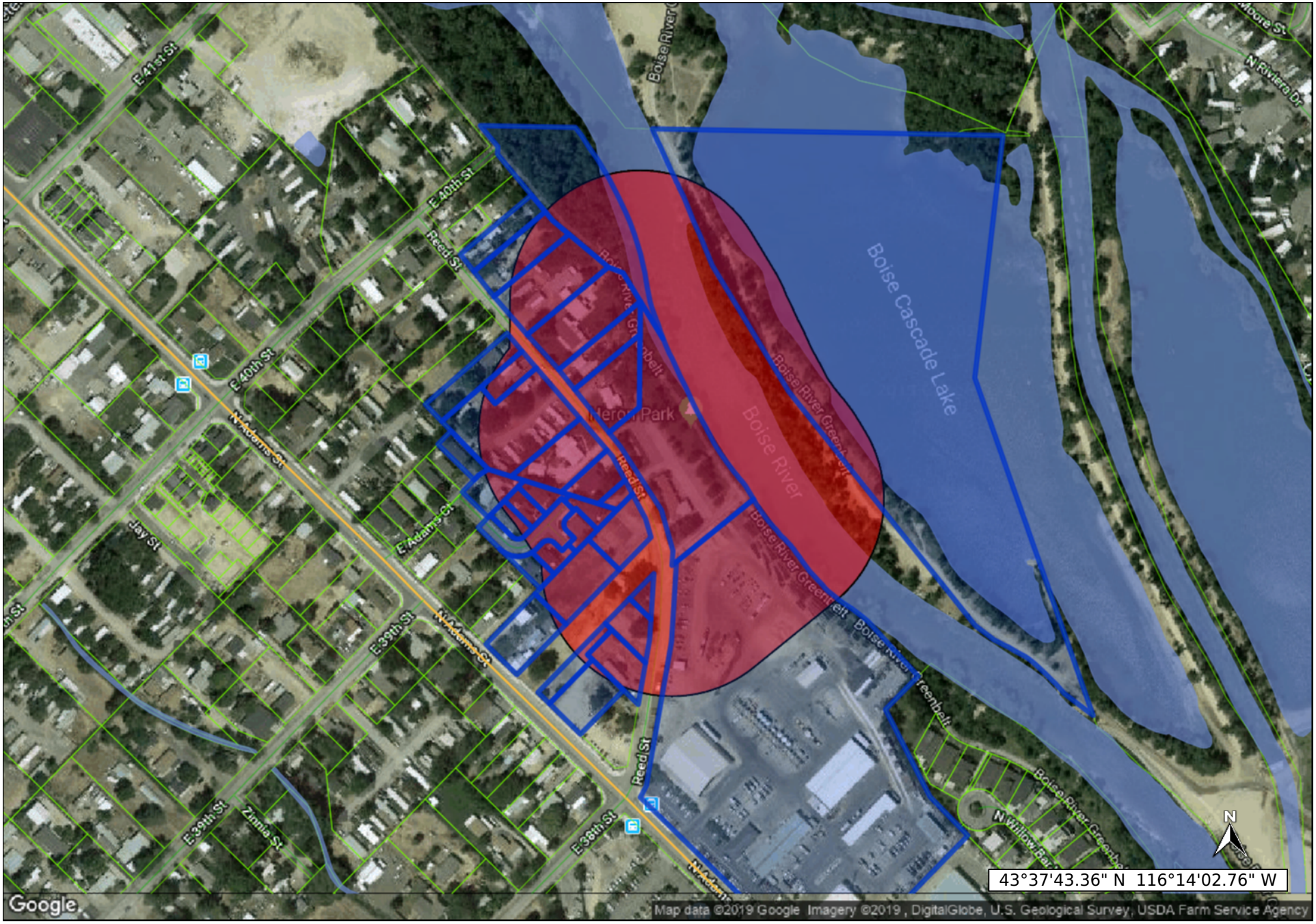
Thank you in advance for your consideration and support. We look forward to working with the Garden City staff to plan a quality project of which we can all be proud of.

Sincerely,

Becky Yzaguirre
Planning Project Coordinator

Neighborhood Map

300ft



May 21, 2019 - landproDATA.com
Scale: 1 inch approx 300 feet

The materials available at this website are for informational purposes only and do not constitute a legal document.

DECLARATION

OF PROTECTIVE COVENANTS, CONDITIONS

AND RESTRICTIONS FOR

BROKEN HORN SUBDIVISION

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PROTECTIVE COVENANTS, CONDITIONS AND RESTRICTIONS FOR BROKEN HORN SUBDIVISION

PROTECTIVE COVENANTS, CONDITIONS, AND RESTRICTIONS FOR BROKEN HORN SUBDIVISION("Declaration"), dated this ____ day of JANUARY, 2019, is made by the BROKEN HORN Property Owners' Association, Inc., an Idaho Nonprofit Corporation, ("Association") acting on behalf of the membership with reference to the following Recitals and is as follows:

RECITALS

WHEREAS, the Association is acting on behalf of the Owners of the real property referred to in Article II of this Declaration and described in **Exhibit A** attached hereto; and

WHEREAS, the Association desires to provide for the preservation of the values and amenities within the Broken Horn Community and for the maintenance of the open spaces, utilities and other common facilities within said community; and to this end, desires to subject the real property described in Article II (together with such additions as may hereafter be made thereto pursuant to Article II) to the covenants, conditions, restrictions, easements, charges and liens hereinafter set forth, each and all of which is and are intended for the mutual benefit of said property and of each owner of a portion thereof; and

WHEREAS, the BROKEN HORN PROPERTY OWNERS' ASSOCIATION, INC. was formed and incorporated under the laws of the State of Idaho, as a nonprofit corporation, hereinafter referred to as the "Association", for the purpose of exercising the powers and responsibilities of administering and enforcing the covenants, conditions and restrictions, and collecting and disbursing the assessments and charges hereinafter created;

THE ASSOCIATION HEREBY declares that the real property described in Article II of this Declaration, and such additions thereto as may hereafter be made pursuant to Article II hereof**,** is held and shall be held, conveyed, hypothecated, encumbered, mortgaged, leased, rented, used, managed, operated, occupied, and improved subject to the declarations, limitations, covenants, conditions, restrictions, easements, charges and liens set forth in this Declaration, and in any amendments to this Declaration as may be made from time to time, and in such other rules and regulations as are instituted pursuant to the provisions of this Declaration. All such declarations, limitations, covenants, conditions, and restrictions shall constitute covenants running with the real property described in said **Exhibit A** attached hereto, and such additions thereto as may be made pursuant to Article II hereof, and equitable servitudes and liens, and shall be binding upon and for the benefit of each such Lot conveyed, as that term is herein defined, and the Owner of each such Lot, and upon and for the benefit of all parties having or acquiring any right, title, interest, or estate in the Existing Properties, or any part thereof, including without limitation the heirs, executors, administrators, successors, and assigns of any such parties and all subsequent owners of all or any part of the Existing Properties.

ARTICLE I
DEFINITIONS

Section 1.01 ARTICLES: The term "Articles" shall mean and refer to the Articles of Incorporation of the Association as said Articles may be amended from time to time.

Section 1.02 ASSESSMENT: The term "Assessment" shall mean and refer to that portion of the cost of maintaining, repairing, improving and managing the Common Areas and Facilities, defined below, which is to be paid by each Owner as determined by the Association.

Section 1.03 ASSOCIATION: The term "Association" shall mean and refer to the Broken Horn Property Owners' Association, an Idaho Nonprofit Corporation created to own and provide management, maintenance, preservation and control of the Common Areas and Facilities.

Section 1.04 BOARD: The term "Board" or "Board of Directors may be used interchangeably herein and shall mean the Board of Directors of the Association as the same may, from time to time, be constituted.

Section 1.05 BYLAWS: The term "Bylaws" shall mean the Bylaws adopted by the Association as the same may be duly amended from time to time.

Section 1.06 COMMON AREAS AND FACILITIES: The term "Common Areas and Facilities" shall mean all Common Areas, fixtures, and personal property, Improvements and Structures thereon, owned, leased, or otherwise held now or in the future by the Association for the common use and enjoyment of the Owners including:

(a) All roadways in the Existing Properties, including the main entrance roadway running from the Seamon Gutch Road.

Section 1.07 COMMON AREAS: The term "Common Areas" shall mean the real property within the Subdivision to be owned by the Association upon recordation of this Declaration for the common use and enjoyment of the Owners.

Section 1.08 COMMUNITY: The term "Community" as used herein shall refer to the Existing Properties.

Section 1.09 DECLARATION: The term "Declaration" shall mean this Declaration of Protective Covenants, Conditions, and Restrictions for Broken Horn Subdivision, and its amendments, modifications and supplements.

Section 1.10 DEED OF TRUST: The term "Deed of Trust" shall mean and be synonymous with the word "Mortgage" and the same may be used interchangeably with the same meaning; and likewise, the word "Trustor" shall be synonymous with the word "Mortgagor" and the word "Beneficiary" shall be synonymous with the word "Mortgagee".

Section 1.11 DESIGN REVIEW COMMITTEE: The term "Design Review Committee" shall mean the committee created pursuant to Article VII.

Section 1.12 DWELLING, DWELLING UNIT: The terms "Dwelling" and "Dwelling Unit" are interchangeable and shall mean any building or portion thereof located on a Lot and designed and intended for use and occupancy as a single family residence, including patio areas and garages.

Section 1.13 EXISTING PROPERTIES: The term "Existing Properties" shall mean

Section 1.14 GOVERNING INSTRUMENTS: The term "Governing Instruments" shall mean this Declaration, the Articles of Incorporation, Bylaws, Rules and Regulations of the Association, all amendments and supplements thereof, and all other instruments for the ownership, management and control of the Subdivision.

Section 1.15 IMPROVEMENTS: The term "Improvements" shall include buildings, outbuildings, roads, driveways, parking areas, fences, screening walls, retaining walls, stairs,

decks, hedges, windbreaks, plantings, planted trees and shrubs, ground cover, poles, signs, and all other structures or landscaping improvements of every type and kind.

Section 1.16 LOT: The term "Lot" shall mean any parcel of real property which is shown on the recorded plat or plats of the Subdivision and shall for purposes of determining Association voting rights and assessments hereunder shall mean any residential dwelling unit on said Lot.

Section 1.17 MEMBER: The term "Member" shall mean every person or entity that holds a membership in the Association.

Section 1.18 MORTGAGE: The term "Mortgage" shall mean any security device encumbering all or a portion of the Subdivision or any Lot, and the term "Mortgage" shall include Deed of Trust.

Section 1.19 MORTGAGEE: The term "Mortgagee" shall mean and refer to that entity or person who takes or receives a mortgage.

Section 1.20 OWNER: The term "Owner" shall refer to that person or entity or those persons or entities who hold the ownership interest in any Lot or residential dwelling unit on any Lot as shown on the records of the County Recorder, Ada County, Idaho; including Contract sellers, but excluding those having such interest merely as security for the performance of an obligation; such term shall also include any person, persons, entity, or entities who succeed to such recorded interest by any means.

Section 1.21 PERSON: The term "Person" shall mean and includes a natural person, corporation, partnership association, firm or other entity as the case may be and the context may require.

Section 1.22 RESIDENCE: The term "Residence" shall mean a building or buildings, including any garage, carport or similar outbuildings, used for residential purposes.

Section 1.23 RULES AND REGULATIONS: The term "Rules and Regulations" shall mean those Rules and Regulations adopted by the Association or its Board, including any amendments or additions thereto.

Section 1.24 SINGLE-FAMILY RESIDENTIAL USE: The term "Single Family Residential Use" shall mean the occupation and use of a single family dwelling in conformity with this Declaration and any requirements imposed by applicable zoning laws or other state or local municipal rules and regulations.

Section 1.25 STRUCTURE: The term "Structure" shall include buildings, outbuildings, roads, driveways, parking areas, fences, walls, stairs, decks and poles.

Section 1.26 SUBDIVISION: The term "Subdivision" shall mean and refer to that certain real property located in ADA County, Idaho as more particularly described in **Exhibit A** and includes the Common Areas and Facilities defined above and any additional lands which may be brought within the framework of this Declaration pursuant to Article II herein.

ARTICLE II
PROPERTY SUBJECT TO THE DECLARATION AND ADDITIONS THERETO

Section 2.01 ADDITIONS TO EXISTING PROPERTIES: Under no circumstances shall any property annexed pursuant to this Article II be exempt from payment of its fair share of the operation, repair and replacement expenses for the Subdivision's Common Areas and Facilities.

ARTICLE III
RIGHTS OF OWNERSHIP AND EASEMENTS

Section 3.01 MEMBERS' EASEMENTS OF ENJOYMENT: Subject to the provisions of Section 3.02 herein, every member shall have a right and easement of enjoyment in and to the Common Areas and Facilities and such easement shall be appurtenant to and pass with the title to every Lot.

Section 3.02 OWNERS' EASEMENTS OF ENJOYMENT: Every Owner of a Lot shall have an easement and equitable rights of use and enjoyment in and to and throughout the Common Areas and Facilities as well as a non-exclusive easement and equitable right of ingress, egress and support over and through the Common Areas and Facilities. Each such easement and right shall be appurtenant to and pass with the title of every Lot subject to the following restrictions:

Section 3.03 OTHER EASEMENTS:

(b) **Drainage Easements and Restrictions**: All natural or constructed streams, whether constant or flowing or not, and all natural or constructed drainage swales of both a major and minor character, wherever they may occur within the Subdivision, are hereby designated as having a permanent drainage easement as follows:

(ii) **Drainage Swales**: Fifteen (15) feet either side of the centerline of flow line of the drainage swale (total width of thirty (30) feet)

(d) **Private Driveway Access Easements**: Private driveway access easements are shown on the recorded Subdivision Plat for certain Lot(s) or groups of Lots where terrain and other considerations indicated a need for improved Lot access. Said easements are designated for ingress / egress purposes only.

The Board of Directors shall have the right at any time to vacate any such easements and rights of way as to all or any portion of the Subdivision, subject to any agreement regarding use of easements which may be in force at that time; and, only to the extent that the Association has rights in such easements and rights of way, but not with regard to any rights of third parties in such easements and rights of way.

ARTICLE IV
ASSOCIATION PURPOSE AND POWERS

Section 4.01 PURPOSE: The purpose and function of the Association shall be to manage, control and maintain the Common Areas and Facilities for the benefit of its Member Owners and to regulate use and enjoyment thereof by the Owners and their licensees and invitees and by all other persons and in general to promote and further the common interests and welfare of, and harmony among, its Member Owners. The Association's responsibility for management

and control of the Common Areas shall extend to all Common Areas and Facilities within the Subdivision. The Association's management and control duties shall embrace all functions necessary to ensure the preservation of the Common Areas and Facilities and their continued availability for use and enjoyment by Lot owners, including but not limited to physical control and regulation, maintenance, repair and replacement and payment of the costs thereof, payment of use charges or assessments (including water, sewer, waste collection and utility charges not individually metered or charged to individual lots) and insurance against fire, theft and other common hazards and casualties.

Section 4.02 POWERS: The powers of the Association shall include, but not be limited to those powers necessary, conducive or incidental to the accomplishment of its purpose and performance of its functions but shall not extend to the conduct of a trade or business for profit. Specific powers of the Association shall include, without limitation, the following:

(a) **Enforcement of Governing Instruments**: Enforcement of the instruments governing ownership and control of Broken Horn Subdivision and regulating the conduct of the Association and its members, including without limitation this Declaration, the Articles of Incorporation, Bylaws, Rules and Regulations of the Association, all amendments and supplementations thereof, and all other instruments for the ownership, management and control of the Subdivision

(b) **Payment of Taxes, Assessments and Expenses**: Payment of all taxes, assessments and expenses which shall be or could by law become a lien upon the Common Areas and Facilities or any portion thereof

(c) **Insurance**: Procurement of and payment for casualty, liability and other appropriate insurance for protection of the Association and its Members and their property held in common as required by Article X

(e) **Delegation of Powers**: Delegation of its powers to committees, officers and employees as authorized under the Governing Instruments described above, including but not limited to delegation of power to the Design Review Committee to authorize refunds of Contractor's Deposits in those instances where there is not a dispute as to its return. However, the Association and the Board shall not and cannot delegate to any committees, officers or employees the right to levy fines, hold hearings, or impose discipline

(f) **Budget and Financial Statements**: Preparation of budgets and financial statements for management and reporting of its fiscal and financial affairs, as prescribed by the Governing Instruments described above

(g) **Rules, Regulations and Operating Procedures**: Formulation and adoption of rules, regulations and operating procedures for management of the Common Areas and Facilities and conduct of the Association's affairs, by promulgation of the Governing Instruments described above

(h) **Disciplinary Proceedings**: Initiation and execution of disciplinary proceedings against its Members for violations of the provisions of the Governing Instruments, in accordance with procedures set forth in said Governing Instruments

(j) **Levy of Assessments**: Collection of funds for accomplishment of its purpose and performance of its functions by levy of assessments in accordance with the provisions of the Governing Instruments

(o) **Legal Action**: Commencement and prosecution of legal action for accomplishment of its purposes and performance of its function; and

(p) **General Powers**: Performance of all other acts and deeds necessary or expedient in the administration of its affairs and attainment of its purpose

Section 4.03 BOARD OF DIRECTORS: All power and authority of the Association as herein granted and as provided by law shall be vested in and exercised by the Association's governing body, the Board of Directors as provided in the Bylaws; providing, however, that unless authorized by the approval of at least two-thirds of Association Members entitled to vote, who vote in person or by proxy at a meeting called for that purpose and/or who vote by written ballot pursuant to Article IV Section 8 of the Bylaws, and when a quorum is represented, the Board shall not:

(a) Enter into a contract with a third person or entity whereby such person or entity will furnish goods or services for the Common Areas and Facilities of the Association for a term longer than one-(1) year with the following exception:

(b) Spend money for any purpose from the capital expenditure investment account of the Association without the approval of at least two-thirds (2/3) of the members of the Board of Directors;

(c) Pay compensation to members of the Board or officers of the Association for services performed in the conduct of the Association's business provided, however, that the Board may cause a Member or officer to be reimbursed for expenses incurred in carrying on the business of the Association.

ARTICLE V
MEMBERSHIP AND VOTING RIGHTS IN THE ASSOCIATION

Section 5.01 MEMBERSHIP: Every person, persons or entity who is a record owner of a fee or undivided fee interest in any Lot which is subject by this Declaration of record to assessment by the Association shall be a Member of the Association. The foregoing is not intended to include persons or entities that hold an interest merely as security for the performance of the obligation. Membership shall be appurtenant to and may not be separated from ownership of the Lot which is subject to assessment. Any transfer of title to the interest shall automatically transfer the appurtenant membership in the Association to the new Owner.

Section 5.02 VOTING RIGHTS: The Association shall have one (1) class of voting membership, and each Member shall be entitled to one (1) vote for each Lot in which they hold the interests required for membership by Section 5.01. When more than one (1) person holds such interest or interests in any Lot, all such persons shall be Members, and the vote for such Lot shall be exercised as they among themselves determine, but in no event shall more than one (1) vote be cast with respect to any such Lot.

No Member shall be entitled to vote or be counted for purposes of a quorum unless they are then current in the payment of assessments which have been levied by the Association.

ARTICLE VI
PROTECTIVE COVENANTS FOR OTHER THAN BROKEN HORN PROPERTY

Section 6.01 LAND USE AND LIVING UNITS: All of the subject residential Lots in the Subdivision shall be used and occupied solely as single family residential lots.

(b) No structure of a temporary character, trailer, mobile home, basement, tent, shack, garage, barn or other outbuilding shall be used on any Lot at any time as a residence, either temporarily or permanently; nor shall any residential structure be moved on to any Lot from any other location without the prior written approval of the Design Review Committee, such approval to be obtained in the same manner as for new construction.

Section 6.02 DWELLING SIZE, FEATURES, AND LOCATION:

(a) No residence or dwelling shall be erected or permitted to remain on any Lot having a total floor area, exclusive of open porches, garages, or other outbuildings, of less than two thousand five hundred (2,500) square feet. A permanent garage must be constructed for each home, as approved by the Design Review Committee in its discretion. Garages and all outbuildings shall be of design and material similar to the dwelling.

(b) No residence, dwelling, or other structure on a Lot shall be permitted to exceed thirty-five (35) feet in height as measured from the highest roof peak to the highest natural lay of the land immediately adjacent to such structure.

(c) Exterior surfaces of dwellings, garages and all outbuildings shall be of materials consistent with the aesthetics of the Broken Horn environment. Roofs shall be of pitched design, covered by roofing materials rated at the highest fire resistance Class for the material being used, and shall be subject to the approval of the Design Review Committee.

(d) No dwelling, structure or any part thereof (including a garage or other outbuilding whether or not physically a part of such dwelling) shall be erected or allowed to remain on any Lot nearer than fifty (50) feet from the centerline of the right of way of any street or streets adjacent thereto, or nearer than fifteen (15) feet from any interior or rear Lot lines of such Lot, subject to subsection (e) below. Special consideration will be given by the Design Review Committee to variance requests from the front Lot line setback requirements to property Owners having terrain constraints which may limit their ability to comply with such requirements.

(e) No building or other structure shall be placed upon easements as defined in Article III, or interference made with the free use of the same for the purposes intended. For those Lots with interior or rear Lot line easements exceeding fifteen (15) feet as shown on the recorded map of this Subdivision, then the recorded plat easement width shall govern the minimum set-back requirements.

Section 6.03 FENCES: Allowed fences in Broken Horn Subdivision must be constructed of rought iron and not exceed 6’ in height. A fence is defined as a structural barrier which separates one space from another to define property boundaries or which is constructed for ornamental purposes regardless of height; provided, however, that it shall not include architectural extensions of the structure designed as screening for parking, wood storage, garbage disposal areas, and other service areas. However, any such architectural extensions are subject to the prior approval of the Design Review Committee.

Section 6.04 LANDSCAPING, GARDENS AND IRRIGATION:

(a) All of the Lots shall be properly cared for at all times so as to maintain a good appearance to the public view. The Owner of each such Lot, upon erecting a single family residence or other approved structure thereon, shall provide and maintain minimal natural landscaping on the rear and side portions of the Lots as well as the front Lot area. All disturbed areas shall be reestablished with native vegetation. In the event of neglect to properly maintain and care for any such Lot, or to provide for such minimal landscaping, the Association hereby reserves the right, but shall have no obligation, to have the necessary work performed on any Lot to keep it from presenting an unsightly appearance, the charges for work so performed to be billed to, and paid for, by the Owner or Owners of such Lot.

(c) No landscaping or other grading shall be performed on any Lot which shall substantially change the elevations or topography of such Lot without prior approval from the Design Review Committee.

Section 6.05 GARBAGE, REFUSE DISPOSAL, AND STORAGE OF MATERIALS:

(a) No Lot shall be used or maintained as a dumping ground for rubbish, trash, junk, or other waste material. All such waste of this nature must be kept in sanitary containers out of sight of the street, and must be removed from the Lot at least once each week. All equipment for the storage or disposal of such waste material shall be maintained in a clean and sanitary condition at all times.

(c) Adequate space shall be provided on each Lot for off-street parking of all the Owner's personal automobiles.

(d) No building materials of any kind shall be placed or stored upon any Lot until the Owner thereof is ready and able to commence construction, and then such materials shall be placed and kept neatly within the property lines of such Lot.

Section 6.06 NUISANCES:

(a) No one shall perform within the Subdivision any activity which is noxious or offensive or an annoyance or nuisance to the Owner of any Lot, or which involves the pollution of the earth or water of, or the air over, any part of the Subdivision, or which creates noxious, offensive, annoying or dangerous odors, noises or visual or tactile conditions, or which creates or leaves a residue of non-biodegradable substances in offensive quantities.

(b) All outdoor lighting used for area lighting, other landscape lighting or porch lighting shall be unobtrusive and shall be so located as to eliminate glare and not be a nuisance to other property Owners, and shall be approved by the Design Review Committee.

(c) Radios, stereos, tape players, and other sound amplifying devices shall not be placed in the Common Areas of the Subdivision in such a manner as to offend or annoy other Lot Owners or their guests.

(d) During any period of construction on a Lot for which an approval is required under the provisions of Section 7.02 and during which time approved sanitary facilities are not otherwise available, at least one portable chemical toilet shall be provided upon each such Lot.

Section 6.07 SPEED LIMIT AND USE OF STREETS: No vehicle, including but not limited to, a truck, tractor, dune buggy, motor scooter, motorcycle, snowmobile, ATV, or automobile, shall be driven on the streets and roads in this Subdivision for other than legitimate

transportation purposes, nor shall any vehicles be driven at a speed of more than twenty-five (25) miles per hour on paved roads, in the Subdivision. None of the above vehicles shall be operated on streets and roads in the Subdivision by an operator without a valid driver's license, unless accompanied by a licensed driver and pursuant to all applicable laws.

Section 6.08 SIGNS: No signs of any kind shall be displayed to the public view on any Lot except:

(a) A sign of reasonable and customary dimensions and design advertising the property for sale, lease or exchange by the Owner or his or her agent. "For Sale" and "For Lease" signs shall be removed promptly after closing of the sale or lease of the subject property, and in no case shall such sign remain for more than one week after closing;

(c) A construction sign, identifying the contractor during construction which shall be of reasonable and customary dimensions. The sign is to be on its own post and shall not be placed higher than forty-eight (48) inches from the prevailing ground plan. The sign must be placed no closer than twenty (20) feet from the nearest roadway and be approximately parallel to the centerline of the roadway. It must be placed where it cannot be seen from the golf course.

Signs not meeting the standards set forth herein will be removed from the premises where displayed. Exceptions to the above criteria may be granted by the Design Review Committee upon application.

Section 6.09 PROHIBITED LAND USES:

(a) No hunting, shooting or target practice shall be allowed and no guns shall be discharged within the Subdivision.

(b) No antennas of any kind shall be erected or maintained on the outside of any structure or otherwise on any Lot without the prior written approval of the Design Review Committee, except for the following, which may be erected and maintained without prior approval: those measuring no more than four feet (4') in length; or, those measuring no more than three feet (3') in height and two feet (2') in diameter.

(d) No excavations shall be made on any Lot except as is necessary for the erection of approved structures and the same shall be properly filled within thirty (30) days of the completion of the underground procedures, and as otherwise approved by the Design Review Committee in its sole discretion.

(g) Nothing shall be done or kept on any Lot by any person which will increase the rate of insurance on any other Lot or which will result in the cancellation of any insurance or which constitutes a violation of any law.

(h) Trespass upon private property is forbidden in the Subdivision, in particular, adjacent property may not be used for access to any construction site under any circumstances other than with the express permission of the Owner of the adjacent property. Adjacent property may also not be used as a parking lot by any contractor or subcontractor working on the Lot. Damage to adjacent property shall be the responsibility of the Lot Owner and the general contractor.

(i) Ignition of fireworks or any similar incendiaries within Broken Horn Subdivision, including but not limited to on Common Areas and individual Lots, is prohibited.

Section 6.10 RURAL ROUTE MAIL AND NEWSPAPER CONTAINERS: Subject to the requirement of the U.S. Postal Service, roadside containers of a standard design approved by the DRC and a placement approved by the DRC and staff will be permitted.

ARTICLE VII
DESIGN REVIEW FOR BROKEN HORN SUBDIVISION

Section 7.01 PURPOSE AND THEME OF CONTROLS: It is the desire of the Association that design control be implemented for all residential building improvements to insure that the overall excellence of Broken Horn shall be maintained. To this end a Design Review Committee (hereinafter referred to as the "Committee") has been established pursuant to Section 7.02 of this Article VII to guide the site development and design of all structures in the Subdivision and to aid the residential home builders to discover the opportunities and limitations of their building sites.

All of the residential improvements will be encouraged to offer a diversity of types, sizes and styles of architecture and yet will be required to conform to a total visual homogeneity. Consistent use of earth tone colors and textures, natural woods and masonry materials will be encouraged to enhance the aesthetic features of the buildings in this mountain environment.

No building, wall or other structure shall be commenced, erected, altered, placed or maintained upon any Lot nor shall any exterior addition to or change or alteration therein be made until plans and specifications showing the nature, kind, shape, heights, materials and location of the same have been submitted to and approved in writing by the Design Review Committee.

Section 7.02 DESIGN REVIEW COMMITTEE: The Design Review Committee shall consist of no less than three (3) members nor more than five (5) members, all to be appointed by the Board annually. If any member of the Committee resigns or is unable to act, the Board shall have the right to appoint a replacement. The Board of Directors, by a majority vote, may remove and replace any Design Review Committee member at any time.

Members appointed to the Design Review Committee by the Board of Directors shall be from the membership of the Association. No member of the Committee shall receive any compensation or make any charge for his or her services.

The discretion hereinafter vested in the Committee will be exercised towards the end that high standards of workmanship and quality of materials will be maintained throughout the Subdivision and that improvements will be in harmony with and complement the natural landscape, topography and flora.

Section 7.03 DOCUMENTATION AND FEES REQUIRED FOR DESIGN APPROVAL:

(a) No single-family residence, exterior remodel or other building, wall, or structure shall be considered or approved by the Design Review Committee until the Lot Owner has submitted the following information to the Committee:

(i) One set of plans and specifications for the proposed improvements, including the type of heating;

(ii) A plot plan of the Lot showing lot corners, north line arrow, easements, and the location of all existing and proposed improvements, including driveways and landscaping, and which also identifies the location, size, and type of all trees proposed to be removed;

(iii) One set of plans showing exterior building elevations from all sides of the improvement;

(iv) A schedule of exterior materials and colors to be used on the proposed improvement, including exterior light fixtures and their placement;

(v) The following completed form, to be obtained from the Design Review Committee: Building Checklist and Form; and,

(vi) The Owner's proposed construction schedule.

(c) No single-family residence, exterior remodel of same or other building, wall, or structure shall be considered or approved by the Design Review Committee until the Lot Owner has paid the following fees, as applicable, to the Association:

(i) A refundable construction deposit. This deposit will be returned upon satisfactory completion and inspection of the building site, less the cost of any remedial action required.

All such fees will be determined by the Board of Directors, and periodically reviewed and revised.

Section 7.04 BASIS FOR APPROVAL OR DISAPPROVAL: The Committee shall give its approval for the requested improvement only if:

(a) The Owner or applicant shall have complied with the requirements of Section 7.03 herein; and such Design Rules as may be adopted in accordance with the provisions of this Section 7.04.

(b) The Committee finds that the plans and specifications conform to the requirements of Article VI of this Declaration, and furthermore that the Owner or applicant is in compliance with all of the provisions and requirements of this Declaration in its entirety; provided, however, that the Committee may in its sole discretion make exceptions and grant variances for the purpose of advancing the development of the Subdivision in conformance with the goals and standards of Section 7.01 herein; and,

(c) The members of the Committee, in their sole and reasonable discretion, find that the proposed improvement is compatible with the theme of this Subdivision and with the purposes and intent of this Declaration as a whole as to quality of workmanship and materials, as to harmony of external design with existing structures, and as to location with respect to topography and finished grade elevations.

(d) When a request to the DRC is made for a variance of any of the requirements listed in the CC&R's, the MCPOA management will send a descriptive notification of such request to all property owners (including the MCRA) who own property within 300 feet of the perimeter of the requesting property. The notification would solicit input on the issue from those notified but not request approval. The owners notified of the request will be given a 15 day time limit to voice any concerns before the DRC makes a determination of granting or denying the variance request. Approval is the responsibility of the DRC, with appeals going to the board for denial by the applicant, or dispute of approval by a neighbor.

The Committee may waive submission of plans and specifications for approval where minor construction or a minor addition to an existing structure is involved which does not appear to materially affect the Subdivision.

Consent by the Committee to any matter proposed to it or within its jurisdiction, or failure by the Committee to enforce any violation of these Covenants, Conditions and Restrictions shall not be

deemed to constitute a precedent or waiver impairing the Committee's right to withhold approval as to any similar matter thereafter proposed or submitted to it for consent or to enforce any subsequent or similar violation of these Covenants, Conditions and Restrictions.

The Committee may from time to time, and in its sole discretion, adopt, amend, and repeal rules and regulations to be known as "Design Rules". Said rules shall interpret and implement the provisions of this Article VII and the Declaration by setting forth in more detail the standards and procedures for any Committee review, including but not limited to consideration of variances and documentation required for design approval. The Board of Directors shall review and approve all new and modified Design Rules prior to their adoption by the Design Review Committee.

Section 7.05 FORM OF APPROVAL OR DISAPPROVAL:

(a) All approvals given under Section 7.04 shall be in writing: provided, however, that as to any request for approval which has not been accepted or rejected within forty five (45) days from the date of submission thereof to the Committee, such approval will not be required and the provisions of this Section will be deemed to have been fully complied with.

(b) Notice of approval or disapproval shall be sent to the Owner in accordance with the provisions of Section 13.07 herein. In disapproving any plans and specifications or other documents, the Committee shall specify in writing the deficiencies it has relied upon in rendering such disapproval and shall give the applicant the right and opportunity to resubmit his plans and specifications or other documents in amended form. If the Owner's documents are submitted in an amended form, the Committee shall thereafter reconsider such documents as if they were being submitted for the first time.

(c) One set of plans and specifications as finally approved or disapproved shall be retained by the Committee as a permanent record.

(d) Nothing contained in this Section shall be deemed to relieve the Owner of any Lot from complying with all of the provisions of this Declaration or with the provisions of all applicable building codes, zoning regulations, or other governmental regulations or laws governing the lands within this Subdivision.

Section 7.06 DISPUTE RESOLUTION: In the case of any challenge to a decision of the Design Review Committee, the decision shall be reviewed by the Board of Directors. In the case of any challenge to a decision of the Board, the decision shall be upheld unless it is found by clear and convincing evidence that the Boards' decision is: (i) in express violation of this Declaration or any other Governing Instruments, rules or regulations; (ii) in express violation of an applicable federal, state, county or district statute, ordinance or regulation; or, (iii) arbitrary, capricious, unreasonable and oppressive. If an Owner does dispute the Board's decision, the provisions of Article XII shall control.

Section 7.07 PROCEEDING WITH WORK: Upon receipt of approval from the Committee pursuant to Section 7.05 above, the Owner shall, as soon as practicable, satisfy all the conditions thereof and diligently proceed with the commencement and completion of all construction, reconstruction, refinishing, alterations and excavations authorized by such approval, said commencement to be in all cases within one (1) year from the date of such approval. If the Owner shall fail to comply with this Section, any approval given pursuant to Section 7.05 shall be deemed revoked, unless the Committee upon written request of the Owner made prior to the expiration of said one (1) year period extends the time for such commencement. No such extension shall be granted except upon a finding by the Committee that there has been no change in the circumstances upon which the original approval was granted.

Section 7.08 COMPLETION OF CONSTRUCTION: The Owner shall complete the construction authorized by the approval given in Section 7.05 within one (1) year after commencing construction thereof, except, and only for so long, as such completion is rendered impossible or would result in great hardship to the Owner due to strikes, fires, acts of God, actual inability of the Owner to procure deliveries of necessary materials, or by other forces or persons beyond the control of the Owner to prevent. Financial inability of the Owner or his contractor to secure labor or materials or to discharge liens or attachments shall not be deemed a cause beyond his control.

Section 7.09 FAILURE TO COMPLETE WORK: Any construction which is not completed in a good and workmanlike manner, in substantial conformity to the plans and specifications approved for it by the Committee, within the time limits provided in Section 7.08, and where such failure is not excused by the provisions herein, shall be deemed a nuisance, and the Committee shall have the right to enter upon the premises and to have such incomplete construction removed or to carry such construction forward to completion, the charge for work so performed to be billed to, and paid for, by the Owner or Owners of such Lot, and the Association may bring an action at law against the Owner for the costs and expenses incurred in such removal or completion. Any judgment rendered hereunder shall include interest, reasonable attorneys' fees and Court costs.

Section 7.10 LIABILITY: Neither the Association nor the Design Review Committee nor any of their respective officers, directors, employees or agents shall be responsible or liable to any person for any defects in any plans or specifications submitted, revised or approved under this Article VII nor for any defects in construction performed pursuant to such plans and specifications. Approval of plans and specifications under this Article VII shall not relieve the Owner of strict compliance with applicable governmental laws or regulations.

ARTICLE VIII
COVENANT FOR ASSESSMENTS

Section 8.01 CREATION OF THE LIEN AND PERSONAL OBLIGATION OF ASSESSMENTS: Each Owner of any such Lot shall, by acceptance of a Deed therefore, whether or not it shall be so expressed in any such Deed or other conveyance, be deemed to covenant and agree to pay to the Association: (a) Regular annual assessments or charges; and (b) special assessments as required. Such assessments shall be levied in the proportion set forth at **Exhibit D** attached hereto and incorporated herein by reference. Annual and special assessments, together with such interest thereon, costs of collection and reasonable attorneys' fees as hereinafter provided, shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, together with such interest or late charges thereon, costs of collection and reasonable attorneys' fees as hereinafter provided shall also be the personal obligation of the person or persons who was or were the Owner(s) of such property at the time when the assessment fell due. No Lot Owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Areas and Facilities or abandonment of the Lot.

Section 8.02 PURPOSE OF REGULAR ANNUAL ASSESSMENTS: Regular assessments levied by the Association shall be used exclusively to defray expenses attributable to ownership, operation and furnishing of common interests by the Association, to promote the recreation, health, safety and welfare of the Members, and to defray other expenditures incurred

by the Association in the performance of its duties as set forth in the Articles, this Declaration and the Association Bylaws. Annual assessments shall be levied for but not limited to the following:

(a) Maintenance, repair and operation of the Common Areas and Facilities.

(g) A standard fidelity bond covering all members of the Board of Directors of the Association and all other employees of the Association in an amount to be determined by the Board of Directors.

Section 8.03 INCREASED ANNUAL ASSESSMENTS: The regular annual assessment shall be prescribed by the Board without a vote of the membership in accordance with the Association budget requirements, provided however that the maximum annual assessment may be increased above twenty percent (20%) of that levied for the immediately preceding fiscal year only with the approval of at least two-thirds of Association Members entitled to vote, who vote in person or by proxy at a meeting called for that purpose and/or who vote by written ballot pursuant to Article IV Section 8 of the Bylaws, and when a quorum is represented.

Section 8.04 SPECIAL ASSESSMENTS: In addition to the annual assessment authorized herein the Association may levy in any assessment year a special assessment against all Owners, applicable to that year only for the purpose of defraying, in whole or in part, any inadequacy of the annual assessment, the cost of any construction or reconstruction, unexpected repair or replacement of a capital improvement upon the Common Areas and Facilities, including the necessary fixtures and personal property related thereto; provided however that if the special assessment levied to defray the costs of any action or undertaking on behalf of the Association in the aggregate exceeds Five Percent (5%) of the budgeted gross expenses of the Association for that fiscal year, such assessment may not be levied absent the approval of at least two-thirds of Association Members entitled to vote, who vote in person or by proxy at a meeting called for that purpose and/or who vote by written ballot pursuant to Article IV Section 8 of the Bylaws, and when a quorum is represented.

Section 8.05 EFFECT OF NONPAYMENT OF ASSESSMENT; REMEDIES: By acceptance of conveyance of a Lot subject to this Declaration each Lot Owner covenants and agrees to make payment to the Association of assessments levied pursuant hereto promptly as due, and further covenants and agrees to enforcement of such payment, in the event of default, by the remedies provided herein.

(a) **Late Charges And Interest**: Imposition of late charges or interest by the Association for the delinquent payment of regular and special assessments, provided however that the charges so imposed shall be equal to the greater of the following: Twenty-Five Dollars ($25.00); or, One and One-Half Percent (1.5%) per month computed on the outstanding balance which shall include any late charges previously assessed and unpaid from month to month.

No charge may be imposed more than once for the delinquency of the same payment, provided, however, that the imposition of a late charge on any delinquent payment shall not eliminate or supersede charges imposed on prior delinquent payments. The payment of an assessment is not delinquent for the purpose of this Section until at least thirty (30) days following the due date of the assessment. When an assessment is paid more than thirty (30) days after the due date of the assessment, late charges shall accrue from the first day following the due date of the assessment.

The late charge permitted by this Section shall constitute full compensation for any additional bookkeeping, billing, or other administrative costs that may be incurred by the Association as the result of the late payment of an assessment.

(b) **Enforcement by Suit**: By commencement and maintenance of an action at law or in equity against any Owner or owners personally obligated to pay assessments, for collection of such delinquent assessments as to which they are personally obligated. Any judgment rendered hereunder shall include interest, reasonable attorneys' fees and court costs against the delinquent Owner in such amount as the Court may determine. Suit to recover judgment for unpaid assessments may be maintained without foreclosing or waiving the lien hereby created.

(c) **Enforcement by Foreclosure of Lien**: There is hereby created a claim of lien with power of sale to secure payment of any annual or special assessment levied pursuant to this Declaration together with accrued interest, reasonable attorneys' fees and costs. Enforcement of said lien shall be in accordance with the following procedures and the laws of the State of Idaho:

(i) Said lien shall attach to an individual Lot upon recordation by the Association in the Office of the County Recorder of Adams County, Idaho, of the notice of default and claim of lien which shall be executed and acknowledged by any officer of the Association and set forth the name of the defaulting Owner, the amount of the assessment and the other charges properly levied hereunder, the description of the Lot assessed; that the notice of default and claim of lien is made by the Association pursuant to this Declaration; and that a lien is claimed and will be foreclosed against the Lot in an amount equal to the amount stated.

(ii) Upon recordation of a duly executed original or copy of each notice of default and claim of lien, and mailing a copy thereof to the defaulting Owner, first class, postage prepaid, said lien shall immediately attach and become effective. Any such lien may be foreclosed by appropriate action in Court or in the manner provided by law for the foreclosure of a Deed of Trust by exercise of a power of sale contained therein or in the manner provided by law for the enforcement of a judgment; provided, however, that initiation of such foreclosure shall not be commenced prior to fifteen (15) days following delivery to the Lot Owner of said copy of such notice of default and claim of lien. Any action brought to foreclose such lien shall be commenced within one (1) year following such recordation; provided, however, that said period may be extended by the Association for a period not to exceed one (1) additional year by recording a written extension thereof.

(iii) The Association shall have the power to bid at any foreclosure sale, trustee's sale or judgment sale and to purchase, acquire, lease, hold mortgage and convey any interest acquired at such sale subject to the provisions of this Declaration. Reasonable attorneys' fees, court costs, title search fees, interest, and all other costs and expenses shall be allowed to the extent permitted by law.

(iv) The proceeds of any foreclosure, trustee's or judgment sale provided for in this Declaration shall first be paid to discharge court costs, Court Reporter charges, reasonable attorneys' fees, title costs, and costs of the sale, and all other expenses of the proceedings and sale, and the balance of the proceeds, after satisfaction of such charges and unpaid assessments hereunder or any liens, shall be paid to the defaulting Owner. The purchaser at any such sale shall obtain title to the Lot free from the sums claimed, but otherwise subject to the provisions of this Declaration, the Bylaws, and the Rules and Regulations; and no such sale or transfer shall relieve such Lot or the purchaser thereof from liability for any assessments, other payments, or performances thereafter becoming due, or from the lien therefore as provided for herein.

(v) Upon the timely curing of any default for which a notice or claim of lien was filed by the Association, the officers are hereby authorized to record an appropriate release of such lien in the Office of the County Recorder of Adams County, Idaho.

No Owner may waive or otherwise escape liability for the assessments provided for herein by non-use of the Common Areas and Facilities or by abandonment of his Lot. The lien for assessments provided for herein shall be subordinate to the lien of any first mortgage or first Deed of Trust placed upon the Subdivision interests of the Owner. Sale or transfer of any Lot shall not affect the assessment lien. However, the sale or transfer of any Lot pursuant to the exercise of a power of sale in any such first mortgage or trust deed or of judicial foreclosure of the first mortgage or trust deed shall extinguish the lien of such assessments as to payments which become due prior to such sale or transfer. No sale or transfer of the Subdivision interest as the result of a foreclosure or exercise of a power of sale shall relieve the new Owner(s) whether it be the former beneficiary of first encumbrance or another person, from liability for any assessments thereafter becoming due or from any lien thereof.

(d) **Suspension**: No Member shall be entitled to vote or be counted for purposes of a quorum unless they are then current in the payment of assessments which have been levied by the Association. Additionally, during any period in which an Owner shall be in default in the payment of any assessment levied by the Association, the Owner's rights as a member of the Association may be suspended in accordance with the provisions of Section 9.02 herein, provided however that the Association shall have no right to interfere with an Owner's right of ingress to or egress from his Lot.

All rights and remedies granted to the Association of this Section 8.05 shall be cumulative and the exercise of one or more rights or remedies shall not constitute a waiver or election preventing the use of other rights or remedies. The Association shall be entitled to collect from a default Owner all costs and attorneys' fees incurred in connection with pursuing the collection of said assessment and/or the enforcement of said lien.

ARTICLE IX
ENFORCEMENT

Section 9.01 PERSONS ENTITLED TO ENFORCE: The provisions of this Declaration may be enforced by any of the following persons or entities in accordance with the procedures outlined herein:

(a) The Board of Directors of the Broken Horn Property Owners' Association;

(b) The Owner or Owners of any Lot adversely affected, but only after demand made upon each of the aforementioned persons or entities and their failure to act, except that no such Owner shall have the right to enforce independently of the Association any assessment or lien herein;

Section 9.02 METHODS OF ENFORCEMENT Subject to the provisions of Section 9.03 herein, the following methods of enforcement may be utilized:

(a) Legal or equitable action for damages, injunction, abatement, specific performance, foreclosure, rescission, or cancellation of any contracts of an executory nature;

(b) Eviction for trespass by police action;

(c) Action by the Design Review Committee, or the Broken Horn Property Owners' Association, their agents or employees, to restore the portion of the affected property to the condition in which it is required to be kept by the Declaration.

(d) Monetary penalties, fines and temporary suspension from Association membership, in accordance with Article XIV of the Bylaws; provided, that except for late charges, interest, and other penalties for failure to pay as due assessments levied by the Association as provided in this Declaration, no discipline or sanction shall be effective against a member unless:

(i) The member is given fifteen (15) days written notice of the proposed disciplinary action and a timely opportunity to be heard on the matter. The opportunity to be heard may, at the election of such member, be oral or in writing. The notice shall be given personally to such member or sent by first-class or registered mail to the last address of such member as shown on the records of the Association, and shall state the place, date, and time of the hearing, which shall not be less than five (5) days before the effective date of the proposed expulsion, termination, suspension or fine.

(ii) The hearing shall be conducted by a committee composed of not less than three (3) persons, appointed by the President, which shall conduct the hearing in good faith and in a fair and reasonable manner and shall not reach a decision regarding discipline until the conclusion of the meeting.

(iii) Any member challenging the disciplinary measures taken by the Board, including any claim alleging defective notice, must commence Court action within one (1) year after the date of the contested disciplinary measure taken by the Board.

Section 9.03 LIMITATIONS ON ENFORCEMENT: All methods of enforcement and discipline authorized by this Declaration are limited as follows:

(a) The Association may not cause a forfeiture or abridgement of an Owner's right to the full use and enjoyment of his individually owned Subdivision interest on account of the failure of the Owner to comply with provisions of this Declaration or the Rules and Regulations for operation of the Common Areas and Facilities except by judgment of a Court or a decision arising out of arbitration or on account of a foreclosure or sale under a power of sale for failure of the Owner to pay annual or special assessments duly levied by the Association.

(b) Late charges for interest levied by the Association against a member for the delinquent payment of regular and special assessments and enforcement assessments or penalties shall not exceed the maximum rates provided in Section 8.05(a) herein, and shall be levied in accordance with the provisions of said Section.

Section 9.04 FEES AND COSTS: Any person or association entitled to enforce any of the terms hereof, by any of the means contained herein, who obtains a decree from any Court or arbitrator enforcing any of the provisions hereof, shall be entitled to reasonable attorneys' fees and all costs incurred or anticipated to be incurred in remedying or abating the offensive condition as a part of his or its judgment or decree against the party in violation hereof.

Section 9.05 NON-LIABILITY FOR ENFORCEMENT OR FOR NON-ENFORCEMENT: Neither the Design Review Committee nor the Association shall be liable to any person under any of these covenants for failure to enforce any of them, for personal injury, loss of life, damage to property, economic detriment, or for any other loss caused either by their enforcement or non-enforcement. Failure to enforce any of the covenants contained herein shall in no event be deemed a waiver of the right to do so thereafter.

ARTICLE X
INSURANCE

Section 10.01 INSURANCE PROVIDED BY THE ASSOCIATION: The Association shall have the authority and responsibility to provide and pay for, on behalf of its members, the Lot Owners, and at all times maintain in effect, policies of insurance as follows:

(b) **General Comprehensive Public Liability**: A general comprehensive public liability insurance against claims for personal or bodily injury, death, or property damage arising from the use and maintenance of the Common Areas or Facilities. Limits of liability under such insurance shall be maintained at safe and prudent levels and reviewed for adequacy by the Board at least once annually. Such liability insurance shall name all Owners, as a class, as additional insureds and contain appropriate waivers of subrogation against any Owner or member of such Owner's household, and a provision that no act or omission by an Owner, unless acting within the scope of such Owner's authority on behalf of Broken Horn Subdivision, will void the policy or operate as a condition to recovery by any other person under such policy; and

(e) Directors and Officers Liability Insurance: The Association shall purchase and maintain a Directors and Officers Liability Insurance; and,

(f) Any other insurance the Board may deem necessary or desirable in amounts as it shall determine to fully protect the interests of the Owners.

ARTICLE XI
DAMAGE, DESTRUCTION AND EMINENT DOMAIN

Section 11.01 MAINTENANCE AND REPAIRS: Notwithstanding the existence of any insurance covering an Owner, the Association or both, against loss, damage and destruction, the Association and each Owner shall have the affirmative obligation for maintenance as follows:

(a) **Maintenance of the Common Areas and Facilities**: The Common Areas and Facilities shall be maintained in good condition by the Association.

(b) **Owner's Maintenance Obligation**: Each Owner shall maintain his Lot and the improvements thereon, if any, in conformance with the provisions of this Declaration.

Section 11.02 DAMAGE OR DESTRUCTION CONTAINED WITHIN A LOT: In the event any loss, damage or destruction is contained within a Lot and/or improvement upon such Lot and does not affect part of the Common Areas and Facilities, the Owner shall have the sole obligation to repair and restore such structure to the equivalent of its original condition and shall, in the event repair and restoration will change the original appearance of the improvement, submit plans and specifications for the proposed construction to the Design Review Committee in accordance with the provisions of Sections 7.02 and 7.03 herein; provided, however, that in the event construction is to be minor and shall not materially affect the Subdivision, the Design Review Committee may, in accordance with the provisions of Section 7.04, waive such submissions.

In the event damage is to an unimproved Lot, or the Owner shall elect not to restore the improvement, the Owner shall restore the Lot so as to conform with the use provisions of Article VI herein.

Section 11.03 BOARD OF DIRECTORS as Agent: All Owners irrevocably constitute and appoint the Board of Directors as their true and lawful attorney in fact, in their name, place

and stead, for the purpose of dealing with the Common Areas and Facilities upon their damage, destruction or condemnation as hereinafter provided.

Section 11.04 DISTRIBUTION OF PROCEEDS FROM INSURANCE, DAMAGE AWARDS, SALE, OR CONDEMNATION: Proceeds from any of the following sources shall be applied to the Association's Capital Account:

(a) Any excess insurance proceeds or damage awards in excess of the cost of repair or restoration;

(b) Any insurance proceeds or damage awards in the event of an election not to rebuild;

(c) The proceeds of any sale of Common Areas and Facilities, after payment to the holder(s) of any existing encumbrance of record relating to the damaged or destroyed Common Areas and Facilities or portion thereof, in order of priority; and,

(d) Any condemnation award affecting all or part of the Common Areas and Facilities which is not apportioned among the owners by court judgment or by agreement between the condemning authority and each of the affected Owners in the Subdivision.

Section 11.05 ENFORCEMENT BY MORTGAGEES: The provisions of this Article XI are intended to benefit and protect first Mortgagees as well as Owners, and may be enforced by any first Mortgagee.

ARTICLE XII
DISPUTE RESOLUTION AND LIMITATION ON LITIGATION

Section 12.01 AGREEMENT TO ENCOURAGE RESOLUTION OF DISPUTES WITHOUT LITIGATION:

(a) The Association and its officers, directors, all Members, and any Person not otherwise subject to this Declaration who agrees to submit to this Article (collectively, "Bound Parties"), agree that it is in the best interest of all concerned to encourage the amicable resolution of disputes involving Broken Horn Subdivision without the emotional and financial costs of litigation. Accordingly, each Bound Party agrees not to file suit in any court with respect to a Claim described in subsection (b) unless and until it has first submitted such Claim to the alternative dispute resolution procedures set forth in Section 12.02 in a good faith effort to resolve such Claim.

(b) As used in this Article, the term "Claim" shall refer to any claim, tort claim, grievance or dispute arising out of or relating to discretionary decisions of the Design Review Committee, the interpretation, application or enforcement of the Governing Instruments, and the rights, obligations and duties of any Bound Party under the Governing Instruments. The term "Claim" shall specifically not apply to any of the following: any suit by the Association to collect Assessments or other amounts due from any Owner; any suit by the Association to obtain a temporary restraining order and such ancillary relief as the court may deem necessary in order to maintain the status quo and preserve the Association's ability to enforce the provisions of the Governing Instruments; and, any suit by the Association to enjoin a continuing violation of or to enforce the provisions of the Governing Instruments.

Section 12.02 DISPUTE RESOLUTION PROCEDURE:

(a) Notice. The Bound Party asserting a Claim ("Claimant") against another Bound Party ("Respondent") shall give written notice to each Respondent and to the Board stating plainly

and concisely: the nature of the Claim, including the person involved and the Respondent's role in the Claim; the legal basis of the Claim (i.e. the specific authority out of which the claim arises); the Claimant's proposed resolution or remedy; and, the Claimant's desire to meet with the Respondent to discuss in good faith ways to resolve the Claim.

(b) Negotiation. The Claimant and Respondent shall make every reasonable effort to meet in person and confer for the purpose of resolving the Claim by good faith negotiation. If requested in writing, accompanied by a copy of the Notice, the Board may appoint a representative to assist the parties in negotiating a resolution of the Claim.

(c) Mediation. If the parties have not resolved the Claim through negotiation within 30 days after the date of the Notice (or within such other time period as the parties may mutually agree upon), the Claimant shall have 45 additional days to submit the Claim to mediation with a mutually acceptable individual providing dispute resolution services in Idaho. If the Claimant does not submit the claim to mediation within such time, or does not appear for the mediation when scheduled, the Claimant shall be deemed to have waived the claim, and the Respondent shall be relieved of any and all liability to the Claimant on account of such Claim.

If the Parties do not settle the Claim in mediation, the mediator shall issue a notice of termination of the mediation proceedings indicating that the parties are at an impasse and the date that mediation was terminated. The Claimant shall thereafter be entitled to file suit.

Each party shall bear its own costs of the mediation, including attorney's fees, and each Party shall share equally all fees charged by the mediator, unless it is determined that one party is the prevailing party, in which case the non-prevailing party shall bear the cost of all attorney's fees and mediation fees of the prevailing party.

(d) Settlement. Any settlement of the Claim through negotiation or mediation shall be documented in writing and signed by the parties. If any party thereafter fails to abide by the terms of such agreement, the other party may file suit or initiate administrative proceedings to enforce such agreement without the need to again comply with the procedures set for this in this Section. In such event the party taking action to enforce the agreement or award shall, upon prevailing, be entitled to recover for the non-complying party (or if more than one non-complying party, from all such parties) all costs incurred in enforcing such agreement or award, including, without limitation, attorneys' fees and court costs.

ARTICLE XIII
MISCELLANEOUS PROVISIONS

Section 13.01 BINDING EFFECT: The various restrictive measures and provisions of these covenants and restrictions are declared to constitute mutual equitable servitudes for the protection and benefit of each Lot in the Subdivision and of the Owners thereof and for the benefit of the Subdivision as a whole. Each grantee of a conveyance or purchaser under a contract of sale, by accepting a deed or contract of sale, accepts such subject to all of the covenants, conditions and restrictions set forth in this Declaration and specifically agrees to be bound by each and all of them.

Section 13.02 TERM: The covenants, conditions and restrictions of this Declaration shall run with and bind the land for a term of forty (40) years from the date of recordation of this Declaration, after which time they shall be automatically extended for successive periods of ten (10) years, unless otherwise agreed to in writing by the then Owners of at least three-quarters of the Subdivision Lots.

Section 13.03 AMENDMENT: This Declaration may be amended only with the approval of at least two-thirds of Association Members entitled to vote, who vote in person or by proxy at a meeting called for that purpose and/or who vote by written ballot pursuant to Article IV Section 8 of the Bylaws, and when a quorum is represented.

Notwithstanding the above provisions, the percentage of voting power necessary to amend a specific Section or provision of this Declaration shall not be less than the percentage of affirmative votes prescribed for action to be taken under that provision. Any amendment to this Declaration must be recorded in the Office of the County Recorder, Adams County, Idaho.

Section 13.04 CONFLICTS: In the event of any inconsistency between the Bylaws or the Articles and this Declaration, the Declaration shall control.

Section 13.05 EFFECT OF SECURITY INTERESTS: None of the provisions of this Declaration shall in any way reduce the security or defeat or render invalid the lien of any mortgage or the title held under any Deed of Trust now or hereafter placed on any part of the Subdivision. If, however, any portion of the said property is sold under foreclosure of any mortgage or Deed of Trust or the power of sale therein, the party acquiring title at such foreclosure or sale and his successors shall hold all property so acquired subject to all the terms and conditions thereof.

Section 13.06 SEVERABILITY: Invalidation of any one or more of the covenants, conditions or restrictions contained herein by judgment or otherwise shall in no way affect the validity of any of the other provisions which shall remain in full force and effect.

Section 13.07 NOTICES: Any notice required to be sent to any Member or Owner under the provisions of this Declaration shall be deemed to have been properly sent when mailed, first class postage paid, to the last known address of the person who appears as Owner or Member on the records of the Broken Horn Property Owners' Association.

Section 13.08 APPLICATION OF DECLARATION: The provisions of this Declaration shall apply to all parts of the Subdivision, where applicable, and not to just the Lots, and shall further apply to all persons (not just the Owner) on any part of the Subdivision. It shall be the responsibility of the Owners of the subject Lots within the Subdivision to make sure that their tenants, if any, are fully aware of and abide by all of the conditions set forth in this Declaration at all times.

Section 13.09 NON-DISCRIMINATION: No Owner, or his broker or other agent advertising his property for lease, sale or occupancy, shall make any reference to, or discriminate on the basis of race, sex, national ancestry, color or religion; nor in leasing, renting or selling shall any such Owner inquire into, or discriminate or refuse to negotiate, or offer different terms, on the basis of the race, sex, national ancestry, color or religion of the prospective tenant or buyer.

Section 13.10 NOTIFICATION OF SALE: No later than fifteen (15) days before the voluntary or involuntary sale or transfer of any interest under circumstances whereby the transferee becomes the Owner thereof, the transferor shall provide notification to the Association and to the Beneficiary under the purchase deed of trust, if any, in writing and in whatever form, if any, required by the Association, of such proposed sale or transfer and evidence of notice to the Beneficiary under the purchase deed of trust. Such notice shall set forth (a) the name and address of the transferee and transferor; and (b) the date of proposed sale or transfer, and proof by transferor of the fact that all documents required by law to be provided to the transferee have been so provided. The Association shall not be required to recognize the transferee for any purpose unless such notification is provided by either transferee or transferor. Prior to receipt of any such notification by Broken Horn, any and all communications required or permitted to be given by the

Association shall be deemed duly given and made to the transferee if duly and timely made and given to such transferee's transferor.

Section 13.11 NOTIFICATION OF LEASE OF PROPERTY: The owner or owners of property within the Broken Horn Property Owners Association, Inc. who elect to lease their property for a period of six (6) months or more are required to notify the POA office in writing or via e-mail providing the name of the lessee who will reside on the property. The owner or owners shall provide the lessee a copy of the CC&Rs and specifically bring to the attention of the lessee Article VI.

IN WITNESS WHEREOF the undersigned (i) certify and attest that, pursuant to Section 13.03 of the Declaration, the foregoing SIXTH AMENDED AND RESTATED DECLARATION OF PROTECTIVE COVENANTS, CONDITIONS, AND RESTRICTIONS FOR BROKEN HORN SUBDIVISION has been approved by at least two-thirds (2/3) of those members present or represented by ballot or proxy at a meeting of the membership held on June 3, 2017 which was scheduled for the purpose of considering such amendments, at which a quorum was present, and (ii) execute this Declaration effective the 4th day of June, 2017.

BROKEN HORN PROPERTY
OWNERS' ASSOCIATION, INC.

By _____ By: _____

_____, President _____, Secretary

STATE OF IDAHO,)
(ss
County of _____.)

On this _____ day of _____, 20___, before me, _____, a Notary Public in and for said State, personally appeared _____, **PRESIDENT** of BROKEN HORN PROPERTY OWNERS' ASSOCIATION, known or identified to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same for and on behalf of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

_____
NOTARY PUBLIC FOR IDAHO
Residing at: _____
My Commission Expires: _____

STATE OF IDAHO,)
(ss
County of _____.)

On this _____ day of _____, 20___, before me, _____, a Notary Public in and for said State, personally appeared _____, **SECRETARY** of BROKEN HORN OWNERS' ASSOCIATION, known or identified to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same for and on behalf of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

_____
NOTARY PUBLIC FOR IDAHO
Residing at: _____
My Commission Expires: _____

May 16, 2019

Diana Sanders
Ada County Development Services
200 W. Front St.
Boise, ID 83702

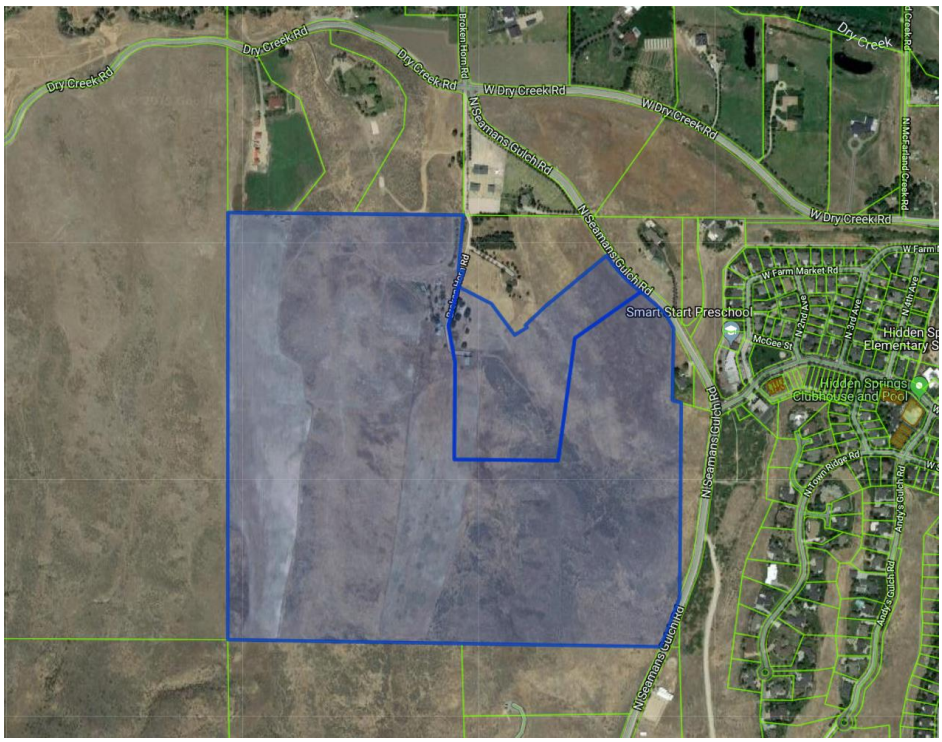
RE: Broken Horn Subdivision | Ada County
Preliminary Plat, Private Road, Hillside Development Applications | PN 117103

Dear Diana, Staff, and Commissioners:

We are pleased to submit the enclosed applications associated with the Broken Horn Subdivision (the "Project" or "Development"). The applications include Preliminary Plat, Private Road Application, and Hillside Development. The Land Group represents the property owners as the applicant for this request.

The 151.36-acre development site is generally located west of the Hidden Springs Subdivision on the west side of N Seaman Gulch Road and South of W Dry Creek Road. The property is zoned RR in Ada County and includes parcel numbers S0131315200 and S0131325600.

The proposed development will be accessed via a new public road, W. Red Poll Drive, off N Seaman Gulch Road and consist of 14 single-family residential 10-acre lots, private roads (N. Bradford Lane and N. Brahman Lane), and one irrigation well lot, on approximately 151.36 acres.



Vicinity Map

One access point into the subdivision is proposed from North Seaman Gulch Road via Red Poll Drive. Red Poll Drive will be dedicated to the public and constructed 24' wide with gravel shoulders. No curb, gutter, or sidewalks are planned.

Two new, 50' wide private drive easements will branch from the public street. The private roads will be constructed 24' wide with gravel shoulders. No curb, gutter, or sidewalks are planned. The private roads will be owned and maintained by the Broken Horn Subdivision Owner's Association. The roads will serve the 15 parcel owners, their guests, and emergency vehicles. The private roads will provide frontage and access to fourteen parcels. All roads within the subdivision will comply with WUFI standards.

Individual domestic wells and septic systems will provide services to the parcels.

The homesites are interior to the property and do not front on existing public roadways. The entrance road includes a landscaped buffer to screen the existing home on N. Seaman Gulch Road.

The site is physically suitable for the design and siting of the proposed development. The proposed development shall result in minimum disturbance of hillside areas. The development has been designed to provide public safety and welfare in the development and design of building sites, roadways, and other service amenities; to preserve and enhance the hillside landscape by encouraging the maximum retention of natural features, such as drainage swales, slopes, ridgelines, crests of hills, and natural formations; and to provide safe ingress and egress for vehicular, bicycle, and pedestrian traffic to and within the hillside areas, while at the same time minimizing the scarring effects of hillside development.

The proposal sets forth sufficient and adequate mitigation for the identified visual impacts beyond the normally expected impact of hillside development.

The proposed development will be a consistent and complimentary to the existing uses in the area. The streets and thoroughfares are suitable and adequate to carry the anticipated traffic.

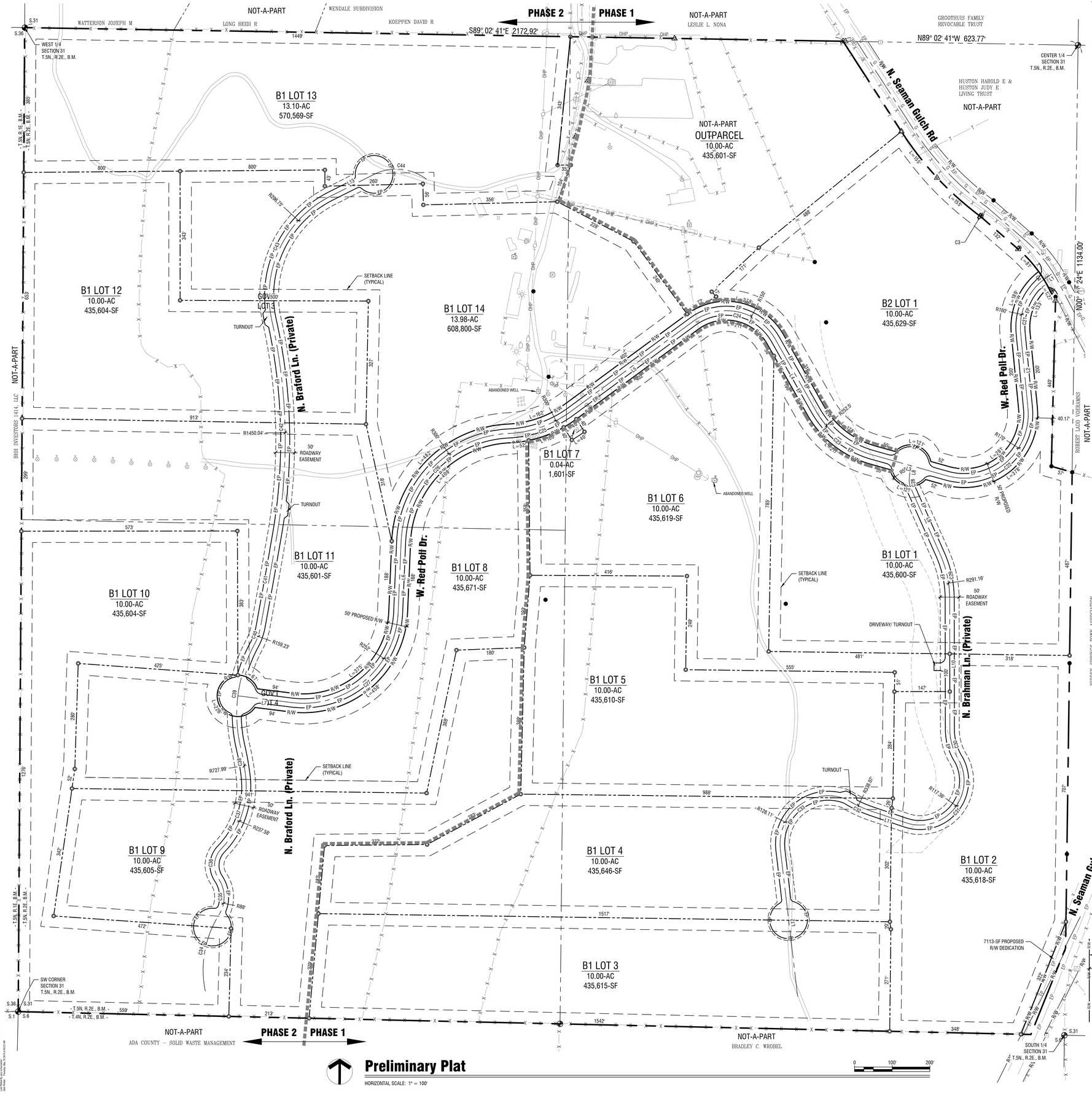
We appreciate the opportunity to formally present these applications to the Planning and Zoning Commission and Board of County Commissioners. As you complete your review, please don't hesitate to let me know if we can provide any additional information to clarify the project's vision. I can be reached via email to tamara@thelandgroupinc.com or at 208-939-4041.

Sincerely,

Tamara Thompson
Director of Client Services

The Land Group, Inc.

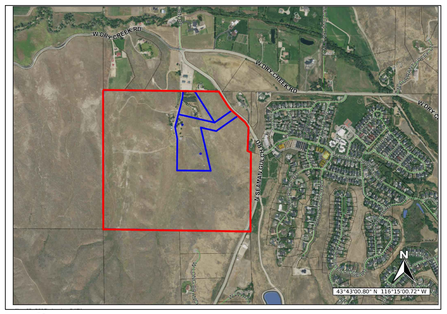
Enclosures – Preliminary Plat, Private Road, and Hillside Development Applications with supporting attachments



Preliminary Plat

HORIZONTAL SCALE: 1" = 100'

Vicinity Map:



Location:

SITUATE IN A PORTION OF THE SW 1/4 OF SECTION 31, TOWNSHIP 5 NORTH, RANGE 2 EAST, BOISE MERIDIAN, ADA COUNTY, IDAHO

Development Contacts:

OWNER / APPLICANT:
BROKEN HORN DEVELOPMENT LLC.
863 W. SEASONAL CREEK LN.
MERIDIAN, ID 83642
(208) 880-4041
CONTACT: JIM COLES

PLANNER / REPRESENTATIVE:
THE LAND GROUP, INC.
462 E. SHORE DRIVE, STE. 100
EAGLE, ID 83616
(208) 939-4041
CONTACT: TAMARA THOMPSON

ENGINEER / SURVEYOR:
THE LAND GROUP, INC.
462 E. SHORE DRIVE, STE. 100
EAGLE, ID 83616
(208) 939-4041
CONTACT: JASON DENSMER, PE / MIKE FEMENIA, PLS

UTILITY SERVICE PROVIDERS:
SEWER: NONE, INDIVIDUAL SEPTIC PROPOSED
WATER: NONE, INDIVIDUAL WELLS PROPOSED

Notes:

1. ALL LOT LINES COMMON TO A PUBLIC RIGHT-OF-WAY AND THE SUBDIVISION EXTERIOR BOUNDARY HAVE A TWELVE-FOOT (12') WIDE PERMANENT PUBLIC UTILITY, DRAINAGE, AND IRRIGATION EASEMENT. THE EASEMENT SHALL NOT PRECLUDE THE CONSTRUCTION OF HARD SURFACE DRIVEWAYS FROM THE PUBLIC RIGHT-OF-WAY TO EACH LOT.
2. THE INTERIOR SIDE YARD LOT LINE SHALL HAVE A FIVE-FOOT (5') WIDE PERMANENT PUBLIC UTILITIES, PROPERTY DRAINAGE AND IRRIGATION EASEMENT UNLESS DIMENSIONED OTHERWISE. SAID DRAINAGE AND IRRIGATION EASEMENTS ARE RESERVED FOR HOMEOWNERS ASSOCIATION OR ASSIGNS.
3. ALL REAR LOT LINES SHALL HAVE A TWELVE-FOOT (12') WIDE PUBLIC UTILITIES, PROPERTY DRAINAGE.
4. ALL EXISTING EASEMENTS ARE SHOWN PER CURRENT TITLE REPORTS.
5. STORM WATER DISCHARGE SHALL BE ROUTED TO THE DRAINAGE SWALES AS APPROVED BY ACHD.
6. THIS SUBDIVISION IS SUBJECT TO COMPLIANCE WITH THE IDAHO CODE SECTION 31-3805 CONCERNING IRRIGATION WATER.
7. THE EXISTING IRRIGATION WELL ON PROPOSED LOT 7 WILL BE USED FOR IRRIGATION OF THE AGRICULTURAL AREAS. IRRIGATION OF INDIVIDUAL RESIDENTIAL PARCELS IN THE AREA AROUND HOMES SHALL BE FROM THE HOME'S DOMESTIC WELL SUBJECT TO DIVERSION LIMITS UNDER IDAHO STATUTE 42-111).
8. ANY RE-SUBDIVISION OF THIS PLAT SHALL BE IN COMPLIANCE WITH THE APPLICABLE SUBDIVISION REGULATIONS IN EFFECT AT THE TIME OF RE-SUBDIVISION.
9. MINIMUM BUILDING SETBACK LINES SHALL BE IN ACCORDANCE WITH THE ADA COUNTY ZONING ORDINANCE AT THE TIME OF ISSUANCE OF A BUILDING PERMIT OR AS SPECIFICALLY APPROVED AND/OR REQUIRED.
10. THE PROPERTY DELINEATED HEREON IS LOCATED IN FLOOD ZONE X, AREA OF MINIMAL FLOOD HAZARD, AS SPECIFIED ON FEMA FLOOD INSURANCE RATE MAP 16001C0157 H WITH AN EFFECTIVE DATE OF FEBRUARY, 19, 2003.
11. THE PROJECT PHASING IS SHOWN ON THIS PRELIMINARY PLAT. PHASE 1 IS ANTICIPATED TO BE DEVELOPED IN 2019/2020. PHASE 2 WILL FOLLOW.

Preliminary Plat Development Features:

TOTAL ACRES	151.36-AC
PROPOSED LOTS	15
EXISTING ZONING	RR (RURAL RESIDENTIAL)
PROPOSED ZONING	RR (RURAL RESIDENTIAL)

LAND UTILIZATION:

SINGLE-FAMILY (SF) LOTS	14 LOTS - 147.12-AC
COMMON LOT	1 LOT (LOT 7) (IRRIGATION WELL)
RIGHT-OF-WAY AREA	4.09-AC (PROPOSED)
	0.16-AC (EXISTING) N. SEAMAN GULCH RD.

DIMENSIONAL STANDARDS OF THE RR DISTRICT:

MAXIMUM BUILDING HEIGHT	35-FT
FRONT SETBACK	30-FT
REAR SETBACK	25-FT
INTERIOR SIDE SETBACK	25-FT
STREET SIDE SETBACK	30-FT
MINIMUM LOT AREA	10-ACRES / 435,600-SF
MINIMUM LOT WIDTH & DEPTH	100-FT
MINIMUM STREET FRONTAGE	100-FT

Legend:

- FOUND BRASS OR ALUMINUM CAP
- PROPOSED LOT CORNER
- SECTION LINE
- BOUNDARY LINE
- ROAD CENTERLINE
- R/W — RIGHT-OF-WAY LINE
- INTERIOR LOT LINE
- SETBACK PER RR DISTRICT DIM. STANDARDS
- EASEMENT LINE

Alignment Line Data Table

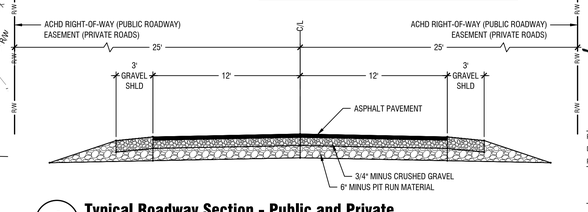
LINE NO.	LENGTH	BEARING
L1	13.43'	S58°20'05.07"W
L2	199.69'	S5°34'29.69"E
L3	204.78'	N74°21'44.97"W
L4	216.37'	N29°31'16.17"W
L5	402.24'	S53°37'15.91"W
L6	188.21'	S2°24'54.82"W
L7	143.41'	N82°50'10.09"W
L8	34.91'	S5°24'05.04"W
L9	192.77'	S23°57'26.00"E
L10	346.45'	S0°04'26.40"E
L11	93.35'	N71°27'04.47"W
L12	392.26'	S6°42'27.10"E
L13	128.35'	N63°25'08.13"E

Alignment Curve Data Table

CURVE NO.	RADIUS	LENGTH	CHORD BEARING
C21	160.00'	172.88'	S25°22'47.69"W
C22	170.00'	329.97'	S50°01'52.67"W
C23	252.50'	197.61'	N51°56'30.57"W
C24	150.00'	253.57'	N77°57'00.13"W
C25	300.00'	176.69'	S70°29'37.96"W
C26	300.00'	444.81'	S44°53'27.57"W
C27	252.00'	416.73'	S49°47'22.37"W
C28	50.00'	25.62'	S9°16'40.48"E
C29	291.16'	121.37'	S12°00'56.20"E
C30	151.42'	86.62'	S18°27'41.37"E
C31	117.36'	279.50'	S40°19'29.05"W
C32	338.07'	78.22'	N64°49'23.27"W
C33	128.11'	264.08'	S52°20'26.62"W
C34	275.15'	211.15'	N10°11'15.35"E
C35	88.00'	101.37'	N0°49'45.12"W
C36	62.82'	85.34'	N5°05'13.66"E
C37	237.58'	210.51'	N18°37'12.70"E
C38	727.99'	79.80'	N9°54'18.01"W
C39	385.29'	279.00'	N7°41'55.98"E
C40	159.23'	50.00'	N19°28'53.35"E
C41	22910.00'	251.75'	N10°08'17.61"E
C42	1450.04'	570.05'	N1°28'19.45"W
C43	296.75'	394.24'	N25°21'32.46"E
C44	131.99'	146.29'	S84°49'46.95"E

Curve Table

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	1.52'	868.73'	0°06'01"	S53°20'04"E	1.52'
C3	142.89'	349.67'	23°24'46"	S37°22'11"E	141.89'
C17	155.25'	943.25'	9°25'49"	S33°37'43"E	155.08'
C19	17.70'	175.00'	5°47'44"	S56°31'08"W	17.69'



1 Typical Roadway Section - Public and Private

Scale: NTS

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

Revisions
1.

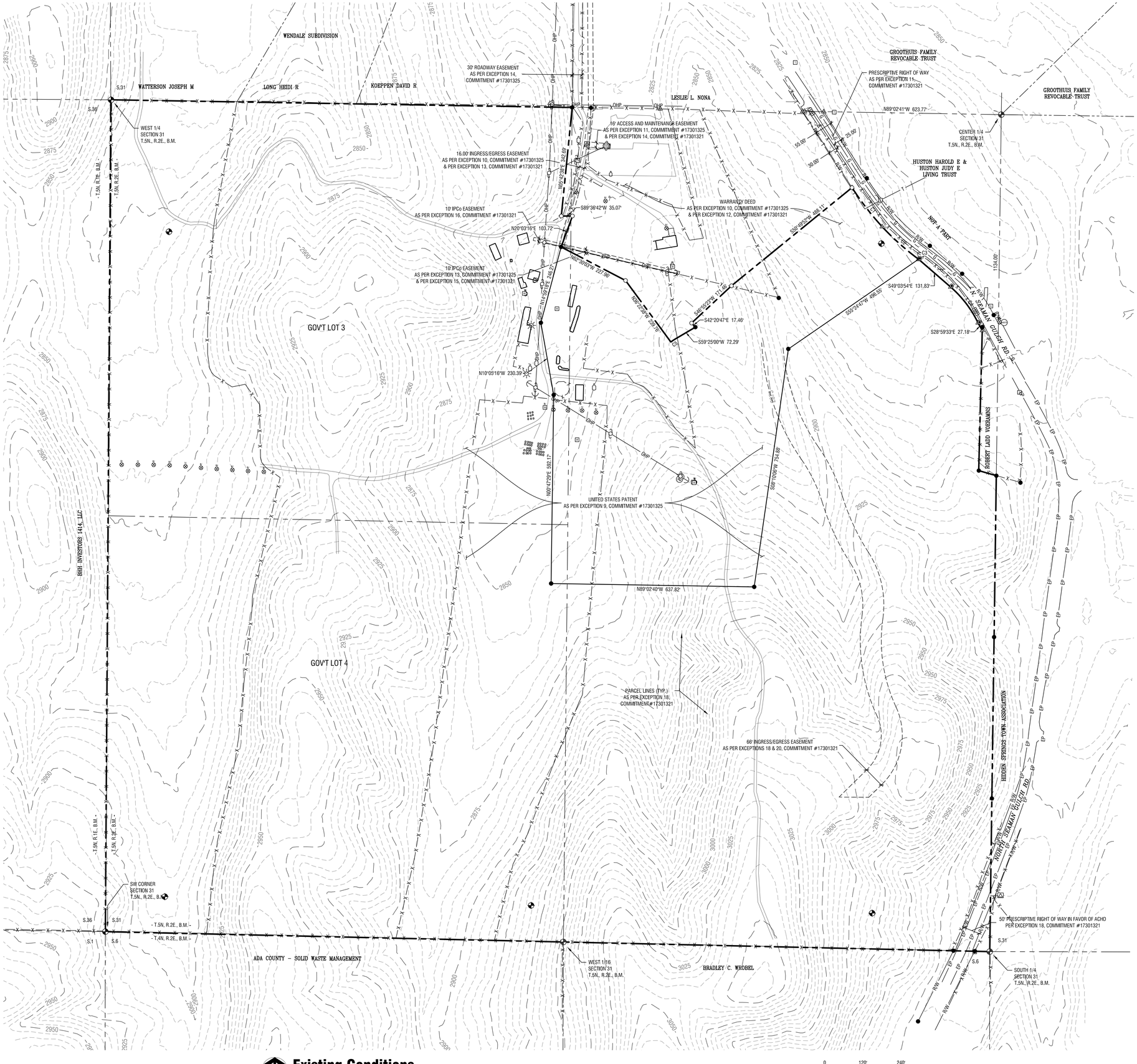
PROFESSIONAL LAND SURVEYOR LICENSED 13550 STATE OF IDAHO MICHAEL S. FEMENIA
05 / 16 / 2019

PROFESSIONAL ENGINEER REGISTERED 10961 STATE OF IDAHO JASON DENSMER
05/16/2019

Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

Preliminary Plat
PrePlat

PP 1



Existing Conditions

HORIZONTAL SCALE: 1" = 120'

0 120' 240'

Curve Table

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	155.25'	943.25'	9°25'50"	S37°37'43"E	155.08'
C2	153.46'	860.21'	10°13'17"	S48°13'18"E	153.25'
C3	1.53'	8.56'	10°13'17"	S53°32'21"E	1.52'
C4	142.89'	349.67'	23°24'46"	S37°22'11"E	141.89'
C5	17.70'	175.00'	5°47'44"	S56°31'08"W	17.69'

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

Revisions:
1.

PROFESSIONAL LAND SURVEYOR LICENSED No. 13550 STATE OF IDAHO MICHAEL S. TEMONA
05/16/2019

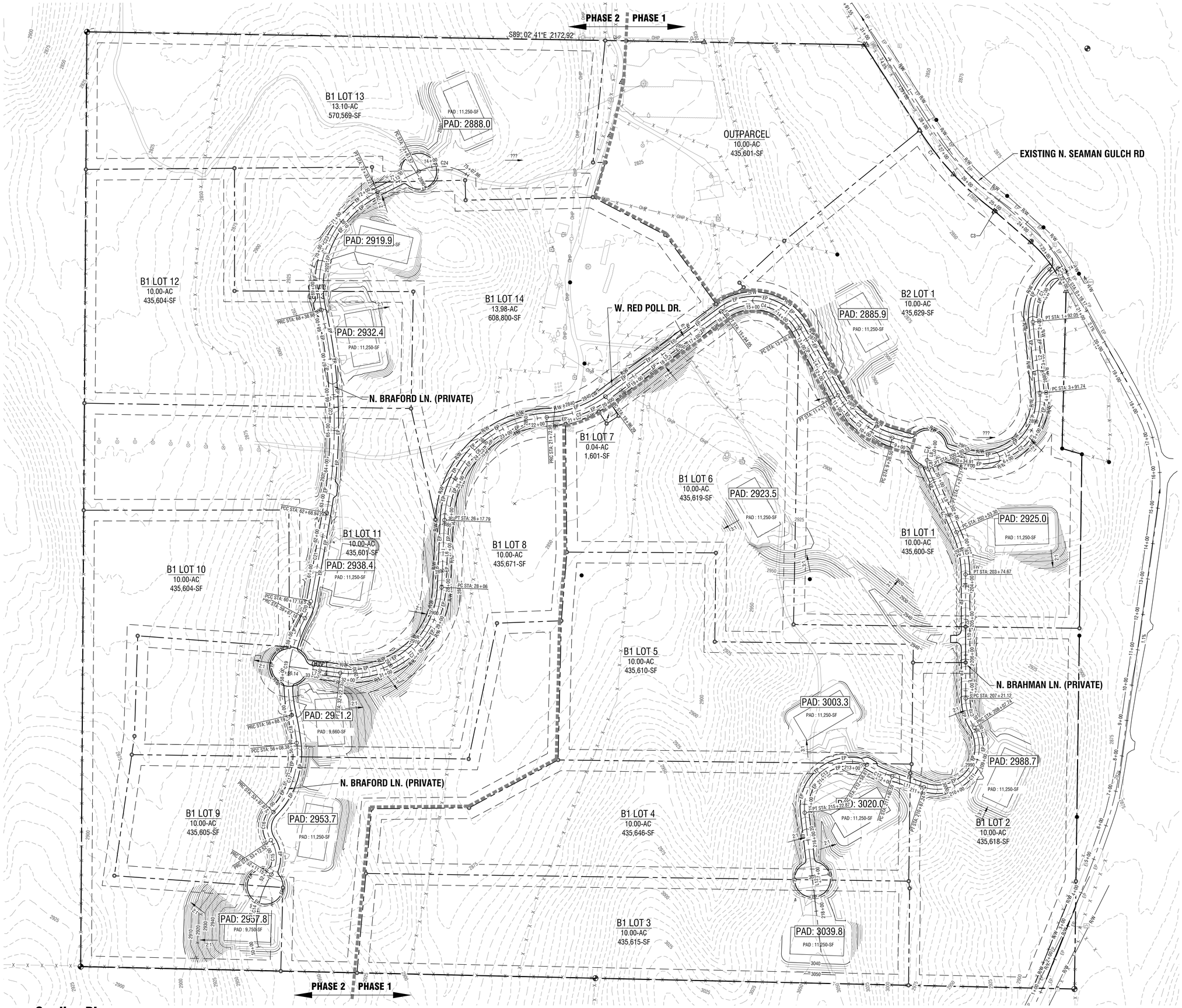
PROFESSIONAL ENGINEER REGISTERED No. 10961 STATE OF IDAHO JASON DENSMER
05/16/2019

Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

Preliminary Plat
Existing Conditions

PP1.1

File Name: 117103-PP1.1-Existing Conditions.pdf
Date Plotted: 5/16/2019 9:00 AM
Date Saved: Thursday, May 16, 2019 8:53:00 AM



Grading Plan

Horizontal Scale: 1" = 100'

Notes:

1. EXISTING AND PROPOSED CONTOURS ARE AT 5' AND 25' INTERVALS

Alignment Line Data Table

LINE NO.	LENGTH	BEARING
L1	13.43'	S56°20'05.07"W
L2	199.69'	S5°34'29.69"E
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L8	34.91'	S5°24'05.04"W
L9	192.77'	S23°57'26.00"E
L10	346.45'	S0°04'26.40"E
L11	93.35'	N71°27'04.47"W
L12	392.26'	S6°42'27.10"E
L13	128.35'	N63°25'08.13"E

Alignment Curve Data Table

CURVE NO.	RADIUS	LENGTH	CHORD BEARING
C1	160.00'	172.88'	S25°22'47.69"W
C2	170.00'	329.97'	S50°01'52.67"W
C3	252.50'	197.61'	N51°56'30.57"W
C4	150.00'	253.57'	N77°57'00.13"W
C5	300.00'	176.69'	S70°29'37.96"W
C6	300.00'	444.81'	S44°53'27.57"W
C7	252.00'	416.73'	S49°47'22.37"W
C8	50.00'	25.62'	S9°16'40.48"E
C9	291.16'	121.37'	S12°00'56.20"E
C10	151.42'	86.62'	S16°27'41.37"E
C11	117.36'	279.50'	S40°19'29.05"W
C12	338.07'	78.22'	N64°49'23.27"W
C13	128.11'	264.06'	S52°20'26.62"W
C14	275.15'	211.15'	N10°11'15.35"E
C15	88.00'	101.37'	N0°49'45.12"W
C16	62.82'	85.34'	N5°05'13.66"E
C17	237.58'	210.51'	N18°37'12.70"E
C18	727.99'	79.80'	N9°54'18.01"W
C19	385.29'	279.00'	N7°41'55.98"E
C20	159.23'	50.00'	N19°26'53.35"E
C21	22910.00'	251.75'	N10°08'17.61"E
C22	1450.04'	570.05'	N1°26'19.45"W
C23	296.75'	394.24'	N25°21'32.46"E
C24	131.99'	146.29'	S84°49'46.95"E

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

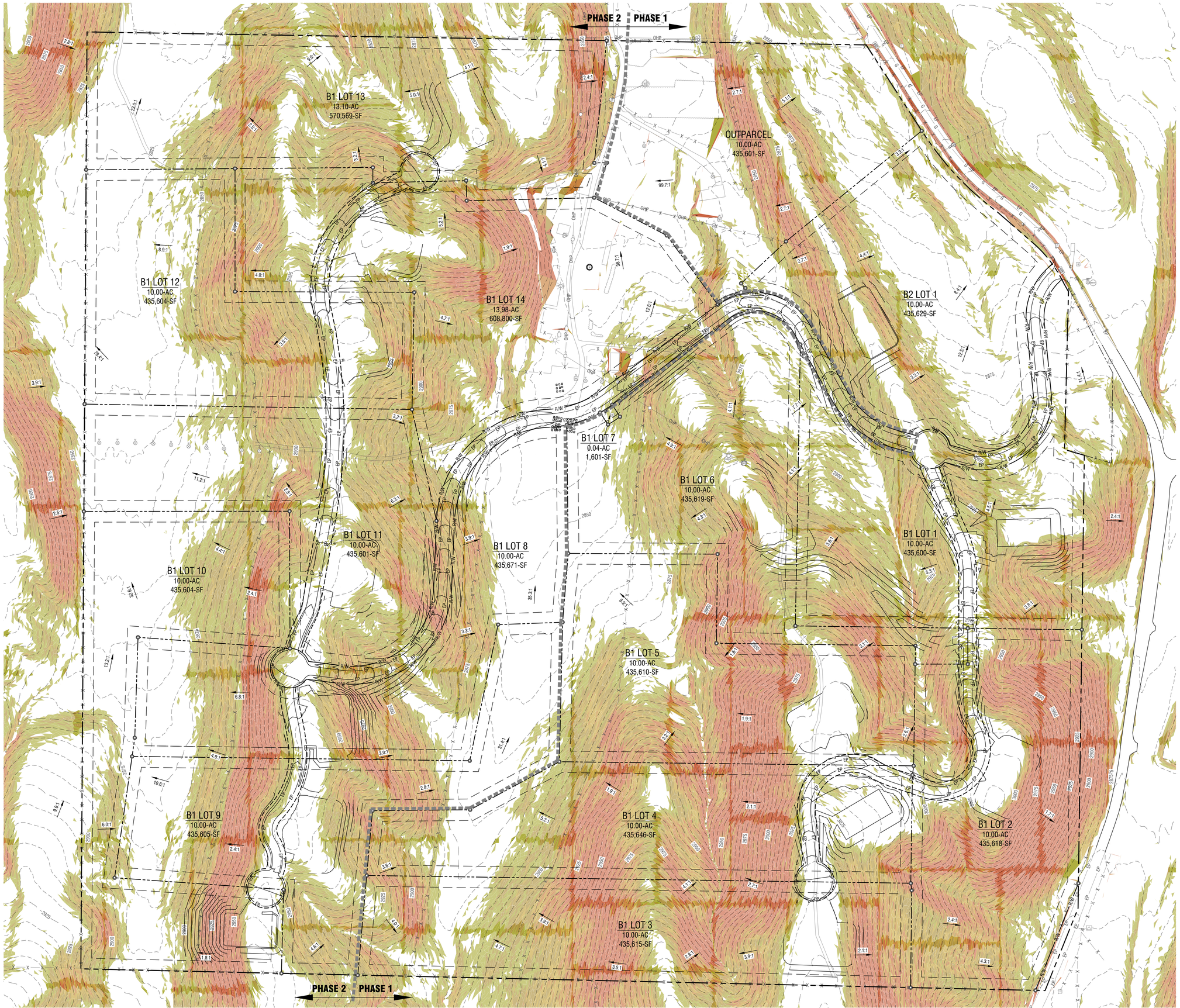
Revisions
1.

PROFESSIONAL ENGINEER REGISTERED 10961 STATE OF IDAHO JASON DENSMORE
05/16/2019

Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

Preliminary Plat
Grading Plan

PP 2



Slope Analysis

Horizontal Scale: 1" = 100'

0 100' 200'

Sheet Notes:

1. EXISTING AND PROPOSED CONTOURS ARE AT 5' AND 25' INTERVALS.
2. SLOPE SHADING REFLECTS THE SLOPE OF THE EXISTING GROUND PRIOR TO THE PROPOSED GRADING.
3. UNCOLORED / UNSHADED AREAS ARE CALCULATED TO BE LESS THAN 15% IN SLOPE.

Surface Slope Legend

RANGE INTERVAL	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	15.0%	20.0%	
2	20.0%	25.0%	
3	25.0%	30.0%	
4	30.0%	35.0%	
5	35.0%	1000.0%	

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

Revisions
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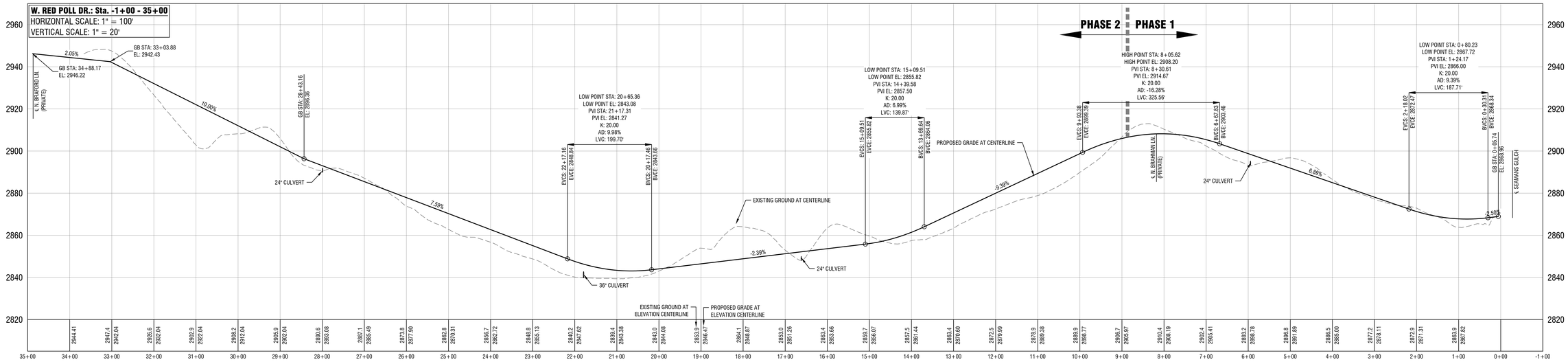
05/16/2019

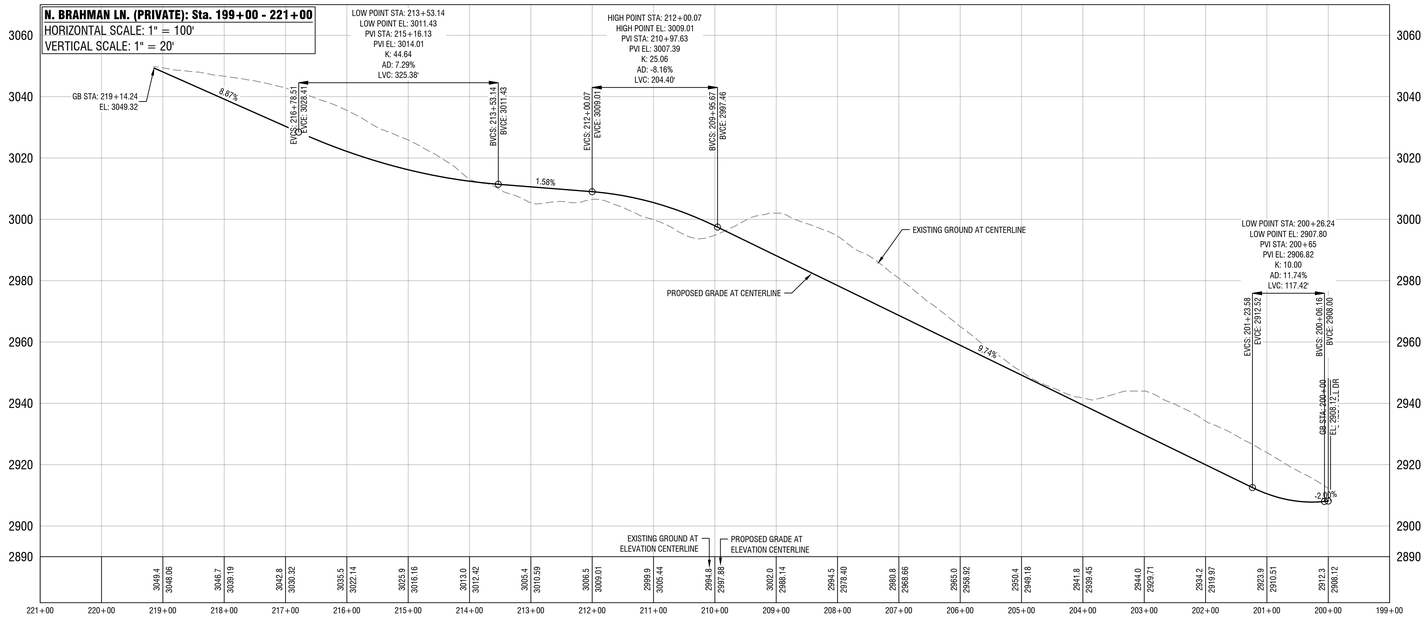
Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

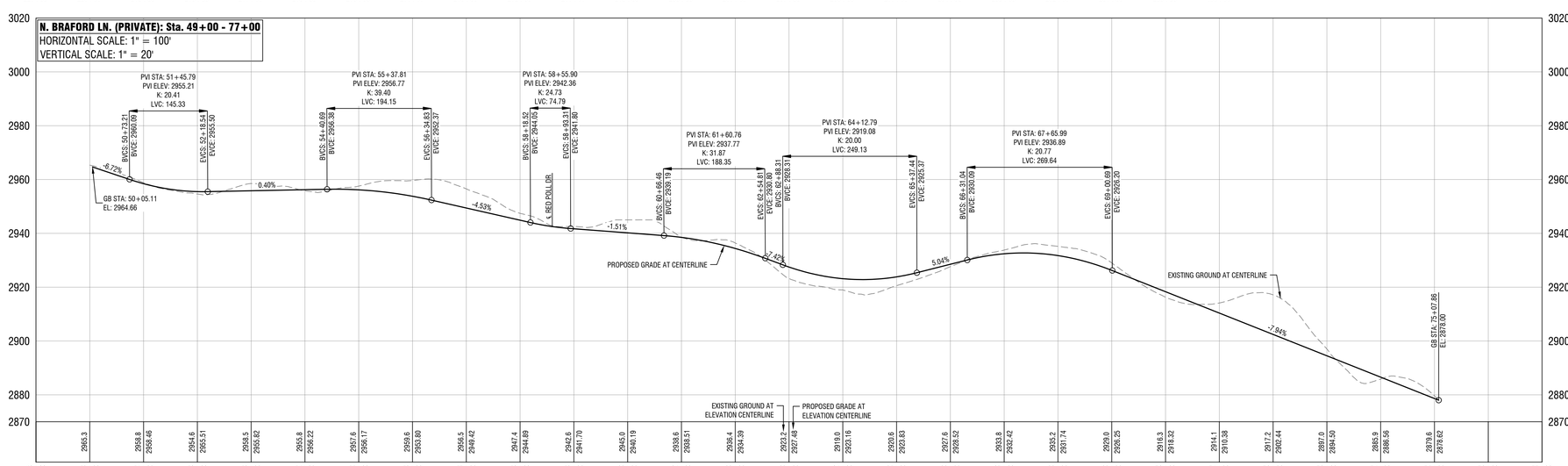
Preliminary Plat
Slope Analysis

PP 2.1

File location: J:\117103\civil\plans\pp\117103-pp-slope-analysis.dwg
Date Plotted: Thursday, May 16, 2019 10:12 AM
User Name: Thomas Dale







THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

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05/16/2019

Project No.: 117103
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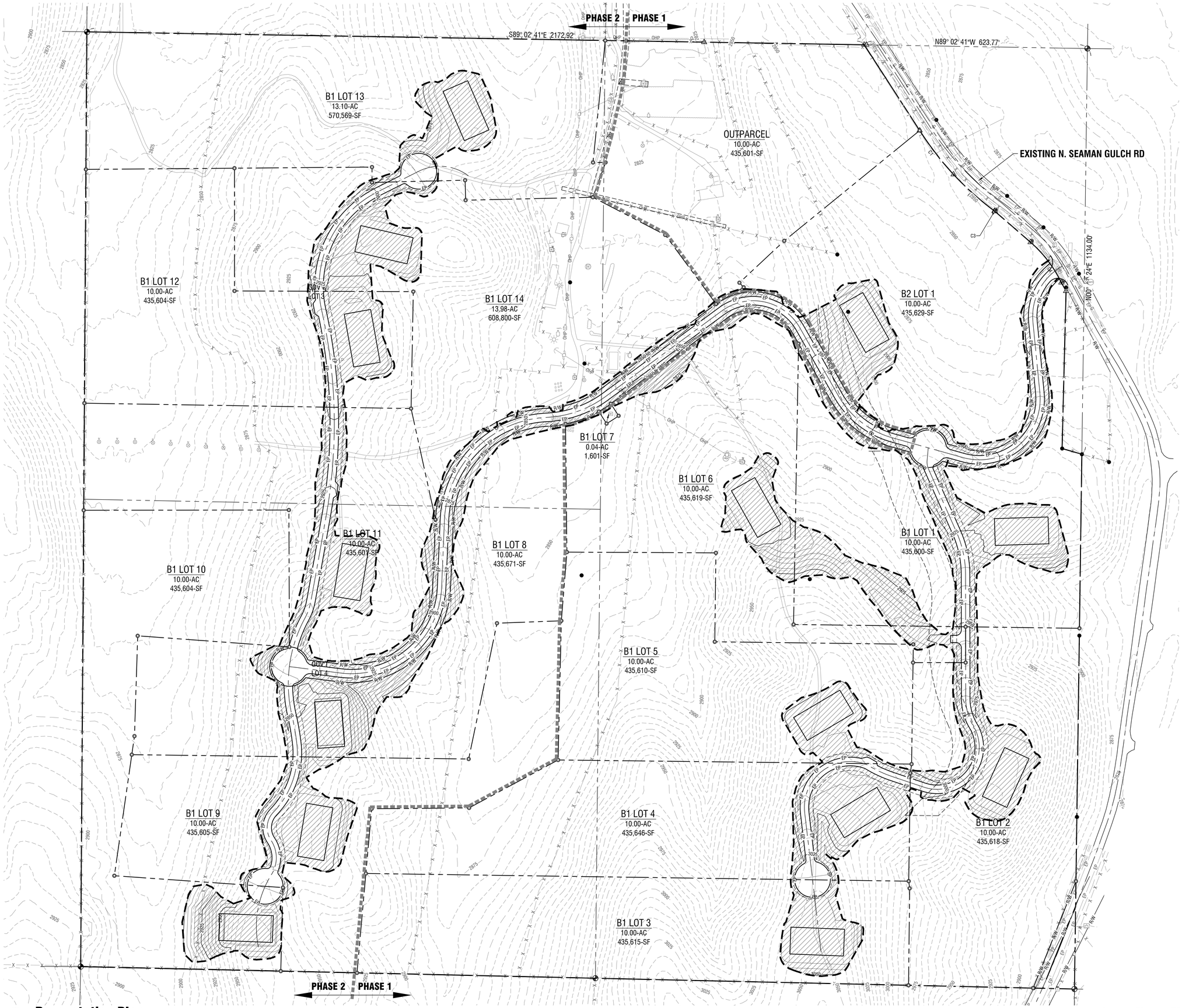
Project Milestone: 04-18-2019

Preliminary Plat Roadway Profiles

PP 3



Revegetation Plan

Horizontal Scale: 1" = 100'

Notes:

1. EXISTING AND PROPOSED CONTOURS ARE AT 5' AND 25' INTERVALS

Legend:

LIMITS OF WORK

REVEGETATION AREA

Revegetation Notes:

1. HATCHED AREAS SHOWN SHOW MINIMUM AMOUNT OF AREA TO BE REVEGETATED. CONTRACTOR IS RESPONSIBLE TO REVEGETATE ALL AREAS DISTURBED DURING CONSTRUCTION. SEE REVEGETATION PLAN AND EROSION CONTROL REPORT.

Landscape Notes:

1. NO CANALS, CREEKS, DRAINS, PONDS, WETLANDS, FLOODPLAINS, HIGH GROUNDWATER AREAS, OR ROCK OUTCROPPINGS ARE EXISTING ON THIS SITE.
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13. OBTAIN TOPSOIL FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH OF NOT LESS THAN 4 INCHES.
14. IMMEDIATELY CLEAN UP ANY TOPSOIL OR OTHER DEBRIS ON THE SITE CREATED FROM LANDSCAPE OPERATIONS AND DISPOSE OF PROPERLY OFF SITE.

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

Revisions
1.

STATE OF IDAHO
PHILIP D. HOLM
LA-202
LICENSED LANDSCAPE ARCHITECT
05/18/2019

Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

Preliminary Plat
Revegetation Plan

PP 4

From: Sub Name Mail
To: Tamara Thompson
Cc: Jim Washburn
Subject: Broken Horn Subdivision Name Reservation
Date: Thursday, September 13, 2018 3:56:56 PM
Attachments: image005.png

September 13, 2018

Tamara Thompson, The Land Group
Jim Washburn, The Land Group

RE: Subdivision Name Reservation: **BROKEN HORN SUBDIVISION**

At your request, I will reserve the name **Broken Horn 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. Name reservations for subsequent adjoining phases are not required by our office. As long as the phases for the subdivision are adjoining the original or subsequent phases of Broken Horn Subdivision, the Broken Horn name will be honored. This memo will serve as our approval for as long as the Broken Horn Subdivision development is underway.

Sincerely,

Jerry L. Hastings, PLS 5359
County Surveyor
Deputy Clerk Recorder
Ada County Development Services
200 W. Front St., Boise, ID 83702
(208) 287-7912 *office*
(208) 287-7909 *fax*

From: Tamara Thompson [mailto:tamara@thelandgroupinc.com]
Sent: Wednesday, September 12, 2018 8:56 AM
To: Sub Name Mail
Subject: Subdivision Name Request - Broken Horn

Please reserve the subdivision name:

Broken Horn Subdivision
Parcels:

County	Parcel	Primary Owner	Property Address	Property City	Subdivision	Zoning
Ada	S0131314950	BROKEN HORN DEVELOPMENT LLC	6417 W DRY CREEK RD	BOISE, ID 83714-0000	5N 2E 31	RR
Ada	S0131325533	BROKEN HORN DEVELOPMENT LLC	6421 W DRY CREEK RD	BOISE, ID 83714-0000	5N 2E 31	RR
Ada	S0131314923	BROKEN HORN DEVELOPMENT LLC	W DRY CREEK RD	BOISE, ID 83714-0000	5N 2E 31	RR
Ada	S0131314904	BROKEN HORN DEVELOPMENT LLC	W DRY CREEK RD	BOISE, ID 83714-0000	5N 2E 31	RR

The land is owned and will be developed by Broken Horn Development, LLC (Jim Coles).
Thank you.

director of client services

tamara thompson

THE LAND GROUP | thelandgroupinc.com | 208.939.4041

Broken Horn Subdivision

Ada County, Idaho

Slope Stabilization & Revegetation Plan

Plan Designer
The Land Group, Inc.
462 East Shore Drive, Ste. 100
Eagle, Idaho 83616
Contact: Phil Hull, RLA
Ph: 208.939.4041

STATE OF IDAHO
PHILIP D. HULL
LA–202
LICENSED LANDSCAPE ARCHITECT
4-18-2019

April 18, 2019

TLG Project No. 117103

Report Purpose

This report outlines recommended revegetation plan and erosion control measures for disturbed cut and fill slopes within the project limits as defined on the accompanying plan. These recommendations are made to prevent short term and long term soil erosion as well as to provide an aesthetic revegetation which will blend with the existing natural surrounding area.

The measures include revegetation and hydromulching procedures following topsoil distribution and fine grading. The area to be revegetated consists of disturbed sloped areas related to grading for lot building pads, roads, and any other areas disturbed in the process of construction. The slopes to be affected vary widely in degree and aspect. The existing vegetation consists primarily of native dryland shrubs, grasses and forbs. Introduced species of weeds are also present and vary in number, location and type.

Examples of existing vegetation.

General Earthwork

All work shall be limited to the area required for construction with minimal, if any, disturbance to the surrounding natural slope or vegetation.

Site Preparation

Earthwork process should begin with clearing large shrubs from the areas to be disturbed. Woody stems and branches shall be removed and disposed of. Natural topsoil occurs at varying depths on the project site. An estimated minimum of 6-in topsoil should be excavated and stockpiled at designated storage areas prior to the proposed grading operation.

Topsoil Distribution

Once the general earthwork is complete and rough grading has been accomplished, the topsoil should be redistributed over the slope and common areas to a minimum depth of six inches (6-in). Where needed, slopes should be graded with serration to hold topsoil adequately. Topsoil should be spread and lightly

compacted utilizing a small cleated tractor moving perpendicular to the contours or another method with equal capability. It is recommended that any necessary mechanical means of erosion control be accomplished as grading is completed. Once topsoil has been distributed and graded, slope stabilization should follow immediately. In order to eliminate surface crusting and to facilitate better root penetration, the surface should be scarified or "tracked" prior to seeding.

Products & Materials

Seeding

Apply seed to the project site by hydroseeding. The following information provides material and execution for seeding. Alternatively, the approved ITD dryland seed mix may be used if approved by the project engineer.

Seed Mixture	*Pure Live Seed % Mix*
Bluebunch Wheatgrass	6.0
Thickspike Wheatgrass	14.81
Ephraim Wheatgrass	14.46
Covar Sheep Fescue	5.57
Greatbasin Wildrye	9.0
Indian Rice Grass	6.0
Western Yarrow	5.26
Rubber Rabbit Brush	0.6
Canby Bluegrass	5.01
Lewis Blueflax	5.31
Sainfoin	9.02
Farewell to Spring	1.0
Louisiana Sage	0.93
Total Seed	*40-lbs Pure Live Seed* *Install at 20-lbs / acre*

Supplier (or approved equal)

Granite Seed
1697 West 2100 North
P.O. Box 177
Lehi, Utah 84043
1-800-768-4433

Fertile-Fiber Mulch Material

Kiwi Fertile-Fiber from "Quattro Environmental", a composted poultry-based mulch material free of growth or germination inhibiting ingredients. Apply at the rate of 2000 lbs. per acre.

Alternatively, submit specification and sample of similar product from Crop Production Services or other manufacturer for approval.

Organic Soil Amendment

Kiwi Power from "Quattro Environmental" (or approved equal) – 5 gallons per acre. Alternatively, submit specification and sample of similar product from Crop Production Services or other manufacturer for approval.

Tackifier

Mulch tackifier soil stabilizer – Ecology controls M-Binder. Tackifier applied at the rate of 80 lbs. per acre. Alternatively, submit specification and sample of similar product from Crop Production Services or other manufacturer for approval.

Erosion Control Blankets

- "Bonterra" Erosion Blankets (or approved equal)
  Terra Enterprises
  P.O. Box 9485
  Moscow, Idaho 83843
  1-208-882-9489
- Bonterra Erosion Blanket 'S2' – on greater than 2:1 slopes.
- Staples: 16 gauge, 8" long "U" shaped securing pins. 2 staples per square yard.

Hydroseeding

Mix specified seed and organic soil amendment in water per manufacturer's recommendations. Apply seeded slurry evenly in two intersecting directions. Do not hydroseed area in excess of that which can be mulched on same day. Keep off roads, walks, structures and areas not to be seeded. Clean up these areas.

Mulch slope with 2000 lbs. per acre of fertile-fiber mulch material and 80 lbs. per acre of tackifier.

Immediately following mulch and tackifier, cover seeded slopes greater than 2:1 with erosion control blankets. Install per manufacturer's recommendations. Anchor blankets loosely and in full contact with the soil. Overlap blanket edges approximately 2" and staple. Install blankets so edge overlaps are shingled away from prevailing winds. Overlap blanket ends 6", upper blanket over lower blanket, and staple using five staples. Cut excess blanket with scissors and anchor at end of slope.

Maintenance

Immediately reseed areas which show bare spots. Minimum acceptable plant coverage is 80 percent after one growing season. Protect seeded areas with warning signs during maintenance period. The seed will require approximately ninety (90) days of favorable growing conditions to germinate and become established for successful survival with normal minimal summer precipitation.

Seeding Time

The optimal seeding time shall be in fall, between mid September and mid October. If this is not accomplished, then seeding should be in early spring, as soon as soil is workable (not muddy), generally between March and mid May. This planting time provides the optimum weather conditions for seed germination and seedling survival rate. Seeding after November 20, 'dormant seeding' ensures that the

seed does not germinate prior to freezing winter temperatures and seed should be in place for the early spring rains.

Water

This project will rely primarily upon natural precipitation for seed germination and establishment. The natural precipitation at the site provides marginal moisture for revegetation efforts. If deemed necessary, contractor will provide supplemental water to ensure proper seed germination during low precipitation times of year.

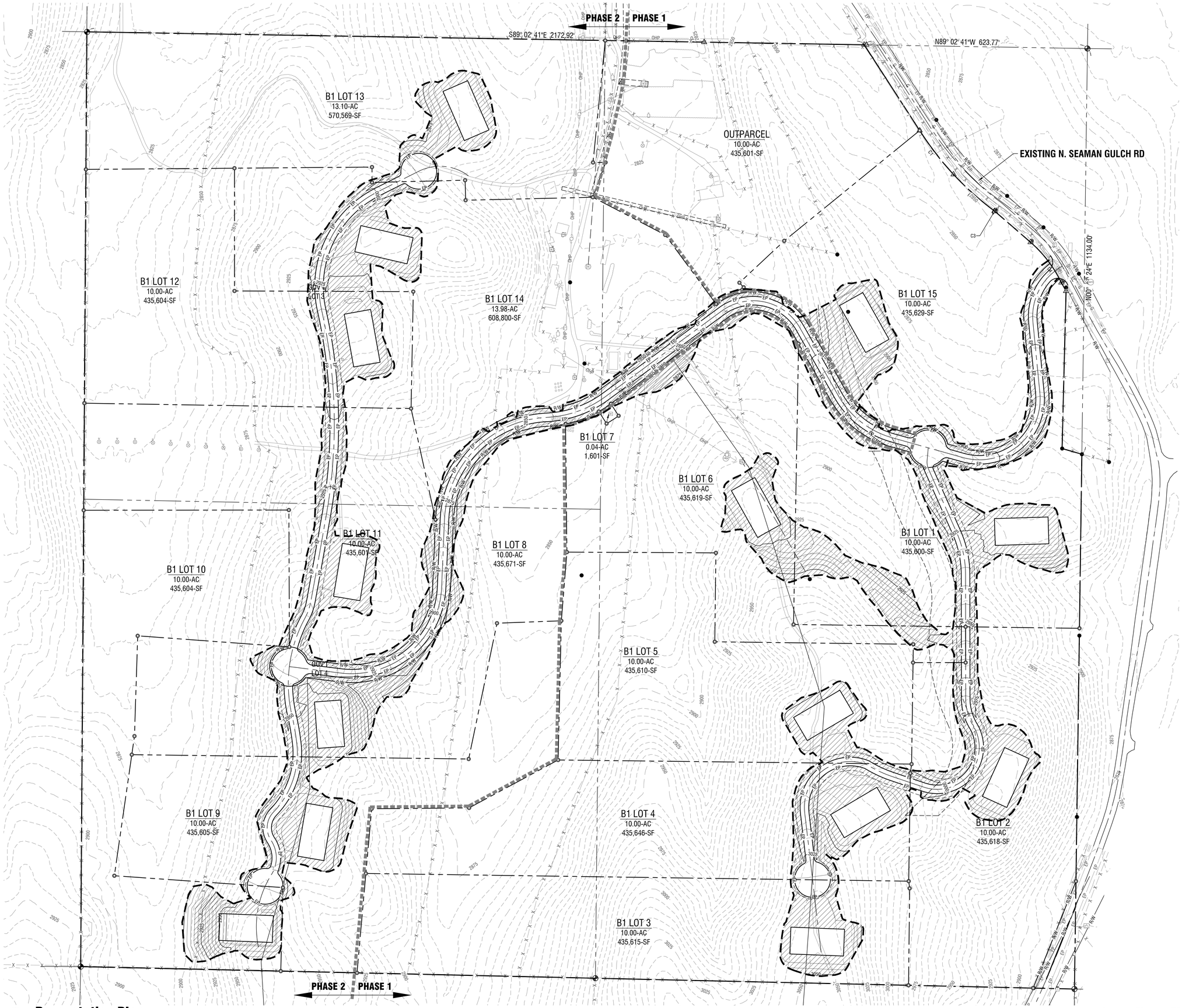
Fertilization

Fertilization is not recommended for reclamation seeding due to promotion of weed competition.

Erosion Control

Under normal circumstances and adherence to the construction practices described in the specifications, the above recommended erosion control measure should provide a stable slope condition. To avoid incidental erosion, it is imperative that the slopes, once prepared, remain undisturbed until seeding commences.

An 80% vegetation cover is recommended to control erosion. If an unusual season occurs with excessive rainfall and run-off, the following measures should be taken. Surface conditions should be monitored at regular frequency – weekly min. If erosion detrimental to the slope is observed or anticipated due to excessive rainfall, one or more remedial measures should be implemented as recommended by the Engineer. Surface erosion should be controlled by using straw wattles at intervals as specified by the contract documents. Under severe runoff conditions ditches may require erosion control measures to collect sediment and to prevent ditch erosion. Should erosion sediments threaten drainage systems, straw wattles, rock check dams, or silt fences shall be considered.



Revegetation Plan

Horizontal Scale: 1" = 100'

0 100' 200'

Notes:

1. EXISTING AND PROPOSED CONTOURS ARE AT 5' AND 25' INTERVALS

Legend:

LIMITS OF WORK

REVEGETATION AREA

Revegetation Notes:

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15. ALL LANDSCAPED AREAS SHALL HAVE AN AUTOMATIC UNDERGROUND SPRINKLER SYSTEM WHICH ENSURES COMPLETE COVERAGE AND PROPERLY ZONED FOR REQUIRED WATER USES. SEE IRRIGATION PLANS.

THE LAND GROUP

BROKEN HORN SUBDIVISION
BROKEN HORN DEVELOPMENT, LLC

Broken Horn Rd.
Ada County, Idaho

Revisions

1.

STATE OF IDAHO
PHILIP D. HUGHES
LA-202
LICENSED LANDSCAPE ARCHITECT
4-18-2019

Project No.:	117103
Date of Issuance:	04-18-2019
Project Milestone:	04-18-2019

Preliminary Plat
Revegetation Plan

PP 4

File name: G:\117103\Landscape\117103-Landscape.dwg
Date/Time: 4/18/2019 1:11:11 PM
User Name: Philip Hughes

Broken Horn Subdivision

Ada County, Idaho

Engineering Hydrology Report

Engineer
The Land Group, Inc.
462 East Shore Drive, Ste. 100
Eagle, Idaho 83616
Contact: Jason Densmer, PE
Ph: 208.939.4041

May 2, 2019

TLG Project No. 117103

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER

05/02/2019

Report Purpose

This report outlines the existing hydrology conditions at the proposed Broken Horn Subdivision. The purpose of the report is to describe the hydrology of the site, conclusions on the proposed development, and adequacy of sites to be developed.

This report is based in part on site hydrology assessments provided for the project by Materials Testing & Inspection in their report dated April 15, 2019 (MTI file B190345g). The MTI report is incorporated herein by reference.

General Existing Site Characteristics

The proposed development is situated on approximately 151-ac of relatively steep, hilly terrain. The site consists of two generally north-south trending ridgelines separated by gently sloping valleys. The ridgelines slope downwards from the north to the south.

Vegetation primarily consist of sagebrush, bunchgrass, and other native grass varieties typical of arid to semi-arid environments.

Regional drainage is north and west toward Dry Creek. 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. From the south, intermittent off-site stormwater may drain into the project site. Stormwater drainage collection and retention systems are not in place on the site and do not currently exist within the project vicinity.

Groundwater

Field investigations on the site did not encounter groundwater in test pits/borings advanced to a maximum depth of 41.5-ft bgs. Based on the geotechnical engineer's investigations and background knowledge of the area, MTI estimates groundwater depths to remain greater than approximately 20-ft bgs throughout the year.

Proposed Site Hydrology

The project will construct roadways typical of the rural setting and project area. Roadways will include borrow ditches to collect and direct drainage. Appropriately sized culverts will be required at low-points and locations where the roadways cross existing drainages.

Pads for residential homes sites will be graded relatively level. Runoff from building sites is expected to be minimal or similar to the existing undeveloped conditions.

Project development is primarily focused on the upper reaches of hillsides where sheet runoff from upland areas is more limited. The majority of the gently sloping and near level valley floors will remain undeveloped and retained as agricultural areas. Hydrology of these areas will be substantially unaffected by the proposed project.

Drainage Systems & Flood Frequency Curves

Drainage systems within the project shall be designed in accordance with the current requirements of the agencies having jurisdiction. For public streets, ACHD's Drainage & Stormwater Management (ACHD Policy Section 8000) shall govern. For private streets and other areas, appropriate methods should be used to

determine expected stormwater flows (ie, Rational Method or TR-55) and provide necessary facilities to manage stormwater.

Stormwater generated by the project should be determined using the Boise Area Intensity-Duration-Frequency Curves (IDF) as adopted by ACHD and attached as Appendix A. This dataset may be referred to by Ada County as a “flood frequency curve”.

Conclusion

The proposed project is suitable for the hydrology of the site. Changes due to construction can be readily addressed by common engineering practice and proper design of the required improvements.

Appendix A

ACHD Boise Area IDF Curve

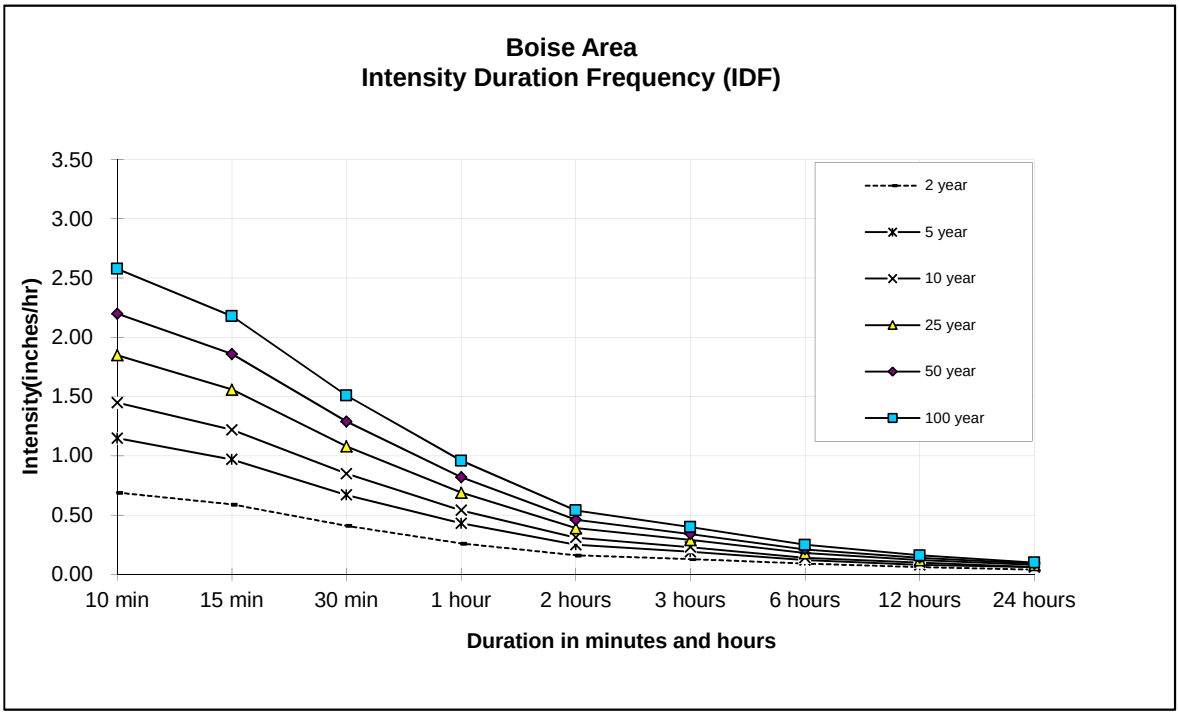
APPENDIX A

Ada County IDF Curve

Boise Area Intensity-Duration-Frequency (IDF)

Intensity (inches per hour)

	Design Storm	2	5	10	25	50	100
Tc (Hr)	Tc (Min)	==========					
0.17	10 min	0.69	1.15	1.45	1.85	2.20	2.58
0.25	15 min	0.59	0.97	1.22	1.56	1.86	2.18
0.33	20 min	0.49	0.81	1.01	1.30	1.54	1.81
0.42	25 min	0.43	0.71	0.89	1.14	1.35	1.58
0.50	30 min	0.41	0.67	0.85	1.08	1.29	1.51
0.58	35 min	0.34	0.56	0.70	0.90	1.07	1.25
0.67	40 min	0.31	0.51	0.64	0.82	0.98	1.15
0.75	45 min	0.29	0.48	0.60	0.77	0.91	1.07
0.83	50 min	0.27	0.45	0.56	0.72	0.85	1.00
0.92	55 min	0.26	0.43	0.54	0.69	0.82	0.96
1.00	1 hour	0.26	0.43	0.54	0.69	0.82	0.96
2.00	2 hours	0.16	0.25	0.31	0.39	0.46	0.54
3.00	3 hours	0.13	0.19	0.23	0.29	0.34	0.40
6.00	6 hours	0.09	0.12	0.14	0.18	0.21	0.25
12.00	12 hours	0.06	0.08	0.10	0.12	0.14	0.16
24.00	24 hours	0.04	0.06	0.06	0.08	0.09	0.10



HILLSIDE DEVELOPMENT CHECKLIST (ACC 8-3H)

A Hillside Development Request is a **staff level** application

GENERAL INFORMATION:

Applicant:	DESCRIPTION	Staff:
	MASTER APPLICATION FORM	
	DETAILED LETTER by the applicant fully describing the request or project.	
	SITE PLAN: Full-sized, scaled plot plan, showing all existing and proposed easements, property lines, structures, septic and well locations, and existing and proposed driveways drawn to scale, including one copy reduced to 8 ½" x 11."	
	PRELIMINARY GRADING PLAN (ACC 8-3H-3B)	
	Contour lines at five foot intervals.	
	Location of all proposed or existing structures & roads.	
	Any areas of cut or fill.	
	Any areas with characteristics listed in ACC 8-3H-5B.	
	Narrative indicating how the proposed design complies with the purpose statement of the hillside overlay district.	
	SLOPE STABILIZATION & REVEGETATION PLAN & REPORT (ACC 8-3H-3C)	
	Prepared & sealed by a licensed Landscape Architect.	
	Complete description of existing soils, existing vegetation, the vegetation to be removed and the method of disposal.	
	Description of the vegetation to be planted, soils amendments and pH adjustments, and slope stabilization measures to be implemented.	
	Plan shall include an analysis of the environmental effects of such operations including the effects on slope stability, soil erosion, water quality, and fish and wildlife.	
	ENGINEERING HYDROLOGY REPORT (ACC 8-3H-3D):	
	Prepared & sealed by a professional engineer registered in the State of Idaho (*this individual should be experienced and knowledgeable in the science of hydrology and in the techniques of hydrologic investigation*).	
	Complete an engineering hydrology investigation and report to include the following:	
	1. An adequate description of the hydrology of the site, conclusions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed. The report shall include results of field investigations of the site, unless existing information is determined by the county engineer to be sufficient to satisfy the purpose of this article.	
	2. Flood frequency curves shall be provided for the area proposed for development.	
	SOILS ENGINEERING REPORT (ACC 8-3H-3E)	
	Prepared & sealed by a professional engineer registered in the State of Idaho	
	Any area proposed for development shall be investigated to determine the soil characteristics. This report shall include the following information:	
	1. Data regarding the nature, distribution, strength, pH, and nutrients of the soils, conclusions and recommendations for grading procedures, design criteria for corrective measures, and opinion and recommendations covering the adequacy of sites to be developed. The report shall include results of field investigations of the site, unless existing information is determined by the county engineer to be sufficient to satisfy the purpose of this article.	
	2. The investigation and report shall be completed by a professional engineer registered in the state. This individual should be experienced and knowledgeable in the practice of soils mechanics.	
	3. Recommendations included in the report shall be incorporated into the design plan and specifications.	
	ENGINEERING GEOLOGY REPORT (ACC 8-3H-3F)	

	Prepared by a professional geologist or professional engineer (with engineering seal) registered in the State of Idaho	
	Any area proposed for development shall be investigated to determine its geological characteristics. This report shall include the following information:	
	1. A description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and the opinions and recommendations covering the adequacy of sites to be developed. The report shall include results of field investigations of the site, unless existing information is determined by the county engineer to be sufficient to satisfy the purpose of this article.	
	2. The investigation and report shall be completed by either a professional geologist registered in the state or by a professional engineer registered in the state. This individual should be experienced and knowledgeable in the principles and practices of engineering geology.	
	3. Any area in which the investigation indicates geologic hazards shall not be developed unless the project engineer can demonstrate conclusively to the county engineer, based on the required engineering reports, that these hazards can be overcome in such a manner as to prevent hazard to life or limb, hazard to property, adverse effects on the safety, use or stability of a public way or waterway, and adverse impacts on the natural environment.	
	4. Recommendations included in the report shall be incorporated into the design plan and specifications.	
	VISUAL IMPACT REPORT (ACC 8-3H-3G)	
	Prepared by a licensed design professional	
	A visual impact report shall be prepared by a licensed design professional and shall be submitted with the development application. The report shall include the following information:	
	1. The view from key vantage points along public roadways or public viewing areas that depict the existing view (prior to development) and the proposed view (after development).	
	2. The proposed screening methods which shall include, but not be limited to: architectural design, designated building envelopes, height restrictions, landscaping, fencing, construction materials, and colors.	
	3. The existing vegetation and the proposed method of preserving and/or replacing such vegetation.	
	4. A statement detailing how the proposed development or subdivision minimizes grading through careful site and roadway design.	
	OTHER PERTINENT DATA	
	Any other pertinent data deemed necessary by the engineer of record or by the director, after consulting with the engineer of record, to satisfy the stated purpose of this article and that is reasonably related to the health, safety, and welfare of the general public and persons who might purchase the property being developed.	

	APPLICATION FEE: **$350** (base fee) + **Engineering Review Fee** (chose one): ☐ **$225** - *No structure* ☐ **$335** - *Uninhabited structure* ☐ **$675** - *Inhabited structure* *NOTE: Building, Engineering, and Surveying applications and fees may be required and are* ***separate*** *from Planning & Zoning Applications and Fees.*	

Supplementary information at the discretion of the Director or County Engineer may be required to sufficiently detail the proposed development within any special development area, including but not limited to hillside, planned unit development, floodplain, southwest, WUFI, Boise River Greenway, airport influence, and/or hazardous or unique areas of development.

Application will not be accepted unless all applicable items on the form are submitted. This application shall not be considered complete until staff has received all required information.

THE LAND GROUP

December 5, 2018

Project No.: 117103

PARCEL "A"
BROKEN HORN DEVELOPMENT, LLC

A parcel of land being a portion of the Southwest One Quarter of Section 31, Township 5 North, Range 2 East, Boise Meridian, Ada County, Idaho being more particularly described as follows:

Commencing at the Center One Quarter corner of said Section 31, marked by an aluminum cap monument; thence on the east-west mid-section line of said section 31, North 89° 02' 41" West, 623.77 feet to a point on the southwesterly right-of-way line of North Seaman Gulch Road AND the POINT OF BEGINNING;

Thence on said right-of-way line, South 32° 52' 31" East, 285.24 feet;
Thence leaving said right-of-way line, South 50° 49' 52" West, 488.11 feet;
Thence South 46° 55' 23" West, 171.46 feet;
Thence South 42° 20' 47" East, 17.46 feet;
Thence South 59° 25' 00" West, 72.29 feet to a point of curvature;
Thence 17.70 feet on the arc of a curve to the left, having a radius of 175.00 feet, a central angle of 05° 47' 44", and whose long chord bears South 56° 31' 08" West, 17.69 feet;
Thence North 36° 22' 38" West, 239.76 feet;
Thence North 62° 30' 03" West, 227.96 feet;
Thence North 20° 03' 16" East, 103.72 feet;
Thence South 89° 36' 42" West, 35.07 feet;
Thence North 05° 42' 38" East, 342.69 feet, to the Center-West One Sixteenth corner of said Section 31;
Thence on the ease-west mid-section line of said Section 31, South 89° 02' 41" East, 723.97 feet to the POINT OF BEGINNING.

The above described parcel contains 10.00 acres (435600 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
PLS 13550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

THE LAND GROUP

January 18, 2019
Project No.: 117103

PARCEL "B"
BROKEN HORN DEVELOPMENT, LLC

A parcel of land being a portion of the Southwest One Quarter of Section 31, Township 5 North, Range 2 East, Boise Meridian, Ada County, Idaho being more particularly described as follows:

Commencing at the Center One Quarter corner of said Section 31, marked by an aluminum cap monument; thence on the east-west mid-section line of said section 31, North 89° 02' 41" West, 623.77 feet to a point on the southwesterly right-of-way line of North Seaman Gulch Road; Thence on said right-of-way line, South 32° 52' 31" East, 285.24 feet to a point of curvature AND the POINT OF BEGINNING;

Thence continuing on said right-of-way line, 155.25 feet on the arc of a curve to the left, having a radius of 943.25 feet, a central angle of 09° 25' 50", and whose long chord bears South 37° 37' 43" East, 155.08 feet to a point of non-tangent compound curvature;
Thence 153.46 feet on the arc of a curve to the left, having a radius of 868.73 feet, a central angle of 10° 07' 15", and whose long chord bears South 48° 13' 26" East, 153.26 feet;
Thence leaving said right-of-way line, South 55° 24' 47" West, 496.56 feet;
Thence South 08° 10' 06" West, 754.88 feet;
Thence North 89° 02' 40" West, 637.82 feet;
Thence North 00° 47' 29" East, 592.17 feet;
Thence North 10° 05' 16" West, 230.39 feet;
Thence North 14° 59' 18" East, 246.27 feet;
Thence South 62° 30' 03" East, 227.96 feet;
Thence South 36° 22' 38" East, 239.76 feet to a point of curvature;
Thence 17.70 feet on the arc of a curve to the right, having a radius of 175.00 feet, a central angle of 05° 47' 44", and whose long chord bears North 56° 31' 08" East, 17.69 feet;
Thence North 59° 25' 00" East, 72.29 feet;

Thence North 42° 20' 47" West, 17.46 feet;
Thence North 46° 55' 23" East, 171.46 feet;
Thence North 50° 49' 52" East, 488.11 feet to the POINT OF BEGINNING.

The above described parcel contains 17.68 acres 770181 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
13550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

THE LAND GROUP

December 18, 2018

Project No.: 117103

PARCEL "C"
BROKEN HORN DEVELOPMENT, LLC

A parcel of land being a portion of the Southwest One Quarter of Section 31, Township 5 North, Range 2 East, Boise Meridian, Ada County, Idaho being more particularly described as follows:

Commencing at the Center One Quarter corner of said Section 31, marked by an aluminum cap monument; thence on the east-west mid-section line of said section 31, North 89° 02' 41" West, 623.77 feet to a point on the southwesterly right-of-way line of North Seaman Gulch Road; Thence on said right-of-way line, South 32° 52' 31" East, 285.24 feet to a point of curvature; Thence 155.25 feet on the arc of a curve to the left, having a radius of 943.25 feet, a central angle of 09° 25' 50", and whose long chord bears South 37° 37' 43" East, 155.08 feet to a point of non-tangent compound curvature; Thence 153.46 feet on the arc of a curve to the left, having a radius of 868.73 feet, a central angle of 10° 07' 15", and whose long chord bears South 48° 13' 26" East, 153.25 feet to a point of compound curvature AND the POINT OF BEGINNING;

Thence continuing on said right-of-way line, 1.52 feet on the arc of a curve to the left, having a radius of 868.73 feet, a central angle of 00° 06' 01", and whose long chord bears South 53° 20' 04" East, 1.52 feet;
Thence South 49° 03' 54" East, 131.83 feet, to a point of curvature;
Thence 142.89 feet on the arc of a curve to the right, having a radius of 349.67 feet, a central angle of 23° 24' 46", and whose long chord bears South 37° 22' 11" East, 141.89 feet
Thence South 28° 59' 33" East, 27.18 feet;
Thence leaving said right-of-way line, South 01° 26' 28" West, 440.21 feet;
Thence South 73° 55' 32" East, 57.45 feet, to a point on the north-south mid-section line of said Section 31;
Thence on said mid-section line, South 00° 47' 24" West, 1263.24 feet, to a point on the centerline of North Seaman Gulch Road;
Thence on said centerline, South 21° 50' 42" West, 247.36 feet, to a point on the south section line of said Section 31;
Thence on said south section line, North 88° 42' 29" West, 2689.04 feet, to the Southwest Section corner of said Section 31, marked by a brass cap monument;
Thence on the west section line of said Section 31, North 00° 22' 34" East, 2612.68 feet, to the West One Quarter corner of said Section 31, marked by a brass cap monument;
Thence on the east-west mid-section line of said Section 31, South 89° 02' 41" East, 1448.95 feet, to the Center-West One Sixteenth corner of said Section 31;

Thence leaving said east-west mid-section line, South 05° 42' 38" West, 342.69 feet;
Thence North 89° 36' 42" East, 35.07 feet;
Thence South 20° 03' 16" West, 103.72 feet;
Thence South 14° 59' 18" West, 246.27 feet;
Thence South 10° 05' 16" East, 230.39 feet;
Thence South 00° 47' 29" West, 592.17 feet;
Thence South 89° 02' 40" East, 637.82 feet;
Thence North 08° 10' 06" East, 754.88 feet;
Thence North 55° 24' 47" East, 496.55 feet to the POINT OF BEGINNING.

The above described parcel contains 133.68 acres (5823164 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
PLS 13550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

MASTER APPLICATION/PETITION

ADA COUNTY DEVELOPMENT SERVICES
Mailing: 200 W. Front Street, Boise, ID 83702 **Website:** adacounty.id.gov **Phone:** 208-287-7900 **Fax:** 208-287-7909

OFFICE USE ONLY:

PROJECT #	RECEIVED BY:
PLANNING/GIS FES:	DATE:
ENGINEERING FEES:	DATE STAMPED:

REQUIRED SUBMITTALS FOR ALL APPLICATIONS:

- ☒ **DEED** or evidence of proprietary interest
- ☒ **APPLICATION SPECIFIC CHECKLIST(S)**
- ☒ **One (1) paper copy** single-sided **& One (1) electronic copy** of all required application submittal documents.

ADMINISTRATIVE APPLICATIONS:

- ☐ ACCESSORY USE
- ☐ DRAINAGE PLAN
- ☐ EXPANSION NONCONFORMING USE
- ☐ FARM DEVELOPMENT RIGHT
- ☐ FLOODPLAIN PERMIT
- ☒ HILLSIDE DEVELOPMENT
- ☐ HIDDEN SPRINGS ADMINISTRATIVE
- ☐ HIDDEN SPRINGS SPECIAL EVENT
- ☐ LANDSCAPE PLAN
- ☐ LIGHTING PLAN
- ☐ MASTER SITE PLAN
- ☐ ONE-TIME DIVISION
- ☐ PLANNED UNIT DEVELOPMENT (PUD)
- ☒ PRIVATE ROAD
- ☐ PROPERTY BOUNDARY ADJUSTMENT
- ☐ SIGN PLAN
- ☐ TEMPORARY USE

HEARING LEVEL APPLICATIONS:

- ☐ CONDITIONAL USE
- ☐ DEVELOPMENT AGREEMENT
- ☐ PLANNED COMMUNITIES
- ☒ SUBDIVISION, PRELIMINARY
- ☐ SUBDIVISION, SKETCH PLAT
- ☐ VACATION
- ☐ VARIANCE
- ☐ ZONING MAP AMENDMENT
- ☐ ZONING TEXT AMENDMENT

HEARING LEVEL PETITION:

- ☐ COMPREHENSIVE PLAN MAP OR TEXT AMENDMENT PETITION CHECKLIST

ADDENDA ITEMS:

- ☐ ADMINISTRATIVE MODIFICATION
- ☐ APPEAL
- ☐ DEVELOPMENT AGREEMENT MODIFICATION
- ☐ FINAL PLAT
- ☐ TIME EXTENSION (ADMINISTRATIVE)
- ☐ TIME EXTENSION (HEARING)

OVERLAY DISTRICTS: Some Overlays require a separate checklist. **All** require additional information:

- ☐ BOISE AIR TERMINAL AIRPORT INFLUENCE AREAS (ACC 8-3A)
- ☐ BOISE RIVER GREENWAY (ACC 8-3G)
- ☐ FLOOD HAZARD (ACC 8-3F)
- ☒ HILLSIDE DEVELOPMENT (ACC 8-3H)
- ☐ PLANNED UNIT DEVELOPMENT (ACC 8-3D)
- ☐ SOUTHWEST PLANNING AREA (ACC 8-3D)
- ☒ WILDLAND-URBAN FIRE INTERFACE (ACC 8-3B)

SITE INFORMATION:

Section: 31 Township: 5N Range: 2E Total Acres: 151.21

Subdivision Name: Broken Horn Subdivision Lot: Block:

Site Address: W Dry Creek Rd. City: Boise

Tax Parcel Number(s): S0131315200- 17.67 acres, S0131325600- 133.54 acres

Existing Zoning: RR Proposed Zoning: RR Area of City Impact:

Overlay District(s):

APPLICANT/AGENT: (Please print)	ADDITIONAL CONTACT, if applicable: (Please print)
Name: The Land Group	Name:
Address: 462 E Shore Dr., Ste. 100	Address:
City: Boise State: ID Zip: 83714	City: State: Zip:
Telephone: 208-939-4041 Fax:	Telephone: Fax:
Email: tamara@thelandgroupinc.com	Email:
I certify this information is correct to the best of my knowledge.	ENGINEER/SURVEYOR, if applicable: (Please print)
	Name:
	Address:
Tamara Thompson	City: State: Zip:
	Telephone: Fax:
Signature: (Applicant) Date: 4/29/19	Email:

OWNER(S) OF RECORD: (Please print)	OWNER(S) OF RECORD: (Please print)
Name: Broken Horn Development LLC	Name:
Address: 863 W Seasonal Creek Ln	Address:
City: Meridian State: ID Zip: 83642	City: State: Zip:
Telephone: 208-880-4041 Fax:	Telephone: Fax:
Email: jcoles@designwesttid.com	Email:
I consent to this application, I certify this information is correct, and allow Development Services staff to enter the property for related site inspections. I understand that as the property owner of record I will be required to enter into a Development Agreement with Ada County, either personally or on behalf of the entity owning the property, in the event this application includes a request for a Zoning Map Amendment. I agree to indemnify, defend and hold Ada County and its employees harmless from any claim or liability resulting from any dispute as to the statements contained in this application or as to the ownership of the property, which is the subject of the application.	I consent to this application, I certify this information is correct, and allow Development Services staff to enter the property for related site inspections. I understand that as the property owner of record I will be required to enter into a Development Agreement with Ada County, either personally or on behalf of the entity owning the property, in the event this application includes a request for a Zoning Map Amendment. I agree to indemnify, defend and hold Ada County and its employees harmless from any claim or liability resulting from any dispute as to the statements contained in this application or as to the ownership of the property, which is the subject of the application.
James Coles	Susan J. Coles
Signature: All Owner(s) of Record 4-22-19 Date	Signature: All Owner(s) of Record 4-22-19 Date

ALL OWNER(S) OF RECORD (ON THE CURRENT DEED) MUST SIGN
(Additional signature pages are Available Online, if needed)

If the property owner(s) are a business entity, please include business entity documents, including those that indicate the person(s) who are eligible to sign documents.

MATERIALS TESTING & INSPECTION
AN ATLAS COMPANY

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

Geotechnical Engineering Report
of
Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Prepared for:

The Land Goup
462 East Shore Drive, Suite 100
Eagle, ID 83616

MTI File Number B190345g

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
AN ATLAS COMPANY

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

Mr. Jason Densmer
The Land Goup
462 East Shore Drive, Suite 100
Eagle, ID 83616
208-939-4041

Re: Geotechnical Engineering Report
Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Dear Mr. Densmer:

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 on 11 and 26 March 2019. 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 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

Clint Wyllie, G.I.T.
Staff Geologist

Reviewed by: Monica Saculles, P.E.
Senior Geotechnical Engineer

PROFESSIONAL ENGINEER
LICENSED
14919
4-15-19
STATE OF IDAHO
MONICA SACULLES

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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 2015 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 north and west of the City of Boise, Ada County, ID, and occupies a portion of the SW¼ of Section 31, Township 5 North, Range 2 East, Boise Meridian. This project will consist of construction of 14 rural residential lots with associated streets. The site to be developed is approximately 151.36 acres in size. It is anticipated that the development will be constructed in two phases. At this time, only the eastern portion of the site is anticipated to be developed. Individual septic systems are proposed as part of the development. 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. Retaining walls may be constructed. MTI was provided a preliminary grading plan by Mr. Jason Densmer of The Land Group, Inc. dated 8 February 2019.

Authorization

Authorization to perform this exploration and analysis was given in the form of a written authorization to proceed from Mr. Jason Densmer of The Land Goup to Clint Wyllie of Materials Testing and Inspection (MTI), on 25 February 2019. Said authorization is subject to terms, conditions, and limitations described in the Professional Services Contract entered into between The Land Goup and MTI. Our scope of services for the proposed development has been provided in our proposal dated 21 February 2019 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 private and ACHD residential pavement section design requirements
- Determining general suitability of the site to support individual subsurface septic systems

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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 ("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.

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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 State Highway 44 to State Highway 55. Proceed north on State Highway 55 approximately 3.5 miles to its intersection with Dry Creek Road. From this intersection, proceed west on Dry Creek Road approximately 1.9 miles to Broken Horn Road. The site is located to the south of this intersection. Presently the site exists as bare land. The location is depicted on site map plates included in the **Appendix**.

Regional Geology

The project site is located along the margin of 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.

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The hillslope portions of the site are underlain with "Sand and Mudstone of Stream and Lake Sediments" as mapped by Othberg and Stanford (1993). These deposits have been described as a medium to coarse-grained arkosic sand, sandstone, and claystone that include interbeds of fine gravel, locally cemented, and sandy siltstone. Geologic structures within this unit vary from large foreset beds of sand to thinly-bedded claystone. This undifferentiated unit reflects a variety of stream and lake depositional environments along the northeastern and southwestern margin of the ancestral western Snake River Plain. This geologic unit includes the Terteling Springs Formation and parts of the Payette, Poison Creek, and Succor Creek Formations.

The valley in the central portion of the project site is underlain by "Sandy Alluvium of Side-Stream Valleys and Gulches" as mapped by Othberg and Stanford (1993). Locally, these deposits are composed of medium to coarse sand interbedded with silty fine sand and silt and are mostly derived from weathered granite and reworked Tertiary sediments of the Boise Foothills. The thickness of this unit is variable. Because of the relative youthfulness of these deposits they contain only minor pedogenic clay and calcium carbonate.

General Site Characteristics

This proposed development consists of approximately 151.36 acres of relatively steep, hilly terrain. The site consists of two generally north-south trending ridgelines separated by gently sloping valleys. The ridgelines slope downwards from the north to the south ranging from approximately 15 feet horizontal to 1 foot vertical (15:1) to 8:1. Hillslopes above the valley floors range from roughly 4:1 to 1.5:1. Throughout the majority of the site, surficial soils consist of fat clay-sand mixtures. Vegetation primarily consists of sagebrush, bunchgrass, and other native grass varieties typical of arid to semi-arid environments.

Regional drainage is north and west toward Dry Creek. 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. From the south, intermittent off-site stormwater may drain onto the project site. Stormwater drainage collection and retention systems are not in place on the project site and do not currently exist within the vicinity 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.

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SEISMIC SITE EVALUATION

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: liquefaction, and surface rupture caused by faulting or lateral spreading. Incidence and anticipated acceleration of seismic activity in the area is low. However, if seismic activity were to occur in the vicinity of the site, slope failures may occur.

Seismic Design Parameter Values

The United States Geological Survey National Seismic Hazard Maps (2008), includes a peak ground acceleration map. The map for 2% probability of exceedance in 50 years in the Western United States in standard gravity (g) indicates that a peak ground acceleration of 0.216 is appropriate for the project site based on a Site Class D.

The following section provides an assessment of the earthquake-induced earthquake loads for the site based on the Risk-Targeted Maximum Considered Earthquake (MCE_R). The MCE_R spectral response acceleration for short periods, S_{MS}, and at 1-second period, S_{M1}, are adjusted for site class effects as required by the 2015 IBC. Design spectral response acceleration parameters as presented in the 2015 IBC are defined as a 5% damped design spectral response acceleration at short periods, S_{DS}, and at 1-second period, S_{D1}.

The USGS National Seismic Hazards Mapping Project includes a program that provides values for ground motion at a selected site based on the same data that were used to prepare the USGS ground motion maps. The maps were developed using attenuation relationships for soft rock sites; the source model, assumptions, and empirical relationships used in preparation of the maps are described in Petersen and others (1996).

Seismic Design Values

Seismic Design Parameter	Design Value
Site Class	D "Stiff Soil"
S_s	0.324 (g)
S_1	0.110 (g)
F_a	1.541
F_v	2.361
S_{Ms}	0.499
S_{M1}	0.259
S_{DS}	0.333
S_{D1}	0.173

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GEOLOGIC HAZARD ASSESSMENT

This section provides an assessment of the geologic hazards for the site, including the potential for surface fault rupture, liquefaction, seismically induced settlements, seismically induced landsliding, lateral spreading, and collapsible soils.

The hazard evaluation methodology involved one or two steps. First, the potential for occurrence of each type of geologic phenomenon is assessed. If there is a potential for a phenomenon to occur, the second step is to assess whether the phenomenon likely will result in a significant hazard for designated structures. For this evaluation, a significant hazard is defined as one that results in structural damage and threatens life-safety.

Regional Faults

The subject site is located along the margin of the Boise Foothills. Per a map titled *Geologic Map of the Boise Valley and Adjoining Area, Western Snake River Plain, Idaho* (Othberg and Stanford, 1993), numerous Tertiary Period normal faults associated with the Boise Front fault system are mapped along the margins of the valley. Tertiary faults experienced movement between 1.6 and 66 million years ago. None of the faults associated with the Boise Front fault system are known to be active. No faults are mapped on the project site, and no evidence of faulting was observed during the subsurface exploration. The closest fault noted by MTI is a northwest trending normal fault mapped approximately 1.3 miles to the east of the project site.

Historical Seismicity

According to the USGS Earthquakes Hazard Program there have been 37 earthquakes recorded within approximately 50 miles of the project site with magnitudes ranging from 1.5 to 3.7. All of these earthquakes occurred within the mountainous regions to the northeast of the Western Snake River Plain, within seismic zones not related to the Boise Front fault system. The closest earthquake noted by MTI occurred on 4 January 2019 approximately 18 miles to the northwest of the project site, and had a magnitude of 2.3.

Seismically Induced Surface Rupture, Settlements, and Lateral Spreading

Earthquakes generally are caused by a sudden slip or displacement along a zone of weakness, termed a fault, in the Earth's crust. Surface fault rupture, which is a manifestation of the fault displacement at the ground surface, usually is associated with moderate to large-magnitude earthquakes (magnitudes of about 6 or larger) occurring on active faults having mapped traces or zones at the ground surface. The amount of surface fault displacement can be as much as 10 feet (3 meters) or more, depending on the earthquake magnitude and other factors. The displacements associated with surface fault rupture can have devastating effects on structures and lifelines situated astride the zone of rupture.

As mentioned above, no <u>active</u> faults have been mapped in the vicinity of the site. Based on the absence of nearby <u>active</u> faults, it is the opinion of MTI that the probability of the occurrence of seismically induced surface rupture, settlements, and lateral spreading is negligible.

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Seismically Induced Landsliding

Earthquake ground shaking can reduce the stability of a slope and cause sliding or falling of the soil or rock materials composing the slope. During ground shaking, seismic inertia forces are induced within the slope, increasing the loads that the slope materials must sustain to resist landsliding (or rockfalls). If the forces tending to cause landsliding exceed the strength of the materials resisting landsliding, a temporary instability is created that is manifested by lateral or downslope displacement of the slope materials, reducing their ability to resist the forces that cause landsliding.

Possible consequences of landsliding include differential lateral and vertical movements of structures siruated within the landslide zone, undermining of structures upslope of the landslide, burial or filling of facilities downslope of the landslide, increased loading against structures in the path of the landslide, and decreased stability of slopes above the landslide.

As discussed in the **General Site Characteristics** section of this report, the site is on steep and hilly ground. If seismic activity were to occur in the vicinity of the site, slope instabilities could be triggered. However, based on the absence of nearby active faults, we conclude that the potential for seismically induced landslides at the site is low.

Liquefaction

Liquefaction is a soil behavior phenomenon in which a soil located below the groundwater surface loses a substantial amount of strength due to strong earthquake ground shaking. Some types of soil tend to compact during earthquake shaking, inducing excess pore water pressure in the saturated soil, which, in turn, causes a reduction in strength of the soil. Recently deposited (i.e., geologically young) and relatively loose natural soils, and uncompacted or poorly compacted fills, are potentially susceptible to liquefaction. Loose sands are particularly susceptible. Loose silts also have potential for liquefaction. Dense natural soils and well-compacted fills have low susceptibility to liquefaction. Clayey soils, gravel sediments, and bedrock generally are not susceptible to liquefaction.

Possible consequences of liquefaction include vertical settlement, lateral displacement, loss of bearing capacity for foundations supported by soil that liquefies, increased lateral loading on structures retaining soil that liquefies, and flotation of lightweight structures embedded in soil that liquefies. Based on the minimal presence of groundwater and liquefiable soils, it is the opinion of MTI that the probability of liquefaction at the project site is negligible.

Collapsible Soils

Collapsible soils undergo a sudden decrease in volume due to the addition of water into the soil structure and/or additional loading. Collapsible soils in arid climates are generally associated with alluvial fans produced by intermittent stream flow. The soils dry prior to subsequent deposition and do not become fully consolidated under the overburden stresses. Collapsible soils typically exhibit a loose, honeycomb structure. They typically have a low to relatively low unit weight, low degree of saturation, and a high dry strength. Wetting a collapsible soil results in the loss of capillary tension or the softening, weakening, and dissolving of cemented agents allowing the larger particles to slip past each other into a denser soil structure. Typically, collapsible soils are made up of fine-grained soils.

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Collapse potential laboratory testing of onsite soils was outside of MTI's scope of work for the project. However, based on the soils conditions encountered onsite and experience with other projects in the vicinity of the site, it is MTI's opinion that the potential for collapsible soils is negligible.

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 soil boring and test pits. Borings/test pits were located in the field by means of a Global Positioning System (GPS) device and are reportedly accurate to within ten feet. Borings were advanced by means of a truck-mounted drilling rig equipped with continuous flight hollow-stem augers. At specified depths, samples were obtained using a standard split-spoon sampler and a modified California sampler, and Standard Penetration Test (SPT) blow counts were recorded. Uncorrected SPT blow counts are provided on logs, which can be found in the **Appendix**. At completion of exploration, borings were backfilled with loose excavated materials and bentonite holeplug. Test pits were backfilled with loose excavated materials. Re-excavation and compaction of these test pit areas are required prior to construction of overlying structures.

Samples have been visually classified in the field by professional staff, identified according to boring/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) 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, Resistance Value (R-value) and Expansion Pressure of Compacted Soils – Idaho T-8, Expansion Index of Soils – ASTM D4829, and Direct Shear Test of Soils Under Consolidated Drained Conditions – ASTM D3080.

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**.

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Varying fat clay-sand mixtures were observed at ground surface. These soils were dark brown to brown, slightly moist, and soft to very stiff, with fine to coarse-grained sand. Organics were noted to depths of up to 1.2 feet bgs. Borderline clayey sand/sandy lean clay soils were encountered beneath surficial soils in test pits 1, 2, and 13. These soils were light brown to brown or orange-brown, slightly moist, and medium dense to dense/very stiff to hard, with fine to medium-grained sand. Moderate to strong induration was encountered throughout this horizon in test pit 13.

Borderline sandy elastic silt/silty sand soils were found beneath surficial soils in test pits 13, 14, and 15 and boring 4. These soils were light brown to gray, slightly moist, and stiff to hard/medium dense to dense, with fine-grained sand. Sand lenses were noted throughout this horizon in test pit 15. Varying layers of silty sand sediments, silty sand with gravel sediments, clayey sand with gravel sediments, and poorly graded sand with silt sediments were observed beneath surficial soils in test pits 5, 12, and 16, borings 3 and 4, and underlying sandy elastic silts in test pit 14. These sediments were light brown to tan, red-brown, or gray-brown, dry to slightly moist, and loose to very dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch-minus cobbles. Refusal was encountered in test pit 14 because of excessive sidewall caving.

Silt with sand soils were encountered underlying surficial soils in test pit 4 and beneath silty sand sediments in test pit 16. These soils were brown to light brown, dry to slightly moist, and very stiff to hard, with fine-grained sand. Intermittent weak induration was encountered throughout this horizon in test pit 4. Elastic silt soils were encountered at depth in the test pits/borings. These soils were light brown to gray, dry to slightly moist, and stiff to hard, with fine-grained sand. Blackish staining and thin sand laminae were encountered within portions of this horizon in test pits 3 and 6. Additionally, moderate to strong induration and calcic veining was often encountered within portions of this horizon.

Of the soils encountered during the subsurface investigation, some of the soil types, in general, would be suitable for subsurface septic systems. However, clayey soils and elastic silt soils are typically unsuitable for subsurface septic systems. When individual home sites have been determined, and geotechnical investigations are conducted for each lot, site specific assessments can be provided for each proposed septic system.

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

Expansive Soil Considerations

High-plasticity soils present across the site are highly active and will be subject to volumetric change with fluctuations in moisture content. Such movement will most often be associated with seasonal moisture variation of these soils. Ground-supported improvements (i.e., shallow foundations or garage slabs) founded on expansive soils <u>will</u> move in response to changes in soil moisture. Movement will be observed as heave if construction occurs when soils are relatively dry then subsequently become wet, and conversely, movement will be observed as settlement if construction occurs when soils are relatively moist and are then allowed to dry.

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Given the presence of these soils, proper grading is considered to be essential. Positive grades must be maintained surrounding each structure, including exterior slabs. Ground surfaces are to slope away from structures at a minimum of 5 percent for a distance of 10 feet, which allows for positive drainage of surface water away from the buildings. If structures are to be tightly clustered, limiting space between two adjacent foundation systems, subsurface drains may be required to alleviate water ponding during short, intense storm events. The interface of plant bedding materials and underlying soils should be graded to provide drainage away from foundation elements. Otherwise, bedding materials may direct water to underlying clays, which increases the potential for localized heave. Excessive watering of landscaping should be avoided, and homeowners must be made aware of these grading and landscaping requirements.

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/borings advanced to a maximum depth of 41.5 feet bgs. Soil moistures in the test pits/borings were generally dry to slightly moist throughout. In the vicinity of the project site, groundwater levels are controlled in large part by seasonal precipitation and runoff. Relatively deep groundwater is likely near the project site because of its topography and elevation above Dry Creek. During previous investigations performed in February 2010, December 2016, and September 2018 within approximately ½-mile to the northeast and southwest of the project site, no evidence of groundwater was noted within numerous borings and test pits advanced to depths as great as 101.5 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.

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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, fat clay, fat clay with sand, sandy fat clay, elastic silt, and silt with sand soils generally offer little permeability, with typical hydraulic infiltration rates of less than 2 inches per hour. Borderline clayey sand/sandy lean clay soils, borderline sandy elastic silt/silty sand soils, and clayey sand with gravel sediments will commonly exhibit infiltration rates from 2 to 6 inches per hour. Silty sand sediments and silty sand with gravel sediments usually display rates of 4 to 8 inches per hour. Poorly graded sand with silt sediments typically exhibit infiltration values in excess of 12 inches per hour.

Ada County Highway District (ACHD) will 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

Slopes ranging from 15 feet horizontal to 1 foot vertical (15:1) to 1.5:1 are relatively common on hillsides within the 151.36 acres of the proposed development. For structures to be constructed near slopes steeper than 3:1, it is necessary to apply slope setback requirements as outlined in the IBC. No potential slope stability deficiencies were noted during the investigation. <u>However, if seismic activity were to occur within the vicinity of the project site, slope failures may be triggered.</u>

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. 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.

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Setbacks from constructed slopes should adhere to provisions of Section 1808.7 of the 2015 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.

Slope Stability Analysis

MTI was provided a preliminary grading plan (Sheet PP 2) dated 8 February 2019 from Mr. Jason Densmer of The Land Group. The grading plan was used to develop topographic cross sections of slopes on the site. Critical cross-sections were analyzed for the stability of the residential development based on subsurface soil conditions. The location of the profiles can be found on the Site Map included in the **Appendix**.

Numerical slope stability analysis has been performed using the Morgenstern-Price Method. In regards to dealing with dynamic earthquake loads, a pseudo-static approach was implemented in which applied earthquake loads were added at the center of gravity of each slice. Seismic forces are applied horizontally through the center of gravity of each slice, reducing the factor of safety. The seismic coefficient used in this analysis is equal to 0.133 ($S_{DS}/2.5$), in accordance with standard engineering practice. A surcharge load of 250 psf was applied to all roadways for the analysis.

Direct shear laboratory testing was conducted on the elastic silt soils at a depth of 35 feet bgs in boring 1 and on fully softened elastic silt soils at a depth of 40 feet bgs in boring 2. Soil properties from the direct shear tests were used in the numerical slope stability analysis. It is anticipated that suitable onsite soils will be used as fill materials on the site. Soil properties for the fill materials have been assumed based on typical values for onsite soils that will be used as structural fill. The following table indicates the soil properties used in the global slope stability analysis:

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Soil Properties

Soil Type	Internal Friction Angle	Unit Weight	Cohesion
Elastic Silt	35°	110 pcf	75 psf
Onsite Soil Fill	32°	100 pcf	50 psf

The Factor of Safety (FS) is the ratio of the soil resisting forces (such as soil internal friction and cohesion) to the downslope driving forces (such as applied loads, soil loads, hydraulic loading, and seismic loads). A FS equal to or less than 1 means the slope may be immediately ready to fail. A FS of 1.5 is generally considered adequate for slopes with regards to stability.

For profiles 1 and 2, sufficient factors of safety in excess of 1.5 and 1.1 were obtained for static and dynamic loading conditions, respectively. Based on the preliminary grading plan, the fill slope in the vicinity of profile 3 is at a gradient of 1 foot horizontal to 1 foot vertical (1:1). The slope stability analysis for this profile did not meet the required FS values of 1.5 and 1.1. Based on these results, MTI recommends that all cut/fill slopes be graded to no steeper than 2:1. The proposed construction is suitable for long term conditions provided the recommendations in this report are adhered to and all slopes are graded to no steeper than 2:1.

PAVEMENT DISCUSSION AND RECOMMENDATIONS

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 fat clay with sand collected from test pit 4, yielded a R-value of less than 5. A R-value of 4 was used for design calculations. 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 section. 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**.

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Gravel Equivalent Method Flexible Pavement Specifications

Pavement Section Component[1]	ACHD and Private Roadways
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

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 12 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 clayey soils 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.

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CONSTRUCTION CONSIDERATIONS

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. Brush and thick grasses 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 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 <u>must</u> 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.

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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.

Fill Placement Recommendations

It is MTI's understanding that significant cut and fill activities will take place throughout the proposed development. Some areas are expected to have cuts of up to 30 feet. The material cut from these areas is anticipated to be used within the fill areas. Materials suitable for use as structural fill are defined in the **Structural Fill** section of this report. Fill zones up to 25 feet in thickness are expected.

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Prior to placement of fill materials, organic material must be removed. Stripping depths should be adjusted in the field to assure that the entire root zone or disturbed zone 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. There is a possibility that spring activity or wet zones may be present throughout the site. If spring activity or wet zones are noted during grading operations, additional recommendations, such as underdrains, may be required. MTI must be onsite during grading operations to identify these possible situations.

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.

MTI should oversee subgrade conditions (i.e., moisture content) as well as placement and compaction of new fill after native soils are excavated to design grade. Sufficient density tests should be performed to properly monitor compaction. One in-place density test per lift for every 5,000 square feet is recommended. MTI personnel must be onsite full-time during grading operations.

Settlement within the deepest fill zones may be on the order of 2 to 6 inches depending on soil type and based upon the laboratory test results. It is noted that even well-compacted fill zones can consolidate up to 1.5 percent. Settlement markers shall be installed within the deeper fill zones, as defined by fills greater than 15 feet in thickness, and installed once the areas are constructed to design elevations. Building construction within the deeper fill zones shall not proceed until fill settlement has reached acceptable tolerances as determined by the geotechnical engineer of record. During construction, additional soil samples shall be collected for laboratory analysis to derive the time-rate of settlement for the various soil types used for construction. This testing will aid the engineer in tracking performance of the fill areas.

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 fat clay soils as structural fill is prohibited. Use of silty soils (USCS designation of GM, SM, and ML), borderline clayey sand/sandy lean clay (SC/CL) soils, and elastic silt (MH) soils as structural fill may be acceptable. However, 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/clayey soil (as outlined above) 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/clayey soils must be protected from degradation resulting from construction traffic or subsequent construction.

When using silty/clayey soils, moisture conditioning will be required to ensure materials are within 2% of optimum moisture content, prior to compaction. This may require disking and/or tilling to ensure a generally uniform moisture level and consistency throughout the material placed. The following is recommended for the use of native silty and clayey materials during construction:

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1. Continuous monitoring and sampling of excavation activities is required to identify potential suspect clayey/silty materials during construction, to confirm that all clayey/silty materials used as fill have expansion indexes of less than 90. Initial expansion index testing was performed on the elastic silt soils from boring 2 at a depth of 15 feet bgs and boring 4 at a depth of 15 feet bgs. This testing yielded expansion indexes of 81 and 69.5. Expansion index testing shall be performed at a frequency of one test per 10,000 cubic yards of fill material placed.
2. Processing of the clayey/silty materials will be required for moisture-conditioning and placement. Clods and/or balls within the fill zones are not acceptable and, if encountered, will require further processing.
3. All surfaces must be property stripped of organic and other deleterious material prior to placement of fill material. In addition, all surfaces must be compacted below fill zones.
4. Organic material must be removed from clayey/silty materials prior to using it as fill material. Organic content of the fill material must be maintained at less than 3 percent.
5. Settlement markers shall be installed within the deeper fill zones, as defined by fills greater than 15 feet in thickness, and installed once the areas are constructed to design elevations. Building construction within the deeper fill zones shall not proceed until fill settlement has reached acceptable tolerances as determined by the geotechnical engineer of record.

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.

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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/boring 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.

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 and 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.

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GENERAL COMMENTS

Based on the subsurface conditions encountered during this investigation and available information regarding the proposed development, the site is adequate for the planned construction. When plans and specifications are complete, and if significant changes are made in the character or location of the proposed structure, consultation with MTI must 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

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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

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-1 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.725648 **Longitude:** -116.264277
Depth to Water Table: Not Encountered **Total Depth:** 10.6 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.8	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, medium stiff to very stiff, with fine to coarse-grained sand.* *--Organics noted to 0.4 foot bgs.*			0.75-3.5	
2.8-7.0	Borderline Clayey Sand/Sandy Lean Clay (SC/CL): *Light brown to brown, slightly moist, medium dense/very stiff, with fine to medium-grained sand.* *--Calcic veining noted from 5.5 to 7.0 feet bgs.*				
7.0-10.6	Elastic Silt (MH): *Light brown, slightly moist, hard.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-2 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.724773 **Longitude:** -116.265366
Depth to Water Table: Not Encountered **Total Depth:** 7.2 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.1	Fat Clay (CH): *Dark brown to brown, slightly moist, soft to stiff, with fine to coarse-grained sand.* *--Organics noted to 0.6 foot bgs.*			0.5-1.5	
2.1-4.6	Borderline Clayey Sand/Sandy Lean Clay (SC/CL): *Light brown to gray-brown, slightly moist, medium dense to dense/very stiff, with fine to medium-grained sand.* *--Silt content varied throughout.*	GS	3.5-4.0		A
4.6-7.2	Elastic Silt (MH): *Light brown, slightly moist, hard.* *--Moderate to strong induration encountered throughout.*				

Lab Test ID	M	LL	PI	Sieve Analysis (% passing)				
-	%	-	-	#4	#10	#40	#100	#200
A	19.7	44	19	98	91	62	54	47.8

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-3 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.723953 **Longitude:** -116.264999
Depth to Water Table: Not Encountered **Total Depth:** 5.2 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.7	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, soft to stiff, with fine to coarse-grained sand.* *--Organics noted to 0.3 foot bgs.*			0.5-1.0	
1.7-5.2	Elastic Silt (MH): *Light brown, dry to slightly moist, hard, with fine-grained sand.* *--Blackish staining and thin sand laminae noted from 1.7 to 3.0 feet bgs.* *--Moderate to strong induration encountered throughout.*				

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

GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-4 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.722431 **Longitude:** -116.264847
Depth to Water Table: Not Encountered **Total Depth:** 11.6 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-3.0	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, soft to very stiff, with fine to coarse-grained sand.* *--Organics noted to 0.5 foot bgs.*	Bulk	1.5-2.0	0.25-2.0	B R-value
3.0-10.9	Silt with Sand (ML): *Brown to light brown, dry to slightly moist, very stiff to hard, with fine-grained sand.* *--Intermittent weak induration encountered throughout.*				
10.9-11.6	Elastic Silt (MH): *Light brown, slightly moist, very stiff to hard.*				

Lab Test ID	M	LL	PI	Sieve Analysis (% passing)				
-	%	-	-	#4	#10	#40	#100	#200
B	32.7	65	46	100	98	87	80	75.7

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-5 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.721466 **Longitude:** -116.266624
Depth to Water Table: Not Encountered **Total Depth:** 5.6 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.6	Sandy Fat Clay (CH): *Dark brown to brown, slightly moist, medium stiff to very stiff, with fine to coarse-grained sand.* *--Organics noted to 1.0 foot bgs.*			1.0-3.5	
1.6-2.9	Clayey Sand with Gravel (SC): *Red-brown, slightly moist, dense, with fine to coarse-grained sand and fine to coarse gravel.*				
2.9-5.6	Elastic Silt (MH): *Light brown, slightly moist, hard.* *--Moderate to strong induration encountered throughout.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-6 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.725887 **Longitude:** -116.267128
Depth to Water Table: Not Encountered **Total Depth:** 8.2 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.9	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, medium stiff to stiff, with fine to coarse-grained sand.* *--Organics noted to 0.4 foot bgs.*			0.75-1.25	
1.9-5.9	Elastic Silt with Sand (MH): *Light brown to whitish, slightly moist, stiff to very stiff, with fine-grained sand.* *--Calcic veining noted throughout.*				
5.9-8.2	Elastic Silt (MH): *Light brown to light gray, dry to slightly moist, hard, with fine-grained sand.* *--Blackish staining and thin sand laminae noted from 5.9 to 7.3 feet bgs.* *--Strong induration encountered throughout.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-7 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.724903 **Longitude:** -116.269897
Depth to Water Table: Not Encountered **Total Depth:** 6.3 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.0	Fat Clay (CH): *Dark brown to brown, slightly moist, soft to stiff.* *--Organics noted to 0.5 foot bgs.*			0.25-1.0	
2.0-6.3	Elastic Silt (MH): *Light brown, slightly moist, very stiff to hard.* *--Moderate to strong induration encountered from 4.5 to 6.3 feet bgs.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-8 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.723301 **Longitude:** -116.270973
Depth to Water Table: Not Encountered **Total Depth:** 5.4 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-0.8	Fat Clay (CH): *Dark brown, slightly moist, soft to medium stiff.* *--Organics noted to 0.5 foot bgs.*			0.5-0.75	
0.8-5.4	Elastic Silt (MH): *Light brown, slightly moist, stiff to hard.* *--Moderate to strong induration encountered from 4.0 to 5.4 feet bgs.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-9 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.723072 **Longitude:** -116.272141
Depth to Water Table: Not Encountered **Total Depth:** 7.7 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.3	Fat Clay (CH): *Dark brown to brown, slightly moist, soft to stiff.* *--Organics noted to 0.8 foot bgs.*			0.5-1.0	
1.3-7.7	Elastic Silt (MH): *Light brown, slightly moist, very stiff to hard.* *--Moderate to strong induration encountered from 3.5 to 7.7 feet bgs.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-10 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.725964 **Longitude:** -116.271805
Depth to Water Table: Not Encountered **Total Depth:** 6.0 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-1.6	Fat Clay (CH): *Dark brown to brown, slightly moist, soft to medium stiff.* *--Organics noted to 0.3 foot bgs.*			0.25-0.75	
1.6-6.0	Elastic Silt (MH): *Light brown, slightly moist, stiff to hard.* *--Calcic veining noted from 2.7 to 4.5 feet bgs.* *--Moderate induration encountered from 4.5 to 6.0 feet bgs.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-11 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.726883 **Longitude:** -116.270790
Depth to Water Table: Not Encountered **Total Depth:** 8.2 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-3.8	Fat Clay (CH): *Dark brown to brown, slightly moist, soft to stiff.* *--Organics noted to 0.7 foot bgs.*			0.5-1.0	
3.8-8.2	Elastic Silt (MH): *Light brown, slightly moist, very stiff to hard.* *--Intermittent calcic veining noted from 3.8 to 6.4 feet bgs.* *--Moderate induration encountered from 6.4 to 8.2 feet bgs.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-12 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.720982 **Longitude:** -116.266525
Depth to Water Table: Not Encountered **Total Depth:** 8.0 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.6	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, soft to very stiff, with fine to coarse-grained sand.* *--Organics noted to 1.0 foot bgs.*			0.5-2.0	
2.6-6.4	Silty Sand with Gravel (SM): *Gray-brown, slightly moist, dense to very dense, with fine to coarse-grained sand, fine to coarse gravel, and 8-inch-minus cobbles.*				
6.4-8.0	Elastic Silt (MH): *Light brown to gray, slightly moist, hard.* *--Moderate to strong induration encountered throughout.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-13 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.721970 **Longitude:** -116.266068
Depth to Water Table: Not Encountered **Total Depth:** 13.2 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.2	Sandy Fat Clay (CH): *Dark brown to brown, slightly moist, medium stiff to very stiff, with fine to coarse-grained sand.* *--Organics noted to 0.3 foot bgs.*			0.75-2.0	
2.2-7.4	Borderline Clayey Sand/Sandy Lean Clay (SC/CL): *Orange-brown to brown, slightly moist, dense/hard, with fine to medium-grained sand.* *--Moderate to strong induration encountered throughout.*				
7.4-10.6	Borderline Sandy Elastic Silt/Silty Sand (MH/SM): *Light brown, slightly moist, hard/dense, with fine-grained sand.*				
10.6-13.2	Elastic Silt (MH): *Light brown, slightly moist, very stiff to hard.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-14 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.722729 **Longitude:** -116.266464
Depth to Water Table: Not Encountered **Total Depth:** ~14.0 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-3.6	Sandy Fat Clay (CH): *Dark brown to brown, slightly moist, stiff to very stiff, with fine to coarse-grained sand.* *--Organics noted to 1.2 feet bgs.*			1.25-3.0	
3.6-6.0	Borderline Sandy Elastic Silt/Silty Sand (MH/SM): *Light brown to gray, slightly moist, very stiff/medium dense, with fine-grained sand.* *--Intermittent sand lenses noted throughout.*				
6.0-Approx. 14.0	Poorly Graded Sand with Silt and Gravel (SP-SM): *Light brown, dry to slightly moist, medium dense, with fine to coarse-grained sand and intermittent fine to coarse gravel.* *--Refusal encountered at approximately 14.0 feet bgs because of excessive sidewall caving.* *--Test pit sidewalls caved before final depth was measured.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-15 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.724140 **Longitude:** -116.264412
Depth to Water Table: Not Encountered **Total Depth:** 7.0 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-2.1	Fat Clay with Sand (CH): *Dark brown to brown, slightly moist, soft to stiff, with fine to coarse-grained sand.* *--Organics noted to 0.4 foot bgs.*			0.5-1.5	
2.1-4.7	Borderline Sandy Elastic Silt/Silty Sand (MH/SM): *Light brown, slightly moist, stiff to very stiff/medium dense, with fine-grained sand.*				
4.7-7.0	Elastic Silt (MH): *Light brown, slightly moist, hard.* *--Moderate to strong induration encountered throughout.*				

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GEOTECHNICAL INVESTIGATION TEST PIT LOG

Test Pit Log #: TP-16 **Date Advanced:** 26 Mar 2019 **Logged by:** Clint Wyllie, G.I.T.
Excavated by: Xtreme Xcavation **Location:** See Site Map Plates
Latitude: 43.724365 **Longitude:** -116.267265
Depth to Water Table: Not Encountered **Total Depth:** 14.6 Feet bgs

Depth (Feet bgs)	Field Description and USCS Soil and Sediment Classification	Sample Type	Sample Depth (Feet bgs)	Qp	Lab Test ID
0.0-4.5	Sandy Fat Clay (CH): *Dark brown to brown, slightly moist, medium stiff to very stiff, with fine to coarse-grained sand.* *--Organics noted to 0.5 foot bgs.*			1.0-3.0	
4.5-7.9	Silty Sand (SM): *Light brown, dry to slightly moist, medium dense, with fine to medium-grained sand.*				
7.9-13.1	Sandy Silt (ML): *Light brown, dry to slightly moist, very stiff to hard, with fine to coarse-grained sand.* *--Sand content varied throughout.*				
13.1-14.6	Elastic Silt (MH): *Light brown, slightly moist, very stiff.*				

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MATERIALS TESTING & INSPECTION

FIELD BOREHOLE LOG

BOREHOLE NO.: B-1
TOTAL DEPTH: 41.5'

PROJECT INFORMATION

PROJECT: Broken Horn Subdivision
LOCATION: 6421 West Dry Creek Road
Boise, ID
JOB NO.: B190345g
LOGGED BY: Clint Wyllie, G.I.T.

DRILLING INFORMATION

DRILLING CO.: Haztech Drilling, Inc.
METHOD OF DRILLING: 6" Hollow Stem Auger
SAMPLING METHODS: Split Spoon/California
DATES DRILLED: 11 March 2019
LATITUDE/LONGITUDE: 43.721091, -116.272497

Water level during drilling | Standard Split Spoon | Auger Sample | California Sampler

DEPTH	SOIL TYPE	DESCRIPTION	MOISTURE (%)	LL/PI	% < #4	% < #200	SAMPLE	BLOWS	BLOWS PER FOOT (N)
0		FAT CLAY (CH): Dark brown to brown, slightly moist, medium stiff to stiff.							
							Standard Split Spoon	3,3,5	
5		ELASTIC SILT (MH): Light brown, dry to slightly moist, medium stiff to hard. --Calcic veining noted from 2.5 to 6.5 feet bgs.					California Sampler	4,6,6	0 30 60
							Standard Split Spoon	6,14,15	
10							Standard Split Spoon	7,15,17	0 30 60
15							Standard Split Spoon	7,15,26	0 30 60
20							California Sampler	8,16,32	0 30 60
25							Standard Split Spoon	5,14,14	0 30 60
30							California Sampler	9,11,13	0 30 60
35							Standard Split Spoon	4,8,12	0 30 60
40		Groundwater not encountered.					Standard Split Spoon	4,10,13	0 30 60

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MATERIALS TESTING & INSPECTION

FIELD BOREHOLE LOG

BOREHOLE NO.: B-2
TOTAL DEPTH: 31.5'

PROJECT INFORMATION

PROJECT:	Broken Horn Subdivision
LOCATION:	6421 West Dry Creek Road Boise, ID
JOB NO.:	B190345g
LOGGED BY:	Clint Wyllie, G.I.T.

DRILLING INFORMATION

DRILLING CO.:	Haztech Drilling, Inc.
METHOD OF DRILLING:	6" Hollow Stem Auger
SAMPLING METHODS:	Split Spoon
DATES DRILLED:	11 March 2019
LATITUDE/LONGITUDE:	43.725640, -116.271430

Water level during drilling | Standard Split Spoon | Auger Sample | California Sampler

DEPTH	SOIL TYPE	DESCRIPTION	MOISTURE (%)	LL/PI	% < #4	% < #200	SAMPLE	BLOWS	BLOWS PER FOOT (N)
0		FAT CLAY (CH): Dark brown to brown, slightly moist, medium stiff to stiff.							
		ELASTIC SILT (MH): Light brown, slightly moist, stiff to hard.						3,4,6	
5								3,5,6	0 30 60
								5,9,10	
10								5,10,10	0 30 60
15								8,15,19	0 30 60
20								8,19,21	0 30 60
25								8,15,16	0 30 60
30		Groundwater not encountered.						7,15,15	0 30 60

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MATERIALS TESTING & INSPECTION

FIELD BOREHOLE LOG

BOREHOLE NO.: B-3
TOTAL DEPTH: 31.5'

PROJECT INFORMATION

PROJECT: Broken Horn Subdivision
LOCATION: 6421 West Dry Creek Road
Boise, ID
JOB NO.: B190345g
LOGGED BY: Clint Wyllie, G.I.T.

DRILLING INFORMATION

DRILLING CO.: Haztech Drilling, Inc.
METHOD OF DRILLING: 6" Hollow Stem Auger
SAMPLING METHODS: Split Spoon
DATES DRILLED: 11 March 2019
LATITUDE/LONGITUDE: 43.725362, -116.265808

Water level during drilling | Standard Split Spoon | Auger Sample | California Sampler

DEPTH	SOIL TYPE	DESCRIPTION	MOISTURE (%)	LL/PI	% < #4	% < #200	SAMPLE	BLOWS	BLOWS PER FOOT (N)
0		FAT CLAY WITH SAND (CH): Dark brown to brown, slightly moist, soft to stiff, with fine to medium-grained sand.						1,6,9	
5		SILTY SAND (SM): Brown to tan, dry to slightly moist, loose to medium dense, with fine to coarse-grained sand.						9,12,12	0 30 60
								3,4,3	
10		ELASTIC SILT (MH): Light brown, slightly moist, medium stiff to very stiff.						3,4,3	0 30 60
15								3,5,9	0 30 60
20								6,12,13	0 30 60
25								5,11,14	0 30 60
30		Groundwater not encountered.						6,14,12	0 30 60

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MATERIALS TESTING & INSPECTION

FIELD BOREHOLE LOG

BOREHOLE NO.: B-4
TOTAL DEPTH: 41.5'

PROJECT INFORMATION

PROJECT: Broken Horn Subdivision
LOCATION: 6421 West Dry Creek Road, Boise, ID
JOB NO.: B190345g
LOGGED BY: Clint Wyllie, G.I.T.

DRILLING INFORMATION

DRILLING CO.: Haztech Drilling, Inc.
METHOD OF DRILLING: 6" Hollow Stem Auger
SAMPLING METHODS: Split Spoon/California
DATES DRILLED: 11 March 2019
LATITUDE/LONGITUDE: 43.722311, -116.264632

Water level during drilling | Standard Split Spoon | Auger Sample | California Sampler

DEPTH	SOIL TYPE	DESCRIPTION	MOISTURE (%)	LL/PI	% < #4	% < #200	SAMPLE	BLOWS	BLOWS PER FOOT (N)
0		FAT CLAY (CH): Dark brown to brown, slightly moist, soft to stiff.							
							Standard Split Spoon	5,7,8	
5		SANDY ELASTIC SILT (MH): Light brown, slightly moist, very stiff to hard, with fine-grained sand.					California Sampler	5,14,20	0 30 60
							Standard Split Spoon	14,23,14	
10		SILTY SAND (SM): Tan to light brown, dry to slightly moist, dense, with fine to coarse-grained sand and fine to coarse gravel.					California Sampler	6,18,22	0 30 60
		ELASTIC SILT (MH): Light brown, slightly moist, very stiff to hard.							
15							Standard Split Spoon	9,17,20	0 30 60
20							California Sampler	11,26,50 for 3"	0 30 60
25							Standard Split Spoon	5,9,11	0 30 60
30							Standard Split Spoon	8,15,16	0 30 60
35							California Sampler	11,18,24	0 30 60
40		Groundwater not encountered.	46.3	81/47	100	99.5	Standard Split Spoon	6,11,13	0 30 60

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GRAVEL EQUIVALENT METHOD – PAVEMENT THICKNESS DESIGN PROCEDURES

Pavement Section Design Location: Proposed Broken Horn Subdivision, ACHD & Private 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:	2.25		**Subgrade Mr:**	3,375
R-Value of Aggregate Base:	80			
R-Value of Granular Borrow:	60			
Subgrade R-Value:	4			
Expansion Pressure of Subgrade:	1.40			
Unit Weight of Base Materials:	130			
Total Design Life 18 kip ESAL's:	33,131			
ASPHALTIC CONCRETE:				
Gravel Equivalent, Calculated:	0.384			
Thickness:	0.196923077		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:	1.551			

	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

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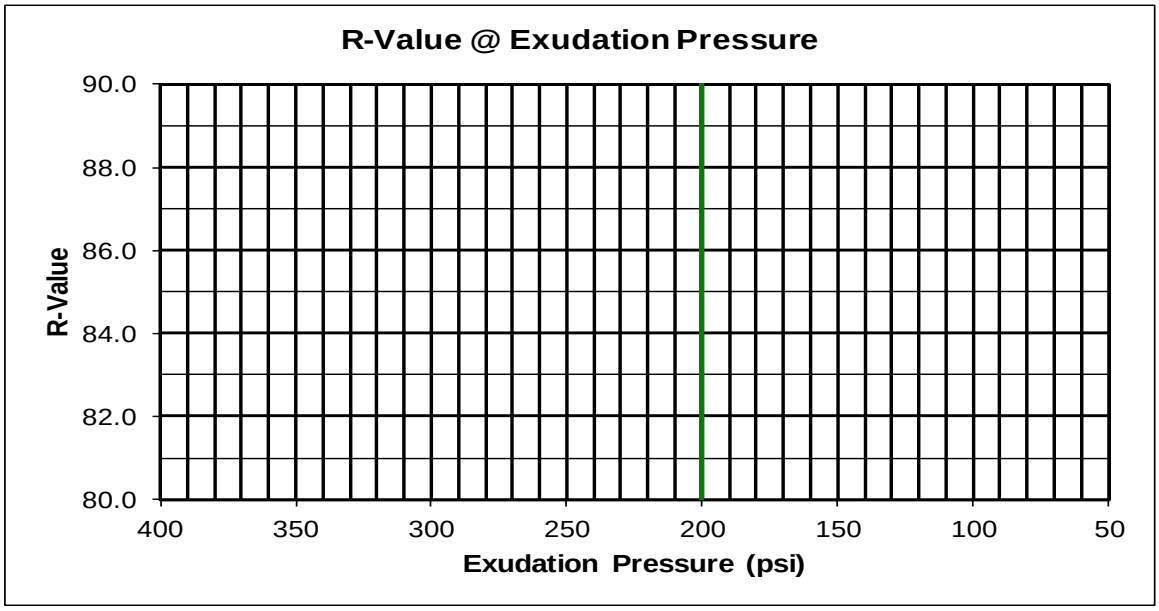
R-VALUE LABORATORY TEST DATA

Source and Description:	TP-4: 1.5'-2.0', Fat Clay with Sand							
Date Obtained:	26 March 2019							
Sample ID:	19-7176							
Sampling and Preparation:	ASTM D75:		AASHTO T2:	X	ASTM D421:		AASHTO T87:	X
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.



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

DIRECT SHEAR LABORATORY TEST DATA

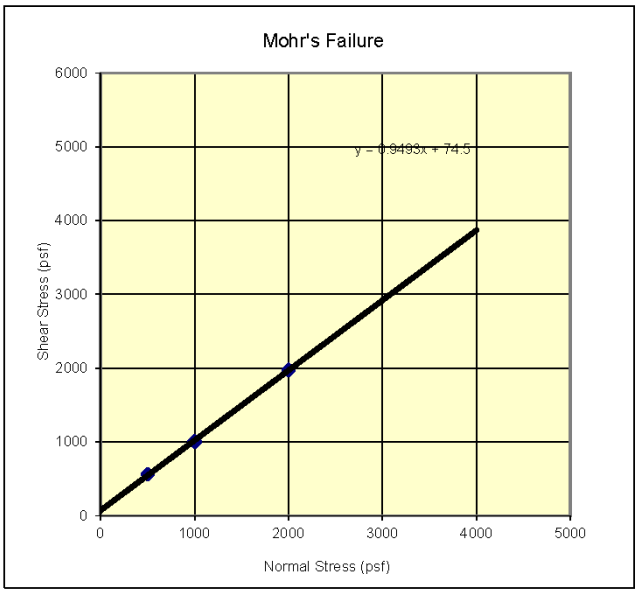
Project Name:	Broken Horn Subdivision					
Source and Description:	B-1: 36.0'-36.5', Elastic Silt					
Date Obtained:	March 13, 2019					
Sample ID:	19-7144					
Sampling and Prep:	ASTM D75:	X	ASTM D421:	X	Drained:	X
Test Standard:	ASTM D3080:	X	ASTM D6528:		Undrained:	

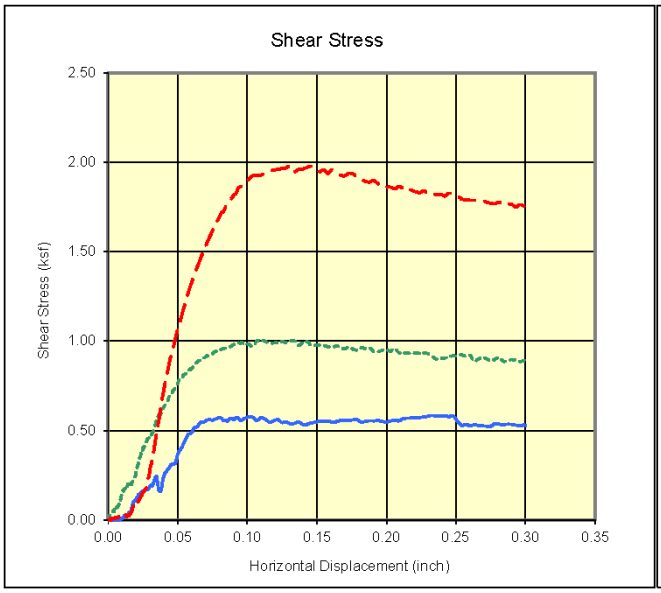
	Point 1	Point 2	Point 3	Received
Initial Moisture Content (%)	37.5	37.5	37.5	37.5
Initial Wet Density (lb/ft^3)	101.6	100.6	100.6	
Initial Dry Density (lb/ft^3)	73.9	73.2	73.2	
Initial Sample Thickness (in)	1.000	1.000	1.000	
Sample Diameter (in)	2.420	2.420	2.420	
Initial Degree of Saturation	21.74	21.33	21.35	
Initial Void Ratio	1.15	1.18	1.17	

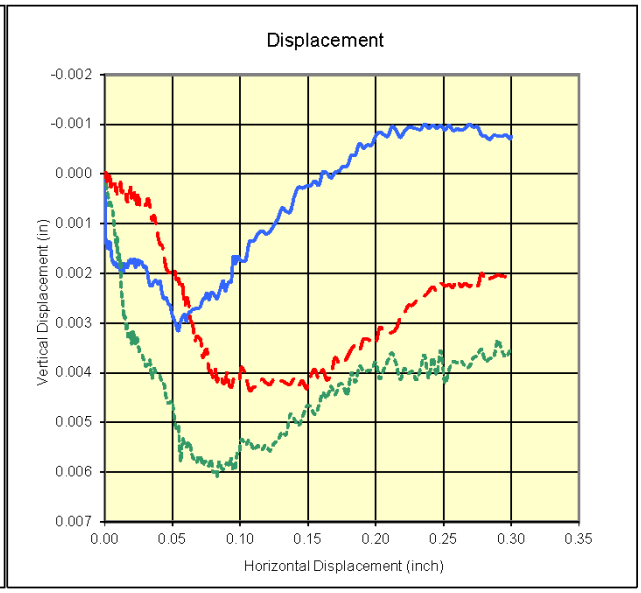
C (psf)	75
Φ(deg)	**43.4**
tan Φ(deg)	0.945

Final Moisture Content (%)	50.0	49.6	49.3
Final Wet Density (lb/ft^3)	111.7	109.8	110.7
Final Dry Density (lb/ft^3)	74.4	73.4	74.2
Final Sample Thickness	0.990	0.977	0.967

Normal Stress (psf)	500	1000	2000
Failure Stress (psf)	561	1006	1979
Failure Displacement (in)	0.2330	0.1098	0.1309
Time to Failure (min)	77.7	36.6	43.6
Ultimate Stress (psf)	1656	2981	5859
Ultimate Displacement (in)	0.5002	0.5001	5.0010
Rate of Strain (in/min)	0.003	0.003	0.003
Specific Gravity (assumed)	2.550	2.550	2.550







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

DIRECT SHEAR LABORATORY TEST DATA

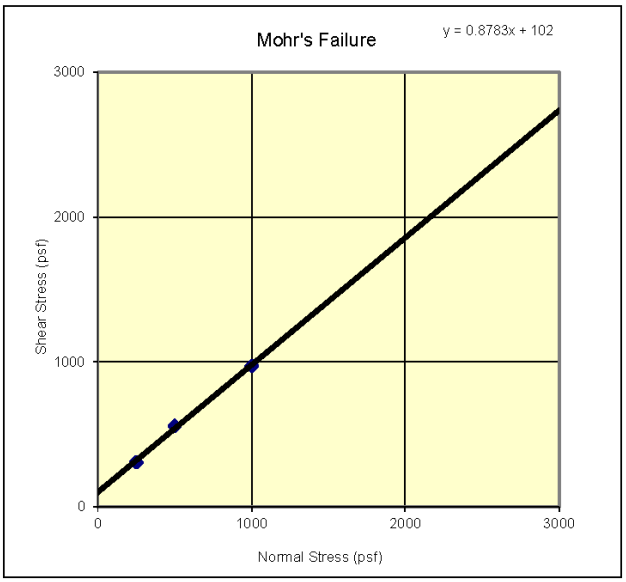
Project Name:	Broken Horn Subdivision					
Source and Description:	B-4: 40.0'-41.5', Elastic Silt (Remolded - Fully Softened)					
Date Obtained:	March 13, 2019					
Sample ID:	19-7144					
Sampling and Prep:	ASTM D75:	X	ASTM D421:	X	Drained:	X
Test Standard:	ASTM D3080:	X	ASTM D6528:		Undrained:	

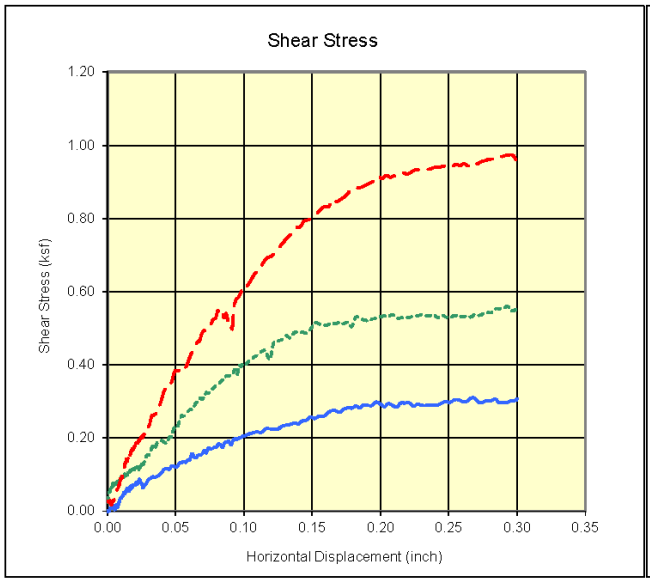
	Point 1	Point 2	Point 3	Received
Initial Moisture Content (%)	80.7	80.7	80.7	80.7
Initial Wet Density (lb/ft^3)	94.5	97.7	97.7	
Initial Dry Density (lb/ft^3)	52.3	54.1	54.1	
Initial Sample Thickness (in)	1.000	1.000	1.000	
Sample Diameter (in)	2.420	2.420	2.420	
Initial Degree of Saturation	26.44	27.80	27.78	
Initial Void Ratio	2.04	1.94	1.94	

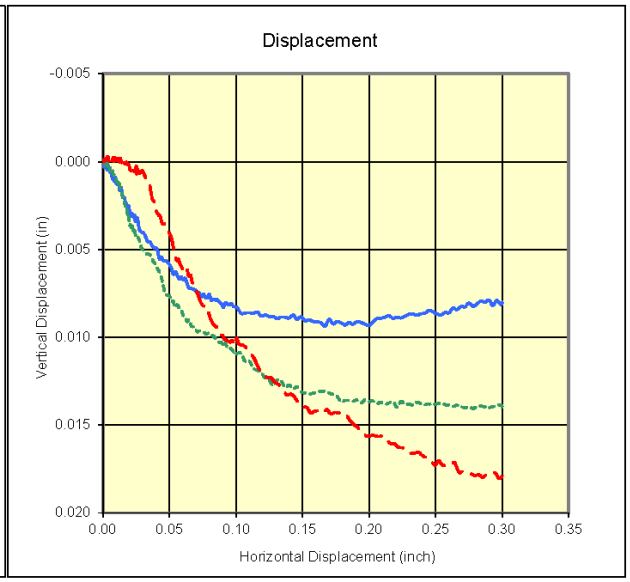
C (psf)	102
Φ(deg)	**41.6**
tan Φ(deg)	0.887

Final Moisture Content (%)	70.6	67.1	63.6
Final Wet Density (lb/ft^3)	96.0	100.7	100.1
Final Dry Density (lb/ft^3)	56.3	60.2	61.2
Final Sample Thickness	0.939	0.908	0.893

Normal Stress (psf)	250	500	1000
Failure Stress (psf)	309	560	974
Failure Displacement (in)	0.2690	0.2930	0.2945
Time to Failure (min)	89.7	97.7	98.2
Ultimate Stress (psf)	1656	2981	5859
Ultimate Displacement (in)	0.5002	0.5001	5.0010
Rate of Strain (in/min)	0.003	0.003	0.003
Specific Gravity (assumed)	2.550	2.550	2.550







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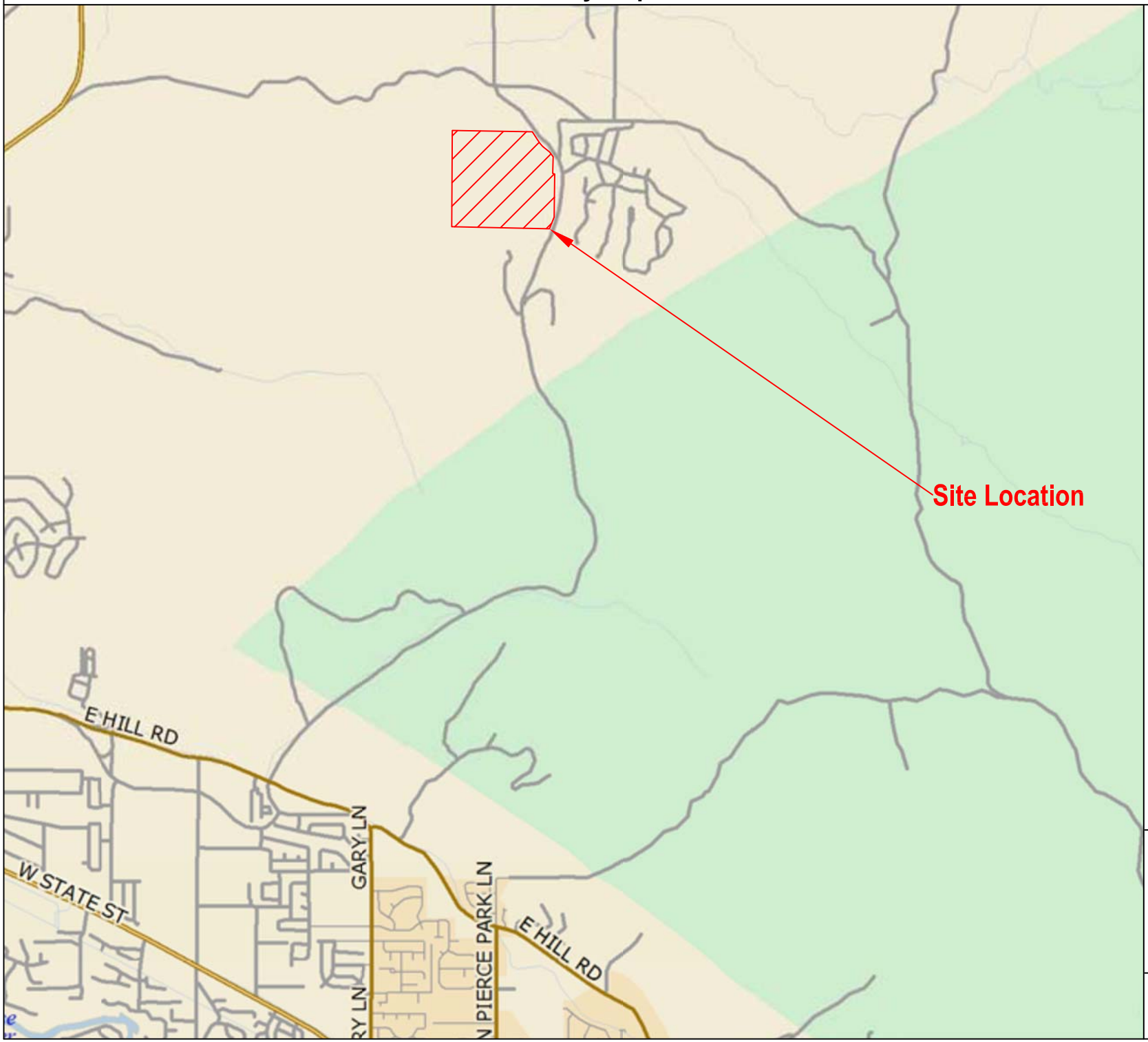
Vicinity Map

Plate 1



MAP NOTES:

- Delorme Street Atlas
- Not to Scale

LEGEND

Approximate Site Location

N

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified from DeLorme by: CCW
1 April 2019
Drawing: B190345g

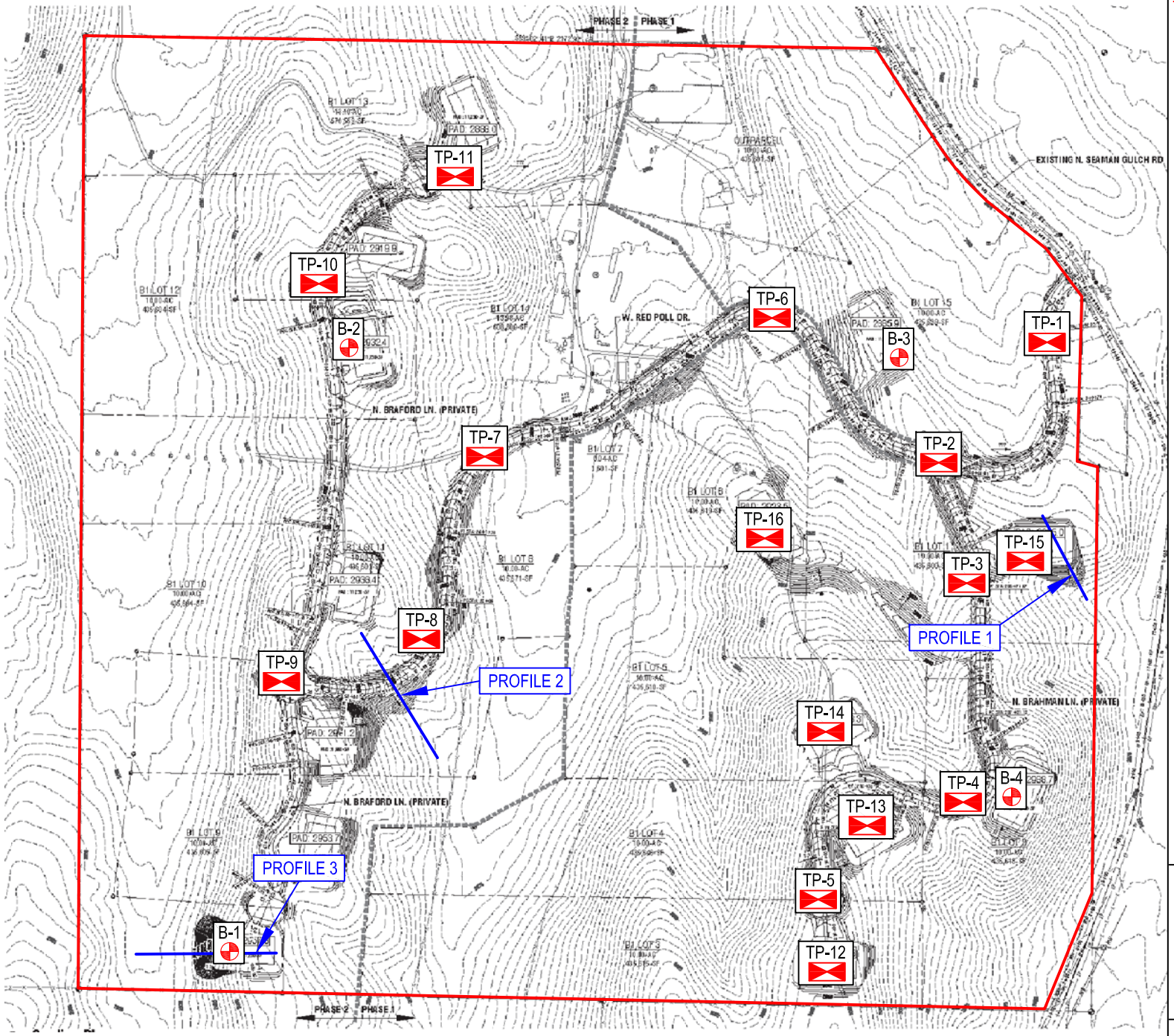
MATERIALS TESTING & INSPECTION
AN ATLAS COMPANY

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

Approximate MTI Boring Location

Numerical Slope Stability Profile

N

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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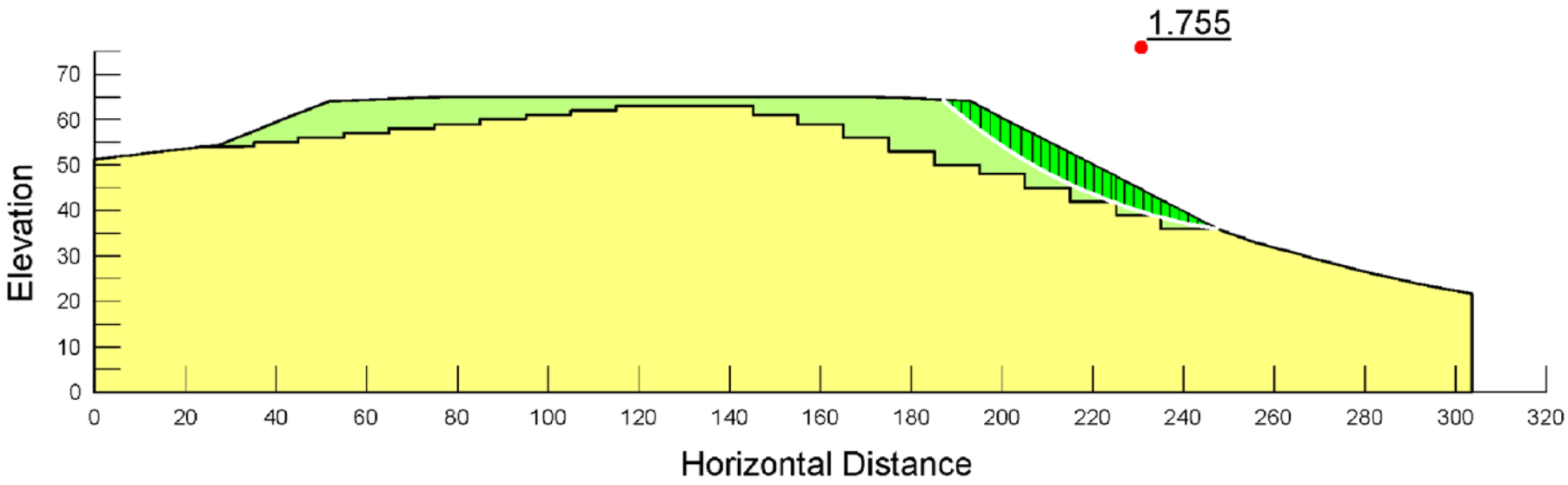
Profile 1 - Static

Plate 3A



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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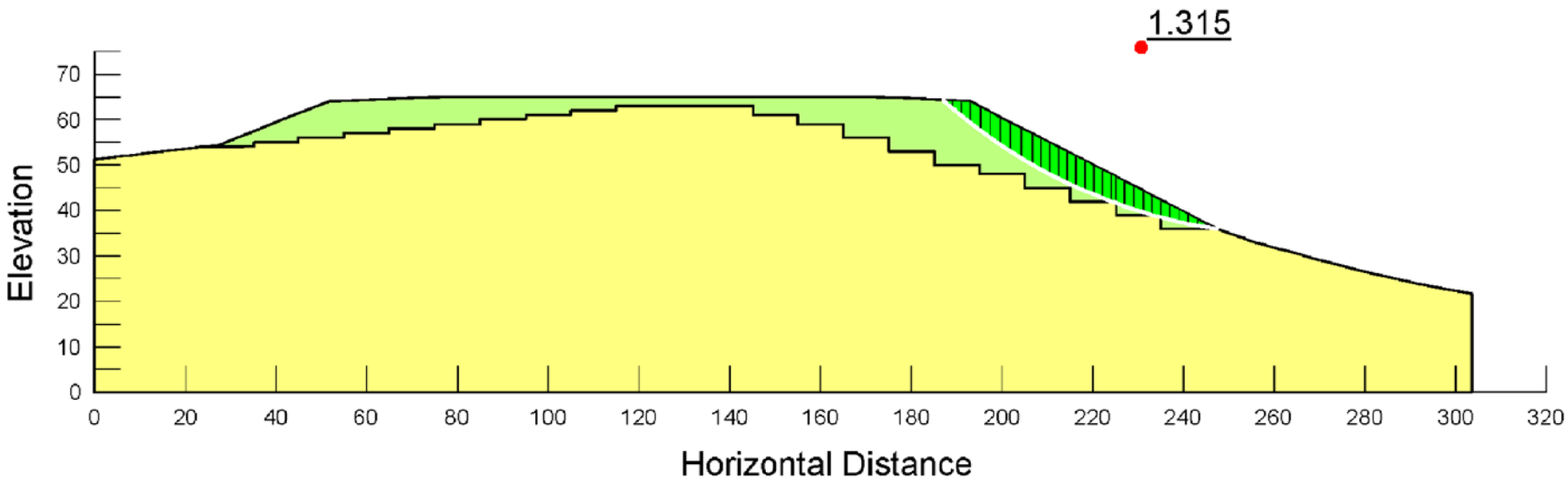
Profile 1 - Seismic

Plate 3B



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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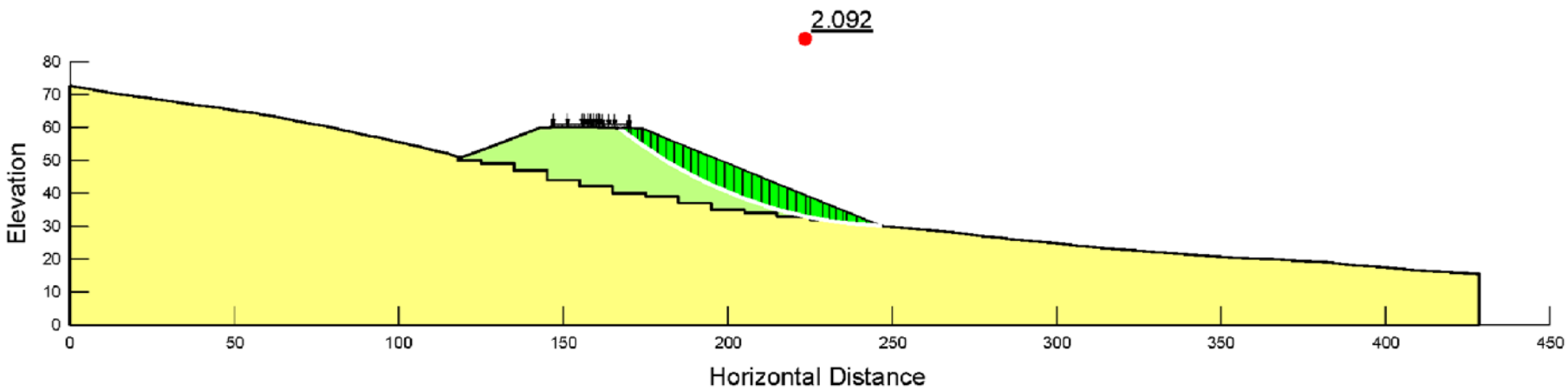
Profile 2 - Static

Plate 4A



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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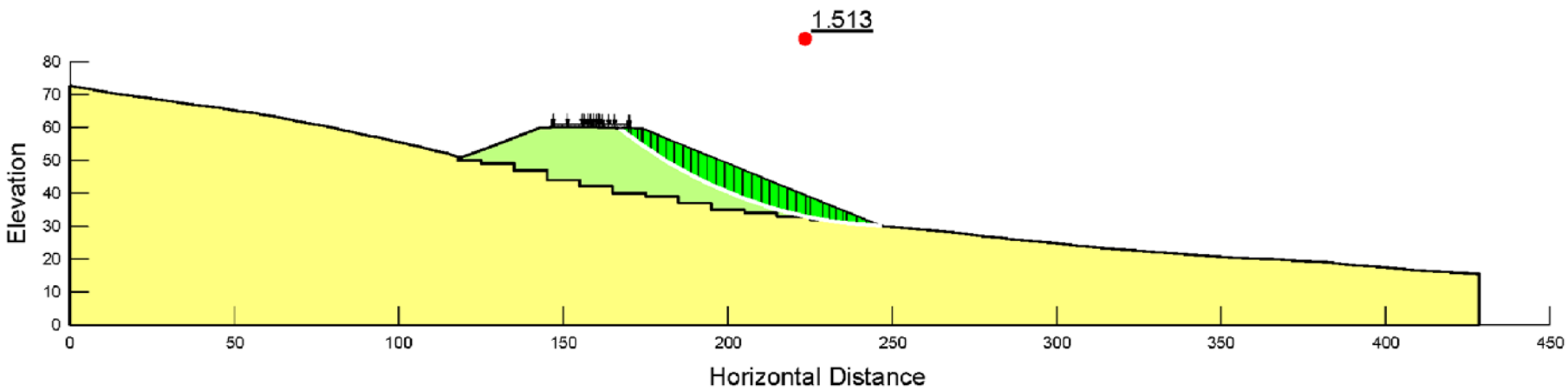
Profile 2 - Seismic

Plate 4B



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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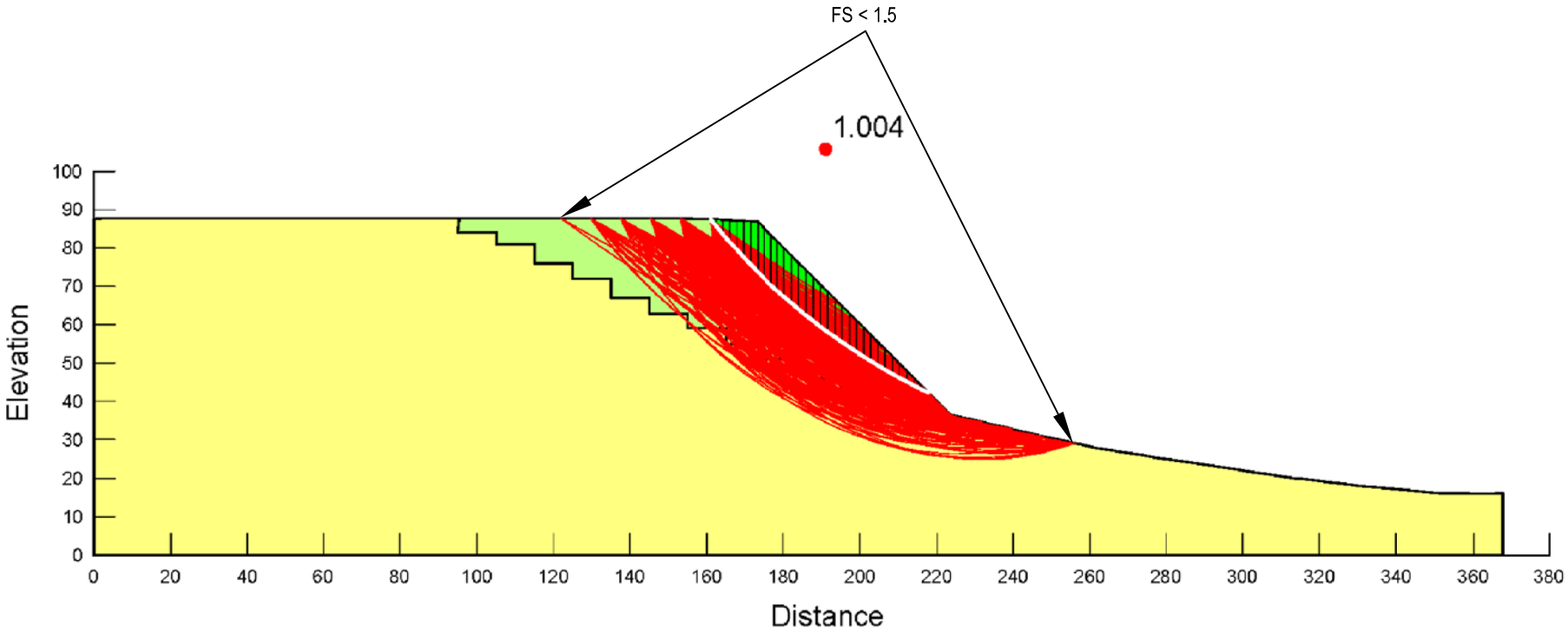
Profile 3 - Static

Plate 5A



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
Drawing: B190345g

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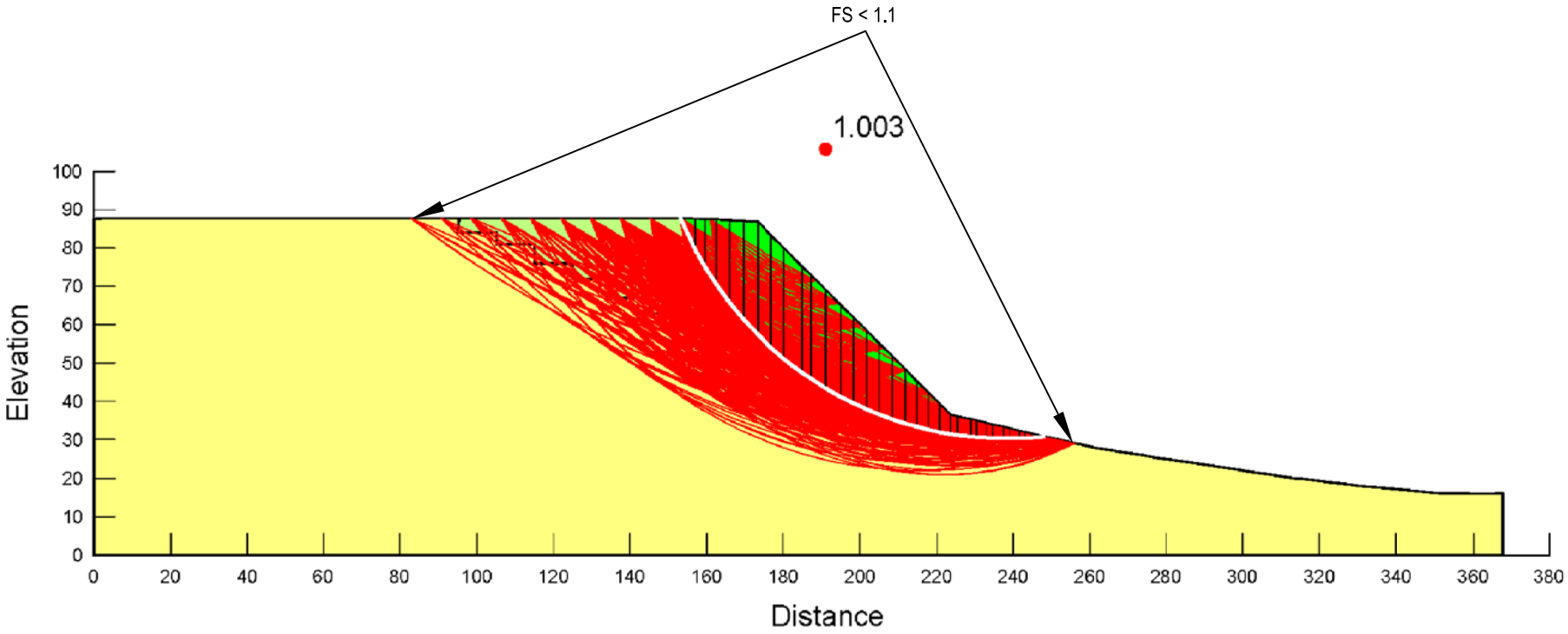
Profile 3 - Seismic

Plate 5B



NOTES:

- Not to Scale

LEGEND

- Lowest Computed Factor of Safety

Broken Horn Subdivision
6421 West Dry Creek Road
Boise, ID

Modified by: CCW
1 April 2019
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PRELIMINARY PLAT CHECKLIST (ACC 8-6)

A preliminary plat (subdivision) is a **hearing level** application, and requires two (2) public hearings.

GENERAL INFORMATION:

Applicant:	DESCRIPTION		Staff:
	PRELIMINARTY PLAT INTAKE MEETING DATE:		
	MASTER APPLICATION FORM		
	DETAILED LETTER by the applicant fully describing the project and addressing the following:		
		Proposed Use(s)	
		Total number of dwellings:	
		Proposed Dwelling units per acre:	
		Zero lot line setbacks proposed: YES ☐ NO ☐	
		Water Provider:	
		Method of Sewage Disposal:	
	PRELIMINARY PLAT: (ACC 8-6-4-2) Two (2) full-sized, scaled plot plans, showing all existing and proposed easements, property lines, and structures drawn to scale, including one copy reduced to 8 ½" x 11" to include the following:		
		Scale of not more than 100' to inch (or written approval from the Director)	
		Limits extending 300' beyond the boundaries of the proposed development	
		Subdivision boundary based on actual field survey, stamped by a licensed professional land surveyor	
		Name of owner	
		Name of person or firm responsible for the drawing	
		Name of the proposed subdivision	
		Date, graphic scale, true north arrow, vicinity map, section, township, and range	
		Ties to all controlling corners	
		Names of neighboring subdivision, according to the Accessor's file	
		Names and boundaries of owners of neighboring properties (Assessor's files)	
		Name, location, width, direction of slope, centerline and right of way of all existing and proposed public streets and private roads	
		Proposed off-site improvements pertaining to streets, water supply, sanitary sewer systems, storm water systems, fire protection facilities, and proposed utilities	
		Street sections and pathway sections	
		Lot layout with lot and block numbers, lot dimensions, and lot area in sq.ft.	
		Graphically depict the minimum setbacks (describe in legend)	
		Identify zero lot line properties	
		Standard Subdivision: Table with number of lots and acreage for residential, commercial, industrial, Common (Landscape, utility, or other), Open Space lots and the total of all	
	NATURAL FEATURES ANALYSIS (ACC 8-4E-4D) must include the following:		
		Hydrology (Visit www.fws.gov/wetlands/data/mapper.html)	
		Soils (Visit www.nrcs.usda.gov)	
		Topography	
		Vegetation	
		Sensitive Plant & Wildlife Species (Provide Letter from **Idaho Dept. of Fish & Game**)	
		Historic Resources	
		Hazardous Areas	
		Impact on Natural Features	
	SUBDIVISION NAME APPROVAL – from Ada County Surveyor		
	PROPOSED STREET NAME (Must comply with ACC 2-1)		
		Contact Ada County Street Name Specialist (Assessor's Office)	
	IRRIGATION PLAN – as required per Idaho Statute 31-3805		
	PHASING PLAN: - *if applicable* (Provide one (1) full size copy and one(1) electronic copy that		

	includes timeline of phasing)	
	OPEN SPACE MANAGEMENT PLAN	
	DRAFT RESTRICTIVE COVENANTS – if proposed	
	PLANNED UNIT DEVELOPMENT (ACC 8-3D)	
	Property must be within an Area of City Impact	
	Property size is a minimum of five (5) acres: YES ☐ NO ☐	
	Density bonus requested: YES ☐ NO ☐ EXPLAIN	
	Deviation of Dimensional Standards requested: YES ☐ NO ☐	
	Public Amenity Proposed: YES ☐ NO ☐ EXPLAIN	
	Does the proposal include a mix of uses that are not allowed as principally permitted or conditional uses in the same base district: YES ☐ NO ☐	
	Commercial Uses: YES ☐ NO ☐	
	Industrial Uses: YES ☐ NO ☐	
	Percentage of Open Space Proposed:	
	Dedicated open space shall abut any lots that have been reduced below the minimum property size and shall abut multi-family development	
	PLANNED COMMUNITIES:	
	Digital Version of Planned Community Subdivision	
	Project Data Tables (see PC application manual)	
	Color keyed full sized copy of preliminary plat displaying land use districts	
	Landscape Plan	
	Urban Public Services Description	
	Urban Public Services Construction Verification	
	Urban Public Services Operation & Maintenance Verification	
	Water Supply Verification & Description	
	Open Space Description	
	Community Center and/or Recreation Center Description (*if applicable*)	
	Transportation (*if applicable*)	
	METES & BOUNDS LEGAL DESCRIPTION. One (1) paper copy & One (1) Electronic Microsoft Word Document	
	PRE-APPLICATION CONFERENCE NOTES	
	NEIGHBORHOOD MEETING CERTIFICATION	
	MUST COMPLY WITH SIGN POSTING REGULATIONS (ACC 8-7A-5)	
Additional Application Requirements, *if applicable:*		
	FLOOD HAZARD (ACC 8-3F)	
	Evacuation plan filed with the Ada City-County Emergency Management Office: YES ☐ NO ☐ (*- Can be a condition of approval*)	
	Flood Zone: YES ☐ NO ☐ Floodway: YES ☐ NO ☐	
	Hillside Tributary Floodway: YES ☐ NO ☐	
	WILDLAND-URBAN FIRE INTERFACE (ACC 8-3B)	
	Fire Protection Plan (prepared by licensed fire professional engineer)	

	APPLICATION FEES: **$1,209** ($1,200+ $9 GIS Fee) + **$20/lot** (for preliminary plats that include more than 35 lots) + **Engineering Review Fee** (chose one): ☐ **$110** - *4 or fewer lots* ☐ **$335** – *5-50 lots* ☐ **$550** – *greater than 50 lots* *NOTE: Building, Engineering, and Surveying applications and fees may be required and are separate from Planning & Zoning Applications and Fees.*	

Supplementary information at the discretion of the Director or County Engineer may be required to sufficiently detail the proposed development within any special development area, including but not limited to hillside, planned unit development, floodplain, southwest, WUFI, Boise River Greenway, airport influence, and/or hazardous or unique areas of development.

Application will not be accepted unless all applicable items on the form are submitted. This application shall not be considered complete until staff has received all required information.

200 W. FRONT STREET
BOISE, IDAHO 83702-7300
PHONE (208) 287-7900

See Article 8-6B of the Ada County Code for Subdivision Required Improvements.

An application for a subdivision requires a public hearing in front of the Planning and Zoning Commission where they will make a recommendation to the Board of Ada County Commissioners. A subsequent public hearing would then occur in front of the Board of Ada County Commissioners.

Prior to the submission of a subdivision and/or a zoning ordinance map amendment application, a neighborhood meeting is required. You may obtain the mailing labels from this office for a $26.50 fee. See Section 8-7A-3 of the Ada County Code for information on neighborhood meetings.

The applicant is required to post the property with the hearing information at least 10 days before the public hearing. A signed certification form is required to be submitted at least 7 days before the public hearing. See Subsection 8-7A-5F of the Ada County Code for information on Sign Posting.

CODE REFERENCES:
Article 8-2A ~ Rural Residential Base District
Article 8-3B ~ Wildland-Urban Fire Interface Overlay District
Article 8-3H ~ Hillside Overlay District
Article 8-4D ~ Private Roads
Chapter 8-6 ~ Subdivision Regulations
Article 8-6A ~ Subdivision Design Standards
Article 8-6B ~ Subdivision Required Improvements
Section 8-7A-3 ~ Neighborhood Meetings
Subsection 8-7A-5F ~ Sign Posting Requirements for public hearings

Preliminary Plat $1200 + $20 per lot >35 lots + $9 GIS
Private Road $409
Hillside Development $350

Engineering Fees
Preliminary Plat $110 / 4 or fewer lots
$335 / 5-50 lots
$550 greater than 50 lots
Private Road $335
Hillside Development
$225 No structure
$335 Uninhabited structure
$675 inhabited structure

MEETING NOTES:
The applicant is seeking to subdivde the property into 10-acre parcels. The initial plan shows approx 15 individual parcels. The plan also shows two private roads, originating from Seaman Gulch Road (private road off a private road). Staff discussed that Ada County Code does not allow a private road off a private road. One option would be to have all the internal roads as public. Another option would be to come in off Seaman Gulch with a public roadway and then take two separate roads off the public road. Another option was taking two separate private roads off Seaman Gulch.

Staff recommends working with ACHD regarding roadway options.

The property is located in the WUFI. The homes will be required to provide defensible space, a fire protection plan is required for a subdivision in the WUFI. The private roads would need to have 5-foot clear area on either side and turnouts every 700-feet.

200 W. FRONT STREET
BOISE, IDAHO 83702-7300
PHONE (208) 287-7900

A hillside development application will be required.

Additional Preap Conference: Required

Neighborhood Meeting Required? Yes

Cross References:

PRIVATE ROAD MAINTENANCE AGREEMENT (DRAFT)

An Agreement made this original date of _____, 20___, applicable to the undersigned parcel owners and users,

RECITALS

WHEREAS, W. Red Poll Dr and N. Brahman Ln. is a private road situated in Ada County Township, County of Boise, State of Idaho

WHEREAS, the undersigned parcel owners are the owners or users of the Roadway Property situated in Ada County Township, County of Ada, State of Idaho, commonly known as W. Red Poll Dr and N. Brahman Ln., and described as follows:

Two new, 50' wide private drive easements will branch from the public street. The private roads will be constructed 24' wide with gravel shoulders. No curb, gutter, or sidewalks are planned. The private roads will be owned and maintained by the Broken Horn Subdivision Owner's Association. The roads will serve the 15 parcel owners, their guests, and emergency vehicles. The private roads will provide frontage and access to fourteen parcels. All roads within the subdivision will comply with WUFI standards.

WHEREAS, the parties desire to enter into an Agreement regarding the costs of maintenance and improvements to as W. Red Poll Dr and N. Brahman Ln.; and

WHEREAS, it is agreed that future parcel owners or users will add their signatures to this document;

NOW THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1. Vehicle and Pedestrian Access Easement. The Roadway Property shall be subject to a perpetual, nonexclusive easement for ingress and egress granting access to all the parcel owners and their occupants, agents, employees, guests, services and emergency vehicles, and those individuals appointed by the homeowner's association to conduct semi-annual road reviews.

2. Utility Easement. The Roadway Property shall be subject to a perpetual, nonexclusive public utility easement for the purpose of permitting above and below ground public utilities to be installed and maintained.

DRAFT

4. Road Maintenance. Road maintenance and road improvements will be undertaken and made whenever necessary to maintain the road in good operating condition at all times and to insure the provision of safe access by emergency vehicles. A majority vote of parcel owners is required for any road improvements and to accept the bid for any road improvement contract. Before authorizing expenditures for future road improvements, parcel owners will be notified by the Homeowners Association, cost estimates will be provided, and a majority agreement will be required. If any parcel owner performs improvements, maintenance, repairs or replacements without the approval of the other lot owners prior to performing such work, the lot owner performing such work shall become liable for the entire cost thereof, unless such work is deemed an emergency. However, where emergency repairs are necessary neither majority vote nor prior approval is necessary before making such improvements or undertaking such maintenance.

5. Parking. For the safety of the residents, no machinery, trailers, vehicles or other property may be stored or parked upon the Private Road except parking of vehicles for limited periods of time (not to exceed twelve hours).

6. Cost Sharing. Road maintenance, snowplowing and road improvement costs shall be shared on a pro-rata basis between the parcel owners sharing access to the above mentioned road. Each parcel owner's share of costs incurred shall be determined as follows: Pro-rated cost share will be based upon the percentage of roadway extending from the start of the Private Road to the intersection of each driveway where a residence exists, or to the midpoint of a property frontage that is adjacent to the roadway when a residence does not exist. The Homeowners Association shall provide an updated copy of the cost allocations at any point that changes are made to the cost allocations.

7. Prepayment. Prepayment of maintenance, snowplowing and improvement costs will be made to the road maintenance account by each property owner. Annually, on or before a date as specified by the Homeowners Association, each parcel owner will contribute their pro-rated share of the estimated annual cost for road maintenance, road improvements, and annual snow removal. Homeowners Association shall send each parcel owner a two-week notice of the annual payments due.

8. Definition of a Parcel. A parcel is defined as a land entity having a certified survey map (CSM), a platted subdivision lot number, or a parcel identification number in the case of unplatted lands. Each parcel is assessed and granted (1) vote regardless of the number of owners. If a parcel is owned by more than one person, all of the owners of the parcel will collectively be referred to as the "parcel owner" for purposes of this Agreement, and will be entitled to one collective vote (i.e. each parcel represents one vote in the matters covered by this Agreement).

9. Future Parcels. Any additional parcels gaining access to the Private Road by way of splitting existing parcels will be bound by all terms and conditions of this agreement, and will be required to pay that portion of the maintenance, snowplowing and improvement costs incurred after the split as determined using the formula contained in Paragraph No. 6 above. If any additional parcels are created

after the original Private Road Maintenance Agreement is signed, the new parcel owners must also sign the agreement. When a parcel is being sold on a land contract, the land contract vendee shall be deemed the owner of record.

10. Snow Plowing. The Private Road shall be snowplowed so as to permit year-round access. The cost shall be shared by the parcel owners as indicated in Paragraph No. 6 above. Individual driveway snow plowing, if desired, will be invoiced to the parcel owners directly by the snowplow contractor.

11. Checking Account. Homeowners Association shall establish and maintain a bank checking account with a local bank and will prepare and distribute to the herein affected parcel owners an annual income and expense report and a yearend balance sheet, accounting for all funds received and disbursed.

15. Binding Agreement. This Agreement shall be binding upon the parties hereto, their respective heirs, executors, administrators and assigns.

16. Amendment. This Agreement may be amended only by a two-thirds majority consent of all parcel owners.

17. Enforcement. This Agreement may be enforced by a majority of parcel owners. If a court action or lawsuit is necessary to enforce this Agreement, the party commencing such action or lawsuit shall be entitled to reasonable attorney fees and costs, if the party prevails.

18. Disputes. If a dispute arises over any aspect of the improvements, maintenance, repair or replacement, a third-party arbitrator shall be appointed to resolve the dispute. The decision of the arbitrator shall be final and binding on all of the lot owners. Contact information for local arbitrators can be obtained through the American Arbitration Association. In selecting a third-party arbitrator, each lot shall be entitled to one vote, and the nominee receiving a majority of the votes shall be the arbitrator. All parties shall share in the cost of any arbitration.

19. Notices. Parcel owners under the Agreement shall be notified by mail or in person. If an address of a parcel owner is not known, a certified notice will be mailed to the address to which the parcel owner's property tax bills are sent.

20. Invalidity. Should any provision in this Agreement be deemed invalid or unenforceable, the remainder of the Agreement shall not be affected, and each term and condition shall be valid and enforceable to the extent permitted by law.

DRAFT

21. Other Agreements. This Private Road Maintenance Agreement replaces all previous Private Road Maintenance Agreements regarding the described Private Road.

22. Town Road and Driveway Ordinance. The Private Road shall be constructed and maintained in accordance with the Ada County Road and Driveway Ordinance.

Signed,

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____
<name> <date>

_____ _____

DRAFT

<name>	<date>
<name>	<date>
<name>	<date>
<name>	<date>
<name>	<date>
<name>	<date>

(Signatures)

DRAFT

ADA COUNTY RECORDER Phil McGrane
BOISE IDAHO Pgs=2 CHE FOWLER
THE LAND GROUP

2019-012682
02/15/2019 04:16 PM
AMOUNT $15 00

00593286201900126820020026

QUITCLAIM DEED

FOR VALUE RECEIVED,

Broken Horn Development, L.L.C.

do(es) hereby convey, release, remise and forever quitclaim unto

Broken Horn Development, L.L.C.

whose current address is:

863 W Seasonal Creek Lane, Meridian, ID 83642

the following described premises:

See attached Exhibit "A"

TO HAVE AND TO HOLD the said premises, unto the said grantees, heirs and assigns forever.

Dated: February 12, 2019

Broken Horn Development, L.L.C.

_____

By: James D. Coles, Managing Member

State of Idaho } ss
County of Canyon }

On this 13th day of February, in the year 2019, before me, Shannon Leslie, a Notary Public in and for said state, personally appeared James Coles known or identified to me to be the Managing Member in the Limited Liability Company known as Broken Horn Development, L.L.C. who executed the foregoing instrument, and acknowledged to me that he/she executed the same in said LLC name.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Shannon Leslie

Notary Public for the State of ID
Residing at: Nampa, Idaho
Commission Expires: 6/13/24

SHANNON M. LESLIE
NOTARY
PUBLIC
Comm No. 22291
STATE OF IDAHO

THE LAND GROUP

December 5, 2018

Project No.: 117103

PARCEL "A"
BROKEN HORN DEVELOPMENT, LLC

A parcel of land being a portion of the Southwest One Quarter of Section 31, Township 5 North, Range 2 East, Boise Meridian, Ada County, Idaho being more particularly described as follows:

Commencing at the Center One Quarter corner of said Section 31, marked by an aluminum cap monument; thence on the east-west mid-section line of said section 31, North 89° 02' 41" West, 623.77 feet to a point on the southwesterly right-of-way line of North Seaman Gulch Road AND the POINT OF BEGINNING;

Thence on said right-of-way line, South 32° 52' 31" East, 285.24 feet;
Thence leaving said right-of-way line, South 50° 49' 52" West, 488.11 feet;
Thence South 46° 55' 23" West, 171.46 feet;
Thence South 42° 20' 47" East, 17.46 feet;
Thence South 59° 25' 00" West, 72.29 feet to a point of curvature;
Thence 17.70 feet on the arc of a curve to the left, having a radius of 175.00 feet, a central angle of 05° 47' 44", and whose long chord bears South 56° 31' 08" West, 17.69 feet;
Thence North 36° 22' 38" West, 239.76 feet;
Thence North 62° 30' 03" West, 227.96 feet;
Thence North 20° 03' 16" East, 103.72 feet;
Thence South 89° 36' 42" West, 35.07 feet;
Thence North 05° 42' 38" East, 342.69 feet, to the Center-West One Sixteenth corner of said Section 31;
Thence on the ease-west mid-section line of said Section 31, South 89° 02' 41" East, 723.97 feet to the POINT OF BEGINNING.

The above described parcel contains 10.00 acres (435600 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
PLS 15550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

ADA COUNTY RECORDER Phil McGrane
BOISE IDAHO Pgs=3 CHE FOWLER
THE LAND GROUP

2019-012689
02/15/2019 04:16 PM
AMOUNT $15.00

00593291201900126890030031

QUITCLAIM DEED

FOR VALUE RECEIVED,

Broken Horn Development, L.L.C.

do(es) hereby convey, release, remise and forever quitclaim unto

Broken Horn Development, L.L.C.

whose current address is:

863 W Seasonal Creek Lane, Meridian, ID 83642

the following described premises:

See attached Exhibit "A"

TO HAVE AND TO HOLD the said premises, unto the said grantees, heirs and assigns forever.

Dated: February 12, 2019

Broken Horn Development, L.L.C.

_____

By: James D. Coles, Managing Member

State of Idaho } ss
County of Canyon }

On this 13th day of February, in the year 2019, before me, Shannon Leslie, a Notary Public in and for said state, personally appeared James Coles known or identified to me to be the Managing Member in the Limited Liability Company known as Broken Horn Development, L.L.C. who executed the foregoing instrument, and acknowledged to me that he/she executed the same in said LLC name.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

SHANNON M. LESLIE
NOTARY PUBLIC
Comm No. 32287
STATE OF IDAHO

Shannon Leslie
Notary Public for the State of ID
Residing at: Nampa Idaho
Commission Expires: 6/13/24

Thence leaving said east-west mid-section line, South 05° 42' 38" West, 342.69 feet;
Thence North 89° 36' 42" East, 35.07 feet;
Thence South 20° 03' 16" West, 103.72 feet;
Thence South 14° 59' 18" West, 246.27 feet;
Thence South 10° 05' 16" East, 230.39 feet;
Thence South 00° 47' 29" West, 592.17 feet;
Thence South 89° 02' 40" East, 637.82 feet;
Thence North 08° 10' 06" East, 754.88 feet;
Thence North 55° 24' 47" East, 496.55 feet to the POINT OF BEGINNING.

The above described parcel contains 133.68 acres (5823164 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
P.L.S. 15550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

ADA COUNTY RECORDER Phil McGrane
BOISE IDAHO Pgs=3 CHE FOWLER
THE LAND GROUP

2019-012683
02/15/2019 04:16 PM
AMOUNT $15.00

00593287201900126830030030

QUITCLAIM DEED

FOR VALUE RECEIVED,

Broken Horn Development, L.L.C.

do(es) hereby convey, release, remise and forever quitclaim unto

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whose current address is:

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the following described premises:

See attached Exhibit "A"

TO HAVE AND TO HOLD the said premises, unto the said grantees, heirs and assigns forever.

Dated: February 12, 2019

Broken Horn Development, L.L.C.

By: James D. Coles, Managing Member

State of Idaho } ss
County of Canyon }

On this 13th day of February, in the year 2019, before me, Shannon Leslie, a Notary Public in and for said state, personally appeared James Coles known or identified to me to be the Managing Member in the Limited Liability Company known as Broken Horn Development, L.L.C. who executed the foregoing instrument, and acknowledged to me that he/she executed the same in said LLC name.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

SHANNON M. LESLIE NOTARY PUBLIC Comm No. 22291 STATE OF IDAHO

Notary Public for the State of ID
Residing at: Nampa, Idaho
Commission Expires: 6/3/29

THE LAND GROUP

January 18, 2019
Project No.: 117103

PARCEL "B"
BROKEN HORN DEVELOPMENT, LLC

A parcel of land being a portion of the Southwest One Quarter of Section 31, Township 5 North, Range 2 East, Boise Meridian, Ada County, Idaho being more particularly described as follows:

Commencing at the Center One Quarter corner of said Section 31, marked by an aluminum cap monument; thence on the east-west mid-section line of said section 31, North 89° 02' 41" West, 623.77 feet to a point on the southwesterly right-of-way line of North Seaman Gulch Road; Thence on said right-of-way line, South 32° 52' 31" East, 285.24 feet to a point of curvature AND the POINT OF BEGINNING;

Thence continuing on said right-of-way line, 155.25 feet on the arc of a curve to the left, having a radius of 943.25 feet, a central angle of 09° 25' 50", and whose long chord bears South 37° 37' 43" East, 155.08 feet to a point of non-tangent compound curvature;
Thence 153.46 feet on the arc of a curve to the left, having a radius of 868.73 feet, a central angle of 10° 07' 15", and whose long chord bears South 48° 13' 26" East, 153.26 feet;
Thence leaving said right-of-way line, South 55° 24' 47" West, 496.56 feet;
Thence South 08° 10' 06" West, 754.88 feet;
Thence North 89° 02' 40" West, 637.82 feet;
Thence North 00° 47' 29" East, 592.17 feet;
Thence North 10° 05' 16" West, 230.39 feet;
Thence North 14° 59' 18" East, 246.27 feet;
Thence South 62° 30' 03" East, 227.96 feet;
Thence South 36° 22' 38" East, 239.76 feet to a point of curvature;
Thence 17.70 feet on the arc of a curve to the right, having a radius of 175.00 feet, a central angle of 05° 47' 44", and whose long chord bears North 56° 31' 08" East, 17.69 feet;
Thence North 59° 25' 00" East, 72.29 feet;

Thence North 42° 20' 47" West, 17.46 feet;
Thence North 46° 55' 23" East, 171.46 feet;
Thence North 50° 49' 52" East, 488.11 feet to the POINT OF BEGINNING.

The above described parcel contains 17.68 acres 770181 sq.ft.) more or less.

PREPARED BY:

The Land Group, Inc.

Michael Femenia, PLS

PROFESSIONAL LAND SURVEYOR
LICENSED
13550
STATE OF IDAHO
MICHAEL S. FEMENIA

01/18/2019

STREET NAME REVIEW APPLICATION

Please attach a legible copy of plat or site plan with the application and submit directly to: Ada County Assessor - 190 E. Front Street, Boise, ID 83702, Email: streetnamemail@adacounty.id.gov

Applications will be reviewed in the order in which they are received

Application Date _____ Review Needed By _____

Project/Subdivision Name _____ Preliminary Plat ☐ Final Plat ☐

Type Of Dwelling(s)/Structure(s) Proposed Single Family ☐ Multi-Family ☐ Other ☐

I'm Applying To: ☐ Name New Public or Private Street(s) ☐ Change Existing Street Name

Existing Street Name _____

Number Of New Public Streets Proposed (Please Attach Plat/Plan) _____ Number Of Private/Changed Streets Proposed (Please Attach Plat/Plan) _____

Private/Changed Street Names Choices

1st Choice _____ 2nd Choice _____

3rd Choice _____ 4th Choice _____

Applicant Information

Company/Firm Name: _____

Applicant Type: Architect ☐ Developer ☐ Engineer ☐ P & Z Dept. ☐ Contractor ☐ Owner ☐

Agent/Contact Name: _____

Phone: _____ Email: _____

Subject Property Information

Location/Street Address _____ Township _____ Range _____ Section _____

Parcel Number(s) _____

Owner Information

Same As Applicant? No ☐ Yes ☐

Owner Name/Company _____ Phone _____

Address _____ City _____ State _____ Zip _____

Street name reviews will be completed within 2 to 3 weeks of receipt of application.
Completed reviews will be uploaded to the following Ada County Assessor link:
https://adacounty.id.gov/Assessor/Land-Records/Street-Naming-and-Addressing

Ada County Assessor - 190 E. Front St., Suite 107, Boise, ID 83702 - Phone: 208-287-7273

THE LAND GROUP

Broken Horn Subdivision

Ada County, Idaho

Visual Impact Report

Engineer
The Land Group, Inc.
462 East Shore Drive, Ste. 100
Eagle, Idaho 83616
Contact: Jason Densmer, PE
Ph: 208.939.4041

PROFESSIONAL ENGINEER
REGISTERED
10961
STATE OF IDAHO
JASON DENSMER
04/19/2019

April 18, 2019

TLG Project No. 117103

Report Purpose

This report provides an assessment of the anticipated visual impacts of the proposed Broken Horn Subdivision from key vantage points along public roadways or public viewing areas.

Project Overview

The proposed development is situated on approximately 151-ac of relatively steep, hilly terrain. The site consists of two generally north-south trending ridgelines separated by gently sloping valleys. The ridgelines slope downwards from the north to the south.

Access to the site and the only adjacent roadway is Seaman Gulch Rd which forms the northeast boundary of the property.

Existing & Proposed Views

The attached exhibits illustrate the existing view from Seaman Gulch Rd at a location near the northeast corner of the property.

A companion exhibit illustrating the proposed view from the same location is also attached.

Screening Methods

The proposed development is well-screened from public roadways or public viewing areas. Following development, the proposed project will be visually compatible with the surrounding properties.

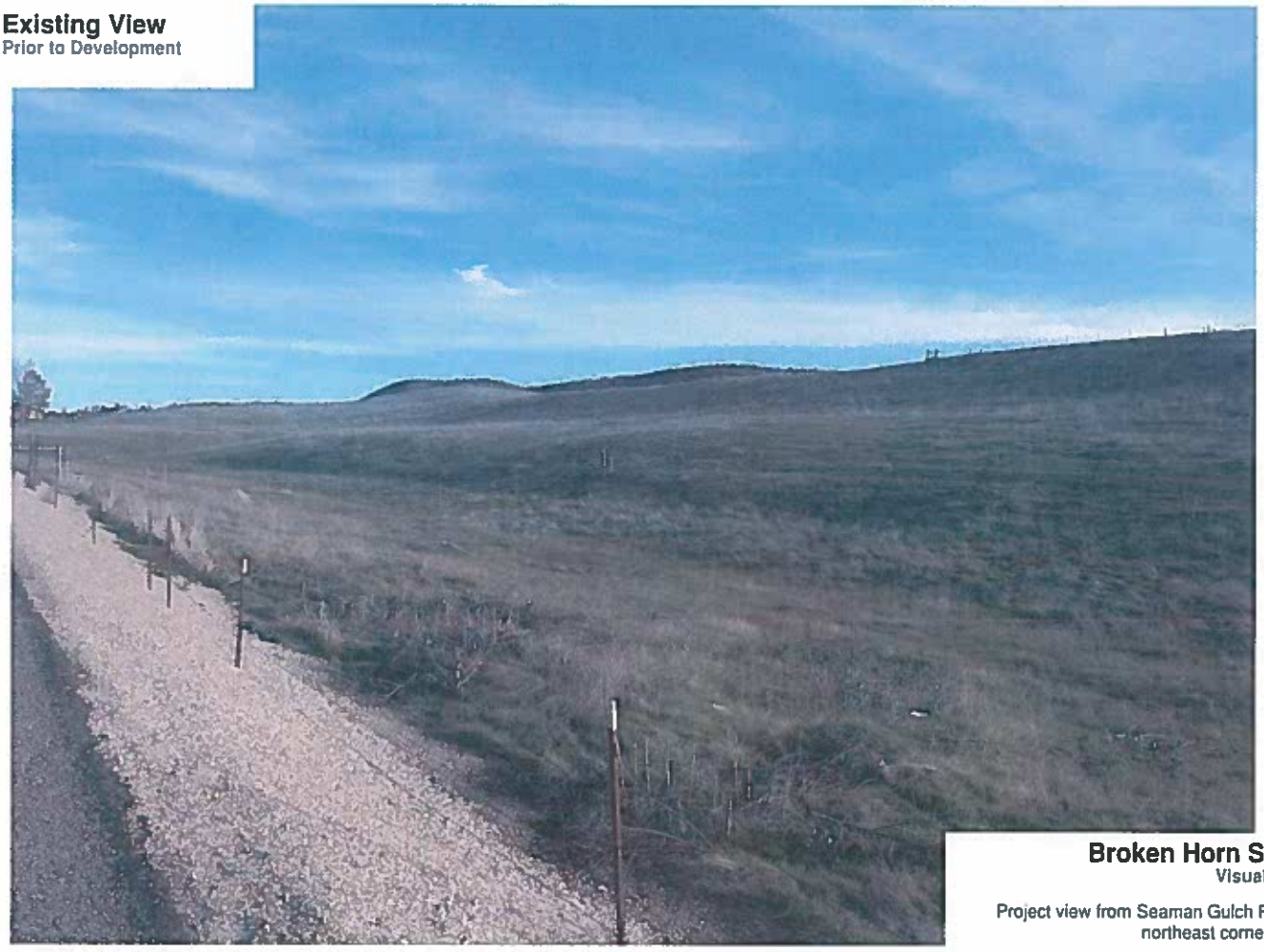
Techniques employed to lessen the visual impacts from the proposed development:

1. Topography. The hilly terrain of the site provides visual screening of proposed improvements from the public roadways. Seaman Gulch Rd is generally at a lower elevation and/or separated from the proposed development areas by hills which obscure views. Project grading has been carefully designed to minimize exposed slopes visible from these public areas.
2. Limited views of the property from public roadways or public viewing areas. The existing roads adjacent to the project have limited viewpoints to the proposed development areas.
3. Building envelopes. The site topography dictates the proposed home site locations to a significant degree. The areas between building sites will remain undisturbed to minimize visual impacts.
4. Vegetation. Existing vegetation primarily consist of sagebrush, bunchgrass, and other native grass varieties typical of arid to semi-arid environments. These will be preserved and protected to the extent practical. Areas disturbed by construction will be revegetated in accordance with the Slope Stabilization and Revegetation Plan.

Attachments

- Existing view of property prior to development
- Proposed view of property after development

Existing View
Prior to Development



Broken Horn Subdivision
Visual Impact Report

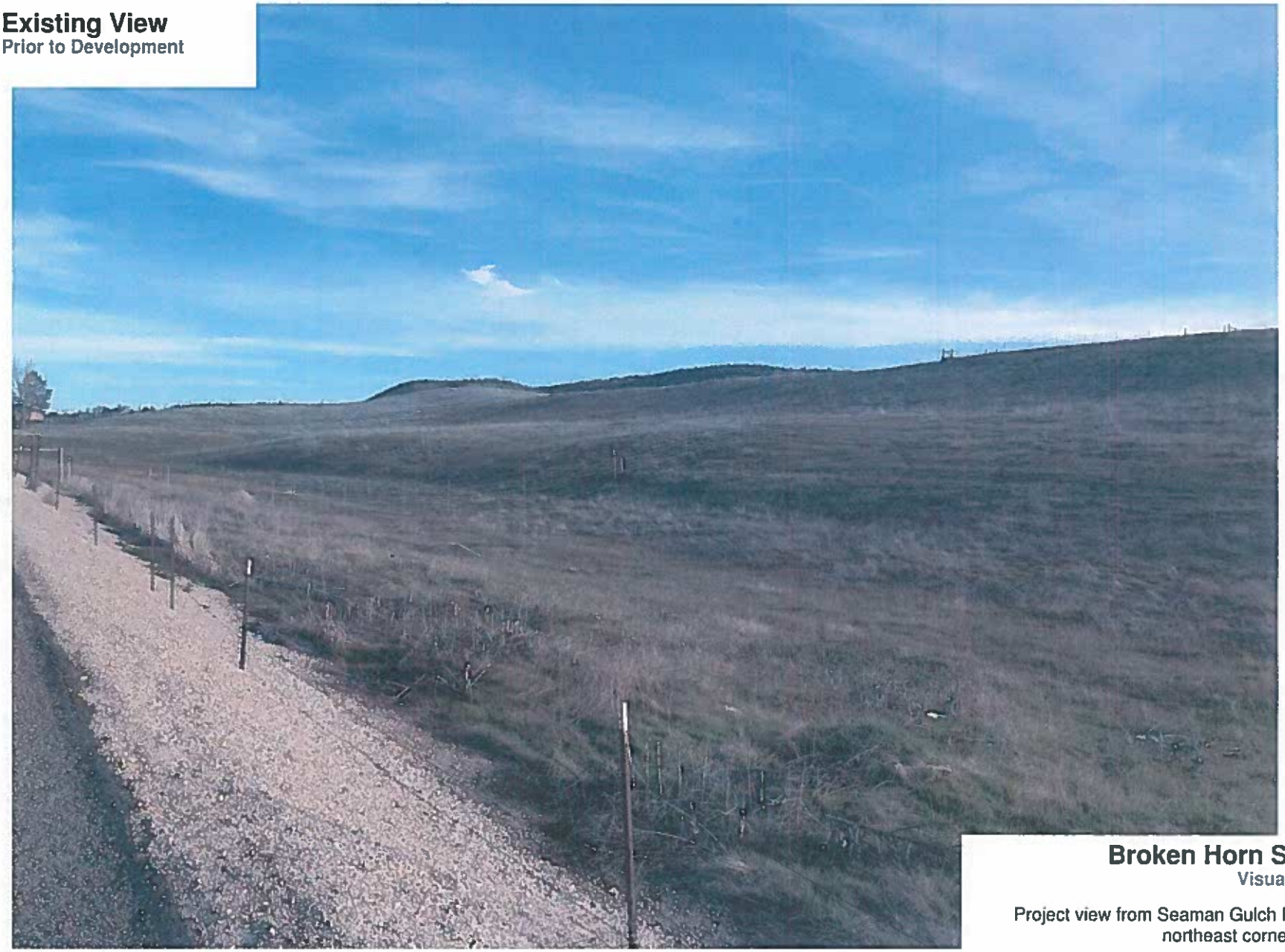
Project view from Seaman Gulch Rd near property northeast corner. View to south.

Proposed View
After Development

Broken Horn Subdivision
Visual Impact Report

Project view from Seaman Gulch Rd near property northeast corner. View to south.

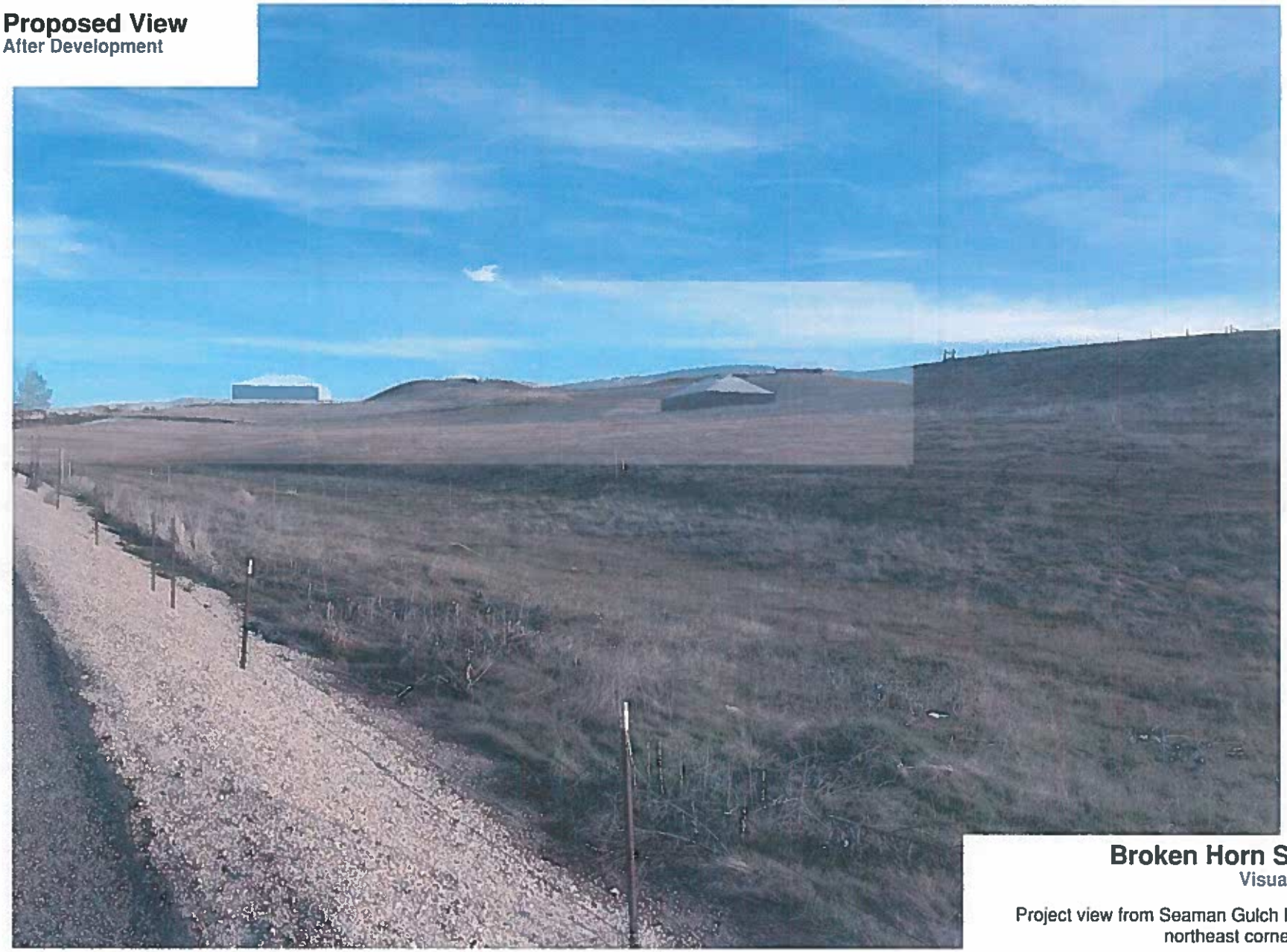
Existing View
Prior to Development



Broken Horn Subdivision
Visual Impact Report

Project view from Seaman Gulch Rd near property northeast corner. View to south.

Proposed View
After Development



Broken Horn Subdivision
Visual Impact Report

Project view from Seaman Gulch Rd near property northeast corner. View to south.

WILDLAND-URBAN FIRE INTERFACE REVIEW -

BROKEN HORN SUBDIVISION

18 December 2018

REGISTERED PROFESSIONAL ENGINEER
3023
12-18-2018
STATE OF IDAHO
Jerry L. O'Neal

WILDLAND-URBAN FIRE INTERFACE REVIEW
BROKEN HORN SUBDIVISION
HIDDEN SPRINGS, ID

The purpose of this review is to evaluate the fire hazards associated with the 18-lot (15 residential, 3 common) subdivision of 161.6 acres located along the west side of N. Seamen Gulch Rd. Hidden Springs, Idaho. The Broken Horn Subdivision is a planned single-family occupancy with a minimum lot size of 10 acres. The property is zoned for rural residential (RR) with no change anticipated. The subdivision is located entirely within Ada County, Idaho. The review is centered on normal private and emergency vehicle access, the wildlands fuel for wildfire potential, and the fire prevention measures taken by the Home Owners to help reduce and mitigate the effects of a fire with respect to the surrounding properties and the home sites.

Background:

The Broken Horn Subdivision is on property located approximately one-eighth mile from the Hidden Springs community center and approximately one-quarter mile from the Hidden Springs Fire Station operated by the Boise Fire Department under agreement with the North Ada Fire and Rescue. It is presently rolling hills terrain with western short grass vegetation. There are no trees or sagebrush. The fuel load is considered as low with low heat potential. Access to the development is by North Seaman Gulch Road approximately one-quarter mile from the Hidden Springs Fire Station and approximately one-quarter mile from the intersection of N/ Seamen Gulch rd. and West Dry Creek Road. West Dry Creek Road provides access to the Horseshoe Bend Road (Highway 55) on the west. These are all Ada County roads and are maintained by the Ada County Highway District (ACHD). The roads are all capable of supporting emergency vehicles under normal road conditions.

The proposed subdivision consists of moderate to relatively steep sloping terrain, approximately 10 to 23% along the slope of the hill. The one access road will be construction is along the side slope of the hill to minimize the road grade wherever possible. Cutting and filling for road construction will be at an absolute minimum. The higher portions of the road may reach 10% slope for short stretches as an upper limit. The majority of the road will have a slope approximating 5% or less. In general, the soils are fine in texture with some surface run-off areas. Native vegetation will be retained in areas not used as building sites. Where the native vegetation has been disturbed for road grading, building lots, or water retention, the areas will be re-seeded with native plant species to control potential erosion.

Access:

North Seaman Gulch Road and Dry Creek Road are both all weather roads built to Ada County Highway District (ACHD) standards and are maintained by the ACHD. Portions of Dry Creek Road are occasionally used for construction access for heavy vehicles. The proposed access to the Broken Horn Subdivision is on the west side of N. Seamen Gulch Rd. adjacent to the Hidden Springs community center. All roads anticipated to be public roads at the end of construction and will be built to Ada County Highway District requirements, have a 50 right-of-way, with a 30 foot rural road section (paved to twenty-four (24) feet wide with three (3) feet of compacted gravel on each side). Driveways to individual residences are anticipated to be paved to 20 feet with gravel shoulders, and be provided with turn-arounds as required by the International Fire Code, Appendix D. Every aspect of the terrain will be used to minimize the slope of the road. The steepest slope for the Broken Horn Subdivision approaches 10% for a short stretch,; the majority of the roads will be approximately 5% or less.

There is no restriction on private or emergency vehicle access to the access road from N. Seamen Gulch Road to the lots in the Broken Horn Hidden Subdivision.

Environmental:

One of the goals of the Broken Horn Subdivision development is to preserve the nature of the foothills and to help retain the wildlife habitat while blending in with the Hidden Springs development. The greater part of the land within the development area is native and undisturbed. This actually helps reduce the fire danger in that the native vegetation is rather sparse and low growing except along the periodic drainage watercourses. The ground cover in the subdivision is short native and pasture grasses with no trees or shrubs. The building sites will be large and placed to prevent damage to the drainage courses All lots are large and have building sites greater than 0.25 acres where the slope is less than 3%.This helps to maintain visual aspects of the properties and to maintain the essentially untouched native aspect of the surrounding area while allowing for an rural living environment.

The buildings lots are encouraged to maintain plantings that are drought tolerant and native to the area. All native plants common to the area are readily available. The landscaping requirements will be in compliance with the ICC International Urban-Wildlands Interface Code. The subdivision does not have a conforming water supply in that each residence is to have its own domestic water well. Fire water is to be from the fire hydrants and fire trucks located at the Hidden Springs community center. For a non-conforming water supply there are two choices for building materials. The first is for a thirty (30) foot defensible space is required around the buildings and the roofs are to be Class B with the building exteriors to be low to noncombustible materials (one hour) as required by the ICC International Urban-Wildlands Interface Code (IUWIC). The second is to provide a forty-five (45) foot defensible space, which will allow a class B roof with normal building materials for exterior construction and decks.

The vegetation for the majority of the area of Hidden Springs area is western dry land short grass and brush. Most, if not all, of the hillside growth is less than 10 inches tall. Some small isolated portions of bitterbrush, rabbit brush, and small trees are growing

along the lower drainage ways but they do not affect the hazard severity rating of the subdivision. The fuel value for dry grass is low even though it burns readily.

Calculations show that in a low wind to moderate wind condition with very low moisture (worst case condition), the flames from a surface vegetation fire on the steeper slopes can cause a flame height of about 3 feet with the possibility of reaching 4 feet. Transmission of the fire to the surrounding area is through ignition of the native grasses. The refuge area radius for burning grasses on the hillsides is in the order of 20 feet. The required defensible areas around the buildings of the subdivision is 30 or 45 feet. Ornamental shrubs and trees within the landscaped areas must be kept away from the buildings and the lower branches for the trees must be 6 feet from the ground. The chance of causing any building in the subdivision to catch fire from a short grass fire is not high. The building lots are on relatively flat ground (about a 3% slope or less). The lots will also have watered and tended lawns surrounding the homes for more than a 30-foot radius.

Fire Prevention Measures:
Construction in Broken Horn for both landscaping and buildings must meet certain criteria. The most basic criteria are that the buildings be reasonably fire resistant. All roofs must be Class B and non-reflective. Building siding of wood, masonry, stone, or brick are encouraged. Building siding of hardboard or plywood veneer, or vinyl, is not allowed. Fire defensible spaces around buildings are as required meet the ICC Urban-Wildlands Interface Code and WUFI standards. In practice, the actual layout of the building groups causes separations from the native vegetation will be larger than the minimum 30 feet. Any existing vegetation must be removed from within 30 feet of any building.

Suez Water of Idaho provides water to the Hidden Springs so a reliable water supply is available for fire suppression. The Hidden Springs fire station is approximately one-quarter mile from Broken Horn subdivision and the North Ada Fire and Rescue main station located at 5800 Glenwood is six-miles (12 minutes) away as a backup responding fire station. Hydrants are located within 1500 feet at the Hidden Springs community center. The fill and return time from Hidden Springs for a fire truck would be about 10 minutes or less. Each of the residential buildings would be required to have fire sprinkler systems meeting NFPA 13D and supplied from their individual water wells.

Refuge Areas:
Specific refuge areas for Broken Horn are not required. There is sufficient open land provided within the subdivision and the access roads are wide enough to provide what should be sufficient separation between a grass fire and the residents. Each of the building lots is required to maintain a 30 or 45 foot defensible space around each building group. The distance is dependent upon the building exterior construction materials.

Emergency Vehicle Access:
Broken Horn has adequate emergency vehicle access from N. Seamen Gulch Road. There is one access road, approximately with 45-foot radius circles at each intersection and at the ends of the roads to act as turnouts and turn-arounds. It will be built to Ada County

and IFC Appendix D requirements for width, support capacity, and turn-arounds. The Broken Horn access road provides direct access to all lots.

Conclusions and Recommendations:

The access road and street design for the Broken Horn Subdivision provides adequate fire and other emergency vehicle access. The subdivision is accessible from N. Seamen Gulch Road, a public road designed, built, and maintained to Ada County standards. The internal access road and driveways provides access to all building locations over surfaces that will meet the International Fire Code (IFC) requirements for fire apparatus access roads for width and dead-end lengths.

Fire prevention and protection for the subdivision is provided for by building construction materials and locations (setback distances) to comply with the ICC International Urban-Wildlands Interface Code (IUWIC) and the Ada County Wildland-Urban Fire Interface Overlay District Construction Requirements. These requirements are incorporated into the projects CCR's. The defensible zone of 30 feet, minimum, clear around each structure is in the CCR's as a separate reference and in the setback requirements.

The individual lots will have separate wells. The wells will provide domestic water and fire sprinkler water to meet NFPA 13D requirements. Fire hydrants are located approximately one-quarter mile away at the Hidden Springs community center with a fill and return time of about 10 minutes.

Fire behavior was calculated using U.S.F.S. software, BehavePlus5. The calculations showed that the low western grassland fuel loading, typical for the project area, did not produce a flame height or ember ignition risk sufficient to rate the hazard above a low to moderate hazard. Defensible distances as required by the IUWIC are reinforced by the subdivision's CCR's. The fire prevention construction requirements of the IUWIC and the Ada County Wildland-Urban Fire Interface Overlay District are also spelled out in the CCR's.

Jerry L. O'Neal, PE(ME, FPE)
18 December 2018

APPENDIX C
FIRE HAZARD SEVERITY FORM; BROKEN HORN SUBDIVISION, HIDDEN SPRINGS, ID

When adopted, this appendix is to be used in place of Table 502 to determine the fire hazard severity.

A. Subdivision Design Points

1. Ingress/Egress

Two or more primary roads	1___	
One road	3_X__	
One-way road in, one-way road out	5___	

2. Width of Primary Road

20 feet or more		1_X__
Less than 20 feet	3___	

3. Accessibility

Road grade 5% or less		1___
Road grade more than 5%	3_X__	

4. Secondary Road Terminus

Loop roads, cul-de-sacs with an outside turning Radius of 45 feet or greater	1_X__	
Cul-de-sac turnaround		
Dead-end roads 200 feet or less in length		3___
Dead-end roads greater than 200 feet in length	5___	

5. Street Signs

Present		1___
Not present		3_X__

B. Vegetation (IUWIC Definitions)

1. Fuel Types

Light		1_X__
Medium		5___
Heavy		10___

2. Defensible Space

70% or more of site		1___
30% or more, but less than 70% of site		10_X__
Less than 30% of site		20___

C. Topography **(worst case for building site)**

8% or less		1_X__
More than 8%, but less than 20%		4___
20% or more, but less than 30%		7___
30% or more		10___

D. Roofing Material

Class A Fire Rated		1___
Class B Fire Rated	5_X__	
Class C Fire Rated		10___
Nonrated		20___

E. Fire Protection.Water Source

500 GPM hydrant within 1,000 feet	1___	
Hydrant farther than 1,000 feet or draft site		2_X__
Water source 20 min. or less, round trip		5___
Water source farther than 20 min., and 45 min. or less, round trip	7___	
Water source farther than 45 min., round trip	10___	

F. Existing Building Construction Materials

Noncombustible siding/deck		1___
Noncombustible siding/combustible deck		5___
Combustible siding and deck		10_X__

G. Utilities (gas and/or electric)

All underground utilities		1_X__
One underground, one aboveground	3___	
All aboveground		5___

Total for Subdivision 41

ICC Urban- Wildlands Interface ratings

Moderate Hazard	40 - 59
High Hazard	60 - 74
Extreme Hazard	75+