

120 Columbia Hill Court Grading Special Use Permit



Prepared by:



July 15, 2019

Job # 432-01

120 COLUMBIA HILL COURT

GRADING SPECIAL USE PERMIT

Prepared for:

Rick Edwards
250 Burks Boulevard
Reno, Nevada 89523

Prepared by:

Rubicon Design Group, LLC
1610 Montclair Avenue , Suite B
Reno, Nevada 89509
(775) 425-4800

July 15, 2019

120 Columbia Hill Court – Grading Special Use Permit

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Washoe County Development Application
Owner Affidavit
Special Use Permit Application
Property Tax Verification

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Preliminary Civil Improvement Plans

120 Columbia Hill Court – Grading Special Use Permit

Introduction

This application includes the following requests:

- A **Special Use Permit** to allow for grading of a driveway and horse arena associated with a single family residence.

Project Location

The project site (APN # 079-342-09) consist of 55.44 acres located at 120 Columbia Hill Court within the North Valleys Area Plan. Specifically, the subject parcel is located on the east side of Columbia Hill Court which intersects with Columbia Hill Drive, connecting to Red Rock Road. Figure 1 (below) depicts the project location.

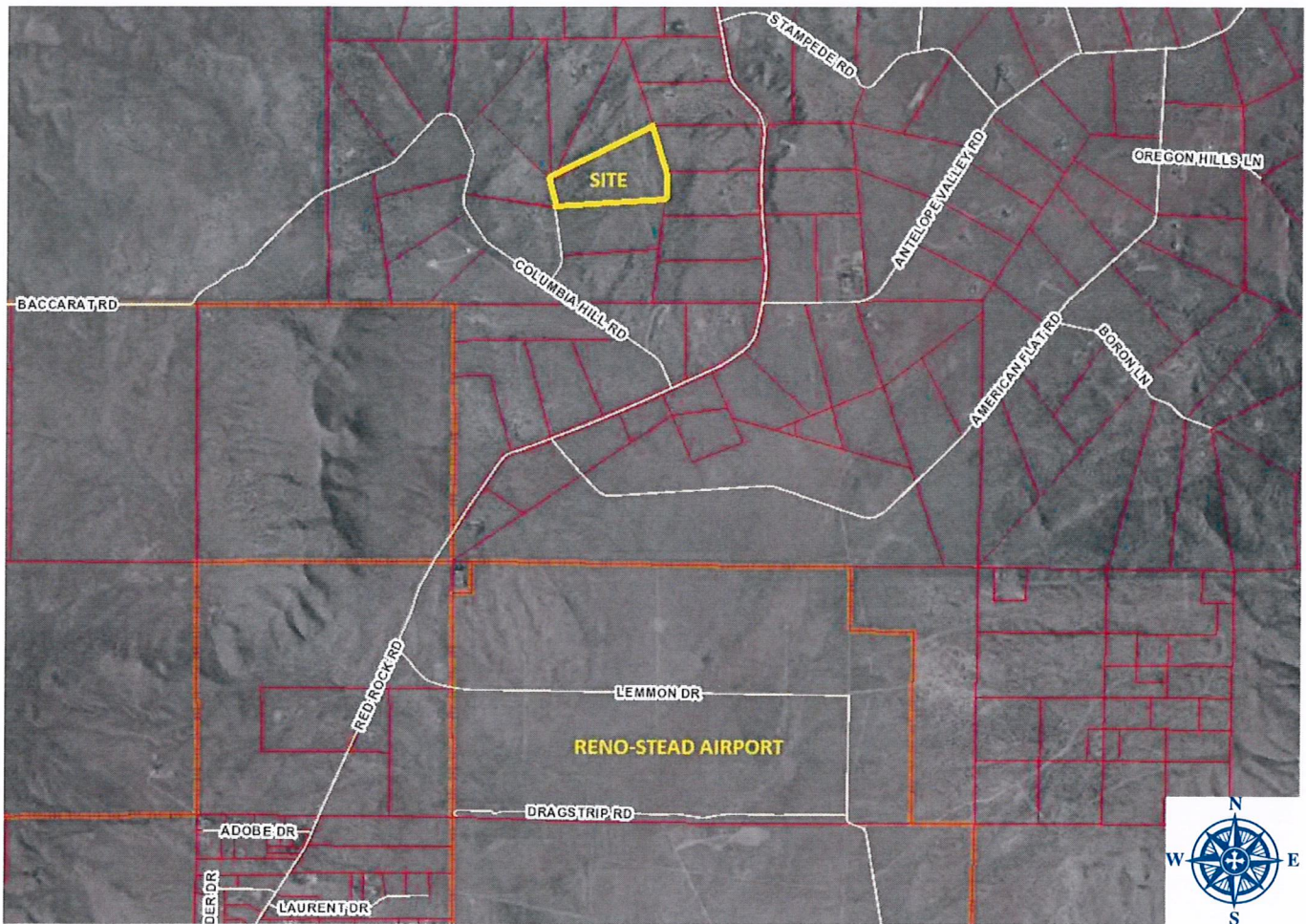


Figure 1 – Vicinity Map

120 Columbia Hill Court – Grading Special Use Permit

Existing Conditions

The subject property is zoned General Rural (GR) and is part of the Red Rock Estates subdivision. The project site is vacant with the exception of a small shed structure associated with an onsite well. A driveway has been graded previously on the property and has been overgrown with sagebrush and native grasses. The previous grading was completed prior to the applicant acquiring the parcel. Figures 2 (below) and 3 (following page) depict the existing onsite conditions.

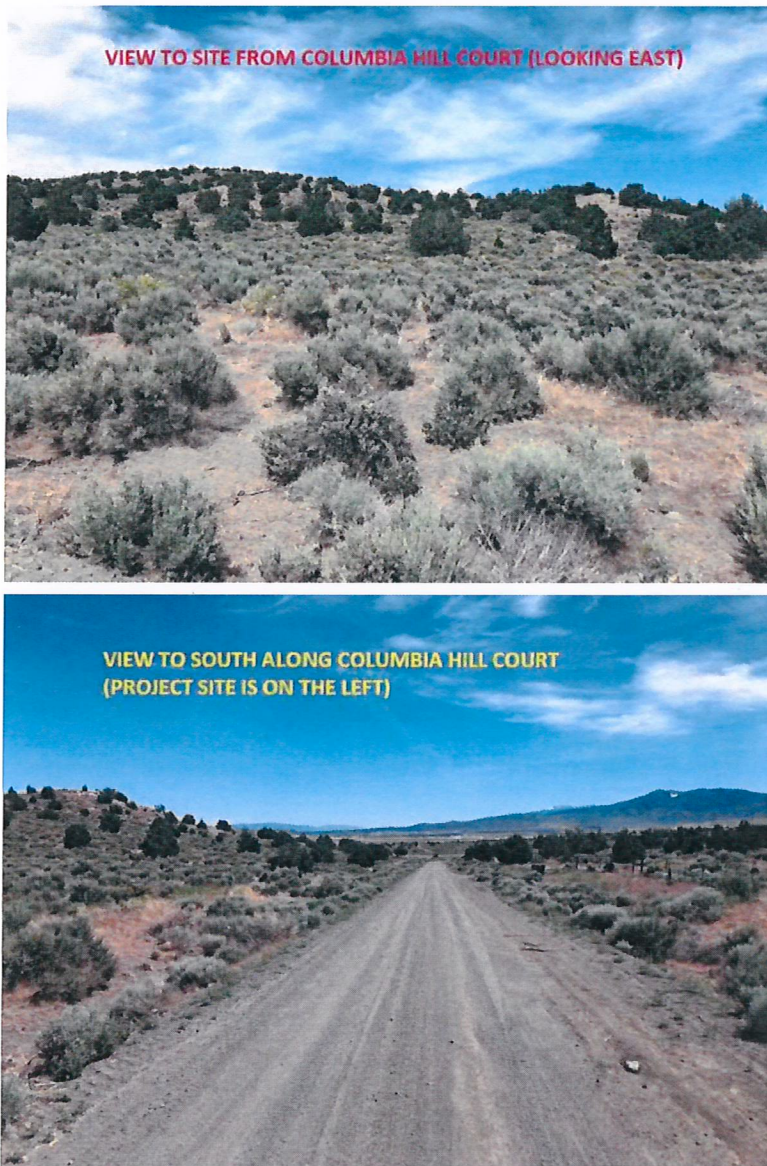


Figure 2 – Existing Conditions

120 Columbia Hill Court – Grading Special Use Permit

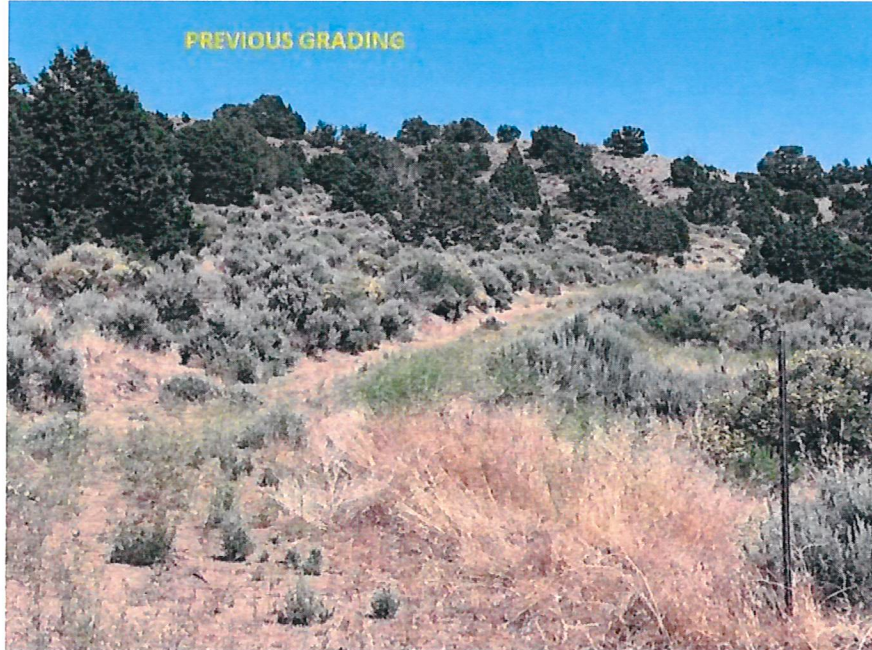
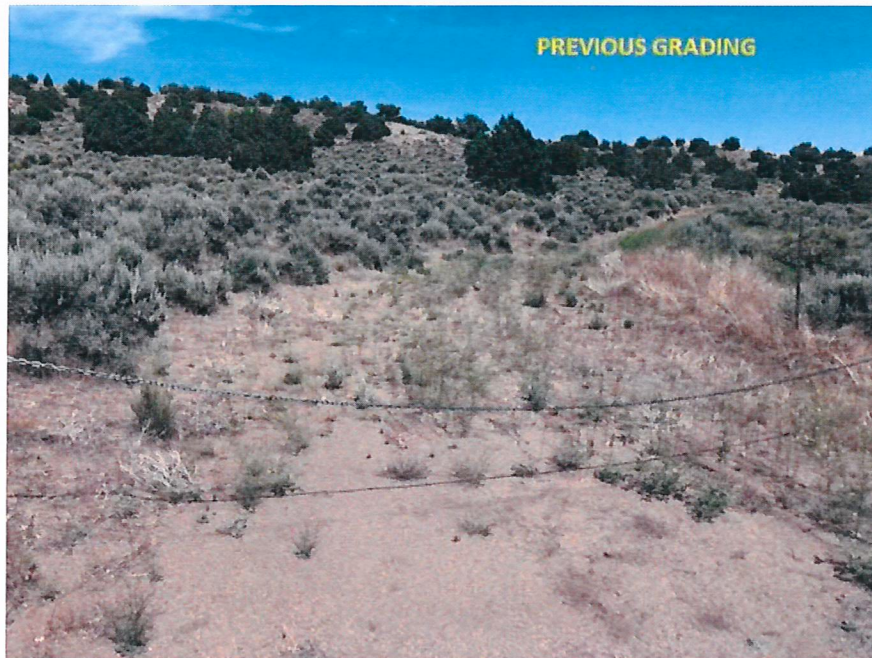


Figure 3 – Existing Conditions

120 Columbia Hill Court – Grading Special Use Permit

Project Request

The project applicant plans to construct a new single family residence at the subject property. It is planned to locate the home at the north central portion of the site in order to maximize views and privacy. In order to reach the planned homesite, it is necessary to grade a new driveway along the southern portion of the parcel which will then traverse north to the building site. Per section 110.438.35 of the Washoe County Development Code, a Special Use Permit (SUP) is triggered based on the overall amount of disturbance and that grading will occur on slopes in excess of 15%.

As part of this SUP request an overall “master plan” for the property is being proposed. The first phase of development will be to construct a driveway and create a pad site for a single family residence. However, the applicant wishes to construct a barn and horse arena at a future date. This facility would be private (not for commercial operation) and is ancillary to the proposed single family dwelling. As such, the grading plan submitted with this SUP request includes the barn and arena (along with additional driveway) in order to eliminate the need for a second SUP at a later date. The barn and arena facilities are proposed to be located at the south-central portion of the site. Figure 4 (following page) depicts an overall site plan for 120 Columbia Hill Court.

As noted previously, the SUP requested with this application is triggered by section 110.438.35 of the Washoe County Development Code. Specifically, the criteria triggered by this request include the following:

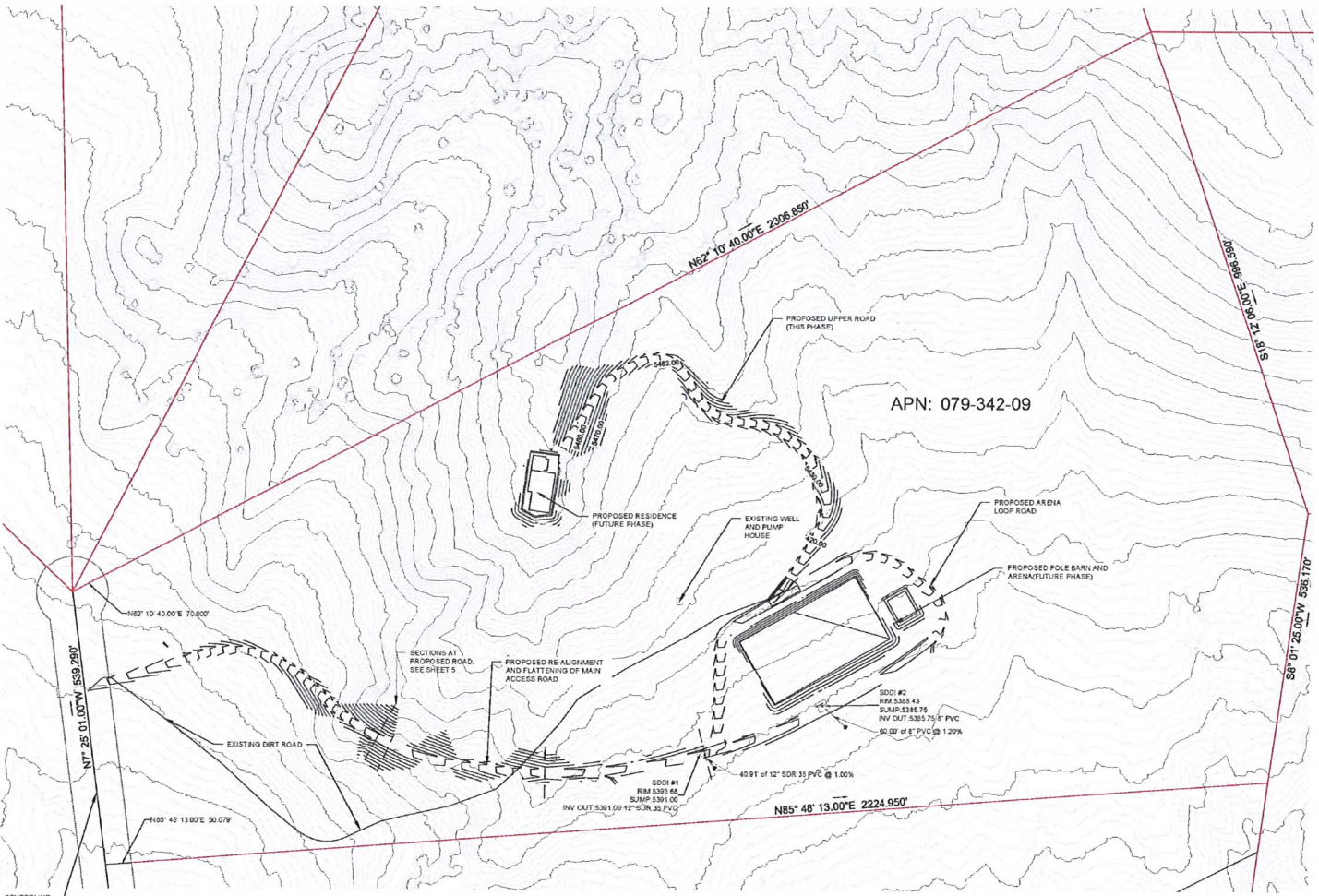
- 110.438.35 (2)(i)(C) – Grading of more than two acres on slopes in excess of 15%.
- 110.438.35 (3) – Any driveway or road that traverses any slope of thirty percent or greater.

In order to reach the proposed homesite, it is necessary to traverse slopes that are greater than 30%. Included with this SUP application are comprehensive grading plans that detail how this will be achieved. It is proposed to meander the driveway in order to maintain grades that can be traversed year round and to limit the amount of visual disturbance.

As noted previously, a graded driveway already exists onsite. It is proposed to utilize a significant portion of this existing graded area. However, the plan included with this proposal does provide for the “flattening” of the existing driveway in order to maintain proper grades for year round access by standard automobile traffic. Overall, grading is kept to the minimum extent necessary to access the homesite and meet all applicable Washoe County standards. The majority of proposed disturbance is limited to the area surrounding the house pad as well as a portion of the driveway located at the southern portion of the property (as shown in Figure 4 – following page). Based on surrounding topography, the disturbed area adjoining the proposed home is not visible from adjacent parcels. Additionally, this area will be largely screened by the house itself. The southern portion of the driveway is located in an area that has already been disturbed and will include native revegetation to ensure slope stabilization as well as a natural appearance.

Cut and fill slopes are designed to blend disturbed areas with the natural topography. As demonstrated with the existing driveway cuts, once native plantings are established, overall visual impacts are minimal.

120 Columbia Hill Court - Grading Special Use Permit



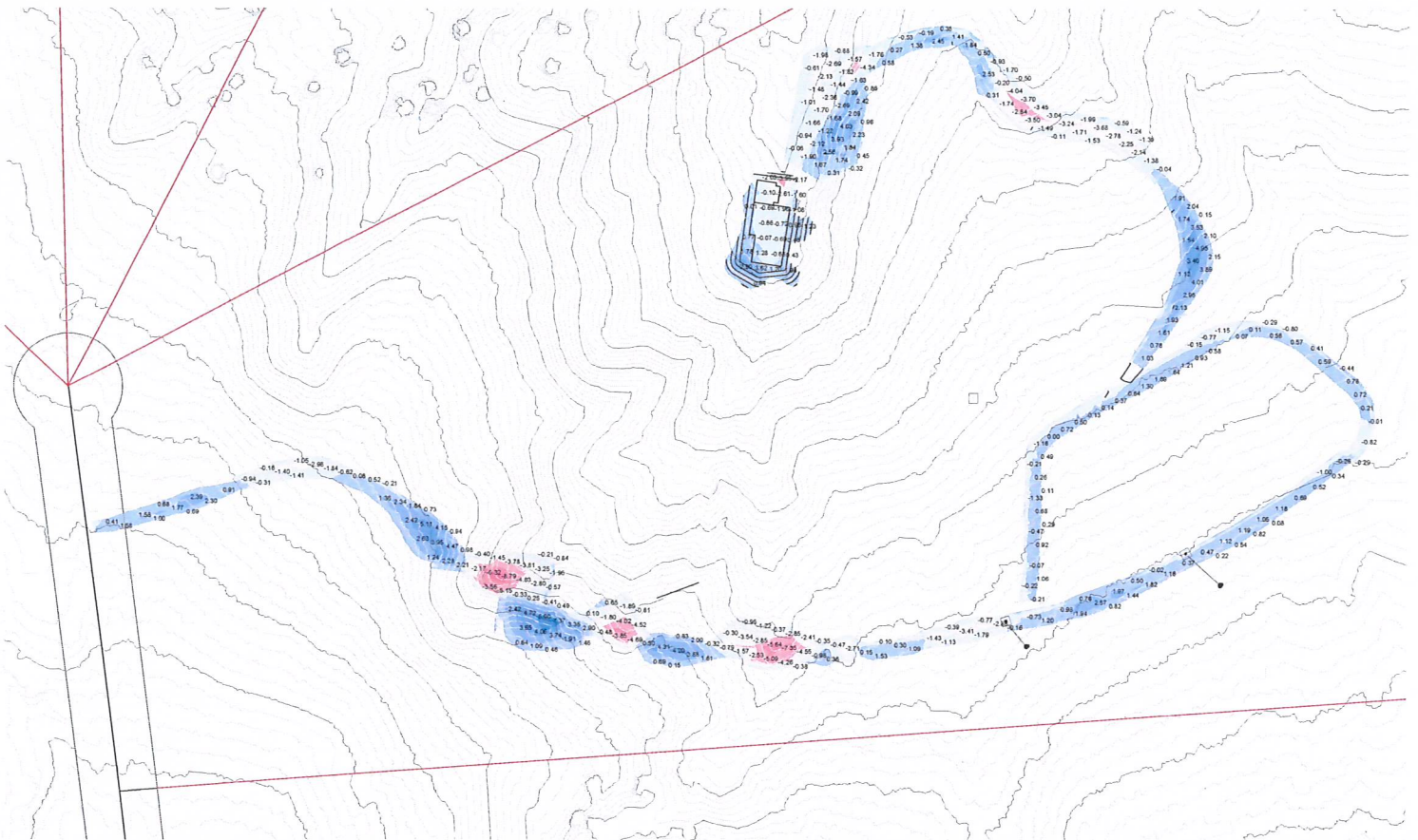
Note: A full-size copy of this plan is included in the attached map pocket.

Figure 4 – Site Plan

120 Columbia Hill Court – Grading Special Use Permit

In order to provide a simplified overview of the proposed grading, Figure 5 (below) depicts and overall cut and fill plan for the proposed SUP.

Surface	Area (sq. ft.)	Max Cut	Max Fill	Mean Gr./ft.
ES to Above	54,137.18	7.62	6.30	-0.13
ES to Arena Loop Road	17,641.37	7.45	3.99	0.02
ES to House Pad	11,406.87	4.81	4.48	0.07
ES to Lower Road	61,900.73	8.36	3.69	-0.09
ES to Upper Road	39,873.16	4.18	3.37	-0.37



Note: A full-size copy of this plan is included in the attached map pocket.

Figure 5 – Cut and Fill Plan

120 Columbia Hill Court – Grading Special Use Permit

In areas where cut and fill slopes are created, revegetation will occur to ensure that a natural appearance is achieved. All revegetation will be in accordance with Best Management Practices established by Washoe County and will include native plant species such as sagebrush, bitter brush, rabbit brush, etc. As building permits are brought forward for the home, arena, barn, etc. Washoe County will verify that all conditions associated with this SUP are being adhered to, including those related to revegetation.

The grading proposed with this SUP is not inconsistent with other properties in the surrounding area. The site is located in an area of custom homes, many of which are built on ridges and knolls in order or maximize views. The same will be true for 120 Columbia Hill Court. In fact, the grading, proposed residence, and planned barn/arena are directly consistent/compatible with adjoining parcels and development within Red Rock Estates. With the implementation of revegetation and Washoe County grading standards, no negative impacts are anticipated to result from this request.

The following table provides an overall summary of the grading proposed at 120 Columbia Hill Court:

Site Area	Graded Area	Cut (Cubic Yards)	Fill (Cubic Yards)	Net (Cubic Yards)
Lower Road	61,900.17± sq.ft.	2,270.88± CY	2,302.25± CY	31.38± CY (fill)
Barn/Arena Loop	17,641.37± sq.ft.	160.11± CY	241.40± CY	81.29± CY (fill)
Upper Road	39,973.16± sq.ft.	1,347.98± CY	1,321.61± CY	26.37± CY (cut)
House Pad	11,406.87± sq.ft.	252.64± CY	282.39± CY	29.75± CY (fill)
TOTAL	130,921.58± sq.ft.	4,031.62± CY	4,147.66± CY	116.04± CY (fill)

Special Use Permit Findings

In order to approve a Special Use Permit, the following findings must be made. Responses are provided in **bold**.

1. Consistency. The granting of the special use permit is consistent with the policies and maps of the Comprehensive Plan Elements and the Area Plan in which the property is located.

The proposed uses to be accommodated by the planned grading are permitted within the General Rural zone and are consistent with the goals and policies of the North Valleys Area Plan. This SUP request provides for consistency with section 110.438.35 and application of Development Code standards further ensures consistency with all applicable policies, etc.

2. Adequate Public Facilities. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities must exist or will be provided.

The property is well suited for the type of development proposed. A well already exists onsite. A septic system will be installed concurrently with the single family residence and is subject to review and approval by the Washoe County Engineering Department and District Health Department. The proposed grading is consistent with Washoe County standards for slopes, drainage, etc. ensuring compliance with this finding.

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3. Site Suitability. The site must be physically suitable for the proposed use and for the intensity of development.

The proposed grading, homesite location, and future equestrian facilities (barn and arena) are compatible and consistent with other custom homes in the Red Rock Estates subdivision and will directly complement adjoining properties. All grading impacts will be mitigated through proper slope transitions, revegetation, and implementation of standards included within the Washoe County Development Code.

4. Issuance Not Detrimental. Issuance of the permit may not be significantly detrimental to the public health, safety or welfare; have a detrimental impact on adjacent properties; or be detrimental to the character of the surrounding area.

No negative impacts are anticipated with the granting of this SUP request. All potential impacts will be properly mitigated and the development proposed is directly consistent with surrounding parcels and uses.

APPENDICES

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information		Staff Assigned Case No.: _____	
Project Name: 120 Columbia Hill Court - Grading SUP			
Project Description: A SUP to allow for grading of a driveway, building pad, and arena associated with a planned single family residence. A SUP is triggered per section 110.438.35 of the Development Code.			
Project Address: 120 Columbia Court, Reno, NV 89506			
Project Area (acres or square feet): 55.44 acres			
Project Location (with point of reference to major cross streets AND area locator): West of Red Rock Rd., north of Columbia Hill Rd.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
079-342-09	55.44		
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: Teru Langsdale		Name: Rubicon Design Group, LLC	
Address: 280 La Salle Heights		Address: 1610 Montclair Ave., Suite B	
Reno, NV	Zip: 89523	Reno, NV	Zip: 89509
Phone: (775) 722-0678	Fax:	Phone: (775) 425-4800	Fax:
Email: rick-slz2@hotmail.com		Email: dwilson@rubicondesigngroup.com	
Cell: (775) 722-0678	Other:	Cell: (775) 527-6710	Other:
Contact Person: Rick<Edwards		Contact Person: Derek<Wilson	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Rick<Edwards		Name: H-Bar-H Engineering	
Address: 250 Burks Blvd.		Address: 1853 Woodtrail Ct.	
Reno, NV	Zip: 89523	Sparks, NV	Zip: 89434
Phone: (775) 722-0678	Fax:	Phone: (775) 287-8632	Fax:
Email: rick-slz2@hotmail.com		Email: fred@hbarh.net	
Cell: (775) 722-0678	Other:	Cell: (775) 287-8632	Other:
Contact Person: Rick<Edwards		Contact Person: Fred Hatcher, P.E.	
For Office Use Only			
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Property Owner Affidavit

Applicant Name: _____

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
COUNTY OF WASHOE)

1. Richard Edwards _____
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 079-342-09

Printed Name Richard Edwards

Signed [Signature]

Address 280 LaSalle Wfs
Reno NV 89523

Subscribed and sworn to before me this
_____ day of _____, _____.

(Notary Stamp)

Notary Public in and for said county and state

My commission expires: _____

Notary Public See Attached
[Signature] 07/11/2019

*Owner refers to the following: (Please mark appropriate box.)

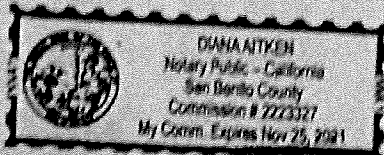
- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of San Benito

Subscribed and sworn to (or affirmed) before me on this 11
day of July, 2011, by Richard Edwards

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.



(Seal)

Signature

Diana Aitken

Community Services Department

Planning and Building

SPECIAL USE PERMIT

(see page 7)

SPECIAL USE PERMIT FOR GRADING

(see page 9)

SPECIAL USE PERMIT FOR STABLES

(see page 12)

APPLICATION



Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89512-2845

Telephone: 775.328.6100

**Special Use Permit Application
Supplemental Information**
(All required information may be separately attached)

1. What is the project being requested?

This is a SUP request to allow for grading of a driveway, homesite, and arena which is triggered per the standards included in section 110.438.35 of the Development Code. Specifically, the proposed grading will result in disturbance of more than 2 acres of land in excess of 15% slope and will allow for a driveway that traverses 30% or more slope.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

The only existing structure onsite is a well house. Refer to attached report and plans for a detailed depiction of existing and proposed conditions.

3. What is the intended phasing schedule for the construction and completion of the project?

The initial driveway and homesite will be completed with the first phase. The arena and barn will be completed as a second phase. Refer to attached report for additional details.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The driveway design and homesite placement have been located to maximize views while minimizing impacts. Much of the graded area will not be visible off-site. Cut and fill slopes will be blended with the natural topography and will include revegetation to mitigate erosion and result in a natural appearance. Refer to attached report for additional details.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The project will directly complement other custom homes within the Red Rock Estates subdivision. Refer to attached report for a detailed overview.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

With the planned mitigation of cut and fill slopes, no negative impacts are anticipated. Refer to attached report for additional analysis.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

4,031.62 CU of Cut/4,147.66 CU of Fill

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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9. Utilities:

a. Sewer Service	Septic
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or Charter Communications
d. LPG or Natural Gas Service	Propane
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	AT&T or Charter Communications
g. Water Service	Well

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #		acre-feet per year	
i. Certificate #		acre-feet per year	
j. Surface Claim #		acre-feet per year	
k. Other #		acre-feet per year	

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

Native revegetation.

10. Community Services (provided and nearest facility):

a. Fire Station	TMFPD - Silver Knolls Volunteer Station
b. Health Care Facility	Renown Urgent Care - North Valleys
c. Elementary School	Silver Lake Elementary
d. Middle School	Cold Springs Middle School
e. High School	North Valleys High School
f. Parks	Silver Knolls Park
g. Library	Washoe County - North Valleys Branch
h. Citifare Bus Stop	Stead Boulevard

**Special Use Permit Application
for Grading
Supplemental Information**
(All required information may be separately attached)

1. What is the purpose of the grading?

The grading will allow for a driveway, custom homesite, and arena area. Refer to attached report for a detailed project description.

2. How many cubic yards of material are you proposing to excavate on site?

4,031.62 CU of Cut/4,147.66 CU of Fill

3. How many square feet of surface of the property are you disturbing?

130,921.58 square feet

4. How many cubic yards of material are you exporting or importing? If none, how are you managing to balance the work on-site?

Grading will be balanced onsite. There is potential for the import of 116 +/- cubic yards of fill.

5. Is it possible to develop your property without surpassing the grading thresholds requiring a Special Use Permit? (Explain fully your answer.)

Onsite slope conditions trigger the need for a SUP per section 110.438.35(3) of the Development Code. Refer to attached report for a detailed analysis.

6. Has any portion of the grading shown on the plan been done previously? (If yes, explain the circumstances, the year the work was done, and who completed the work.)

Yes, a significant portion of the driveway located at the south side of the parcel was graded prior to the applicant acquiring the property. Refer to attached report for a detailed overview.

7. Have you shown all areas on your site plan that are proposed to be disturbed by grading? (If no, explain your answer.)

Yes, all proposed disturbance areas are depicted in the attached engineering plans.

8. Can the disturbed area be seen from off-site? If yes, from which directions and which properties or roadways?

A significant amount of the grading will not be visible outside of the parcel boundaries. It may be possible to see some limited cut/fill slopes from the south along Columbia Hill Court and Columbia Hill Road. These slopes will be revegetated to ensure a natural appearance.

9. Could neighboring properties also be served by the proposed access/grading requested (i.e. if you are creating a driveway, would it be used for access to additional neighboring properties)?

Not applicable.

10. What is the slope (horizontal/vertical) of the cut and fill areas proposed to be? What methods will be used to prevent erosion until the revegetation is established?

A detailed cut/fill plan is included as an attachment to this application providing horizontal/vertical analysis of all areas proposed to be graded. Revegetation will be used to stabilize slopes and ensure a natural appearance. Refer to attached report for additional details.

11. Are you planning any berms?

Yes	No <input checked="" type="checkbox"/>	If yes, how tall is the berm at its highest?
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12. If your property slopes and you are leveling a pad for a building, are retaining walls going to be required? If so, how high will the walls be and what is their construction (i.e. rockery, concrete, timber, manufactured block)?

Retaining wall design will be provided with final custom home building plans.

13. What are you proposing for visual mitigation of the work?

Native revegetation.

14. Will the grading proposed require removal of any trees? If so, what species, how many and of what size?

Not applicable.

15. What type of revegetation seed mix are you planning to use and how many pounds per acre do you intend to broadcast? Will you use mulch and, if so, what type?

Reveg. will occur using BMP's.

16. How are you providing temporary irrigation to the disturbed area?

The existing onsite well can provide water for temporary irrigation as needed.

17. Have you reviewed the revegetation plan with the Washoe Storey Conservation District? If yes, have you incorporated their suggestions?

Not applicable at this time.

18. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit the requested grading?

Yes	No <input checked="" type="checkbox"/>	If yes, please attach a copy.
-----	--	-------------------------------

Account Detail

[Back to Account Detail](#)

[Change of Address](#)

[Print this Page](#)

Collection Cart

Collection Cart	Items	Total	Checkout	View
	0	\$0.00		

Pay Online

No payment due for this account.

Washoe County Parcel Information

Parcel ID	Status	Last Update
07934209	Active	7/15/2019 2:07:29 AM
Current Owner: LANGSDALE, TERU 280 LA SALLE HEIGHTS RENO, NV 89523		
SITUS: 120 COLUMBIA HILL CT WCTY NV		
Taxing District 4000		Geo CD:
Legal Description		
Section 31 Lot 20 Block Range 19 SubdivisionName RED ROCK ESTATES Township 22		

Tax Bill (Click on desired tax year for due dates and further details)

Tax Year	Net Tax	Total Paid	Penalty/Fees	Interest	Balance Due
2019	\$681.57	\$681.57	\$0.00	\$0.00	\$0.00
2018	\$650.35	\$650.35	\$0.00	\$0.00	\$0.00
2017	\$624.14	\$630.38	\$0.00	\$0.00	\$0.00
2016	\$608.32	\$614.40	\$0.00	\$0.00	\$0.00
2015	\$607.11	\$621.25	\$0.00	\$0.00	\$0.00
Total					\$0.00

Disclaimer

- **ALERTS:** If your real property taxes are delinquent, the search results displayed may not reflect the correct amount owing. Please contact our office for the current amount due.
- For your convenience, online payment is available on this site. E-check payments are accepted without a fee. However, a service fee does apply for online credit card payments. See Payment Information for details.

Pay By Check

Please make checks payable to:
WASHOE COUNTY TREASURER

Mailing Address:
P.O. Box 30039
Reno, NV 89520-3039

Overnight Address:
1001 E. Ninth St., Ste D140
Reno, NV 89512-2845

Payment Information

Special Assessment District

Installment Date Information

Assessment Information



August 21, 2019

Mr. Chris Bronczyk
Planner
Washoe County Community Services Department
1001 E. 9th Street
Reno, NV 89512

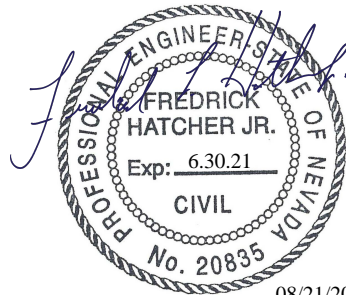
Subject: Special Use Permit Submittal
Re: Corrections to Permit Submittal 19-100744

Dear Mr. Bronczyk,

This letter is to certify that I have reviewed the grading quantities as listed on sheet C.2 of both the original submittal dated 3.08.2019 and the re-submittal set dated 04.30.2019. The later submittal changed the operations to a future phase, but did not change the quantities themselves. I have reviewed the quantities as listed on the currently attached sheet C.2 and C.2a, per our conversation, and hereby assure you that the quantities match the cut fill analyses.

Please feel free to contact me if you have any questions or concerns.

Sincerely,



08/21/2019

H Bar H Engineering
Fredrick L Hatcher, Jr., P.E.

PROPOSED GRADING PLANS FOR: RICK EDWARDS

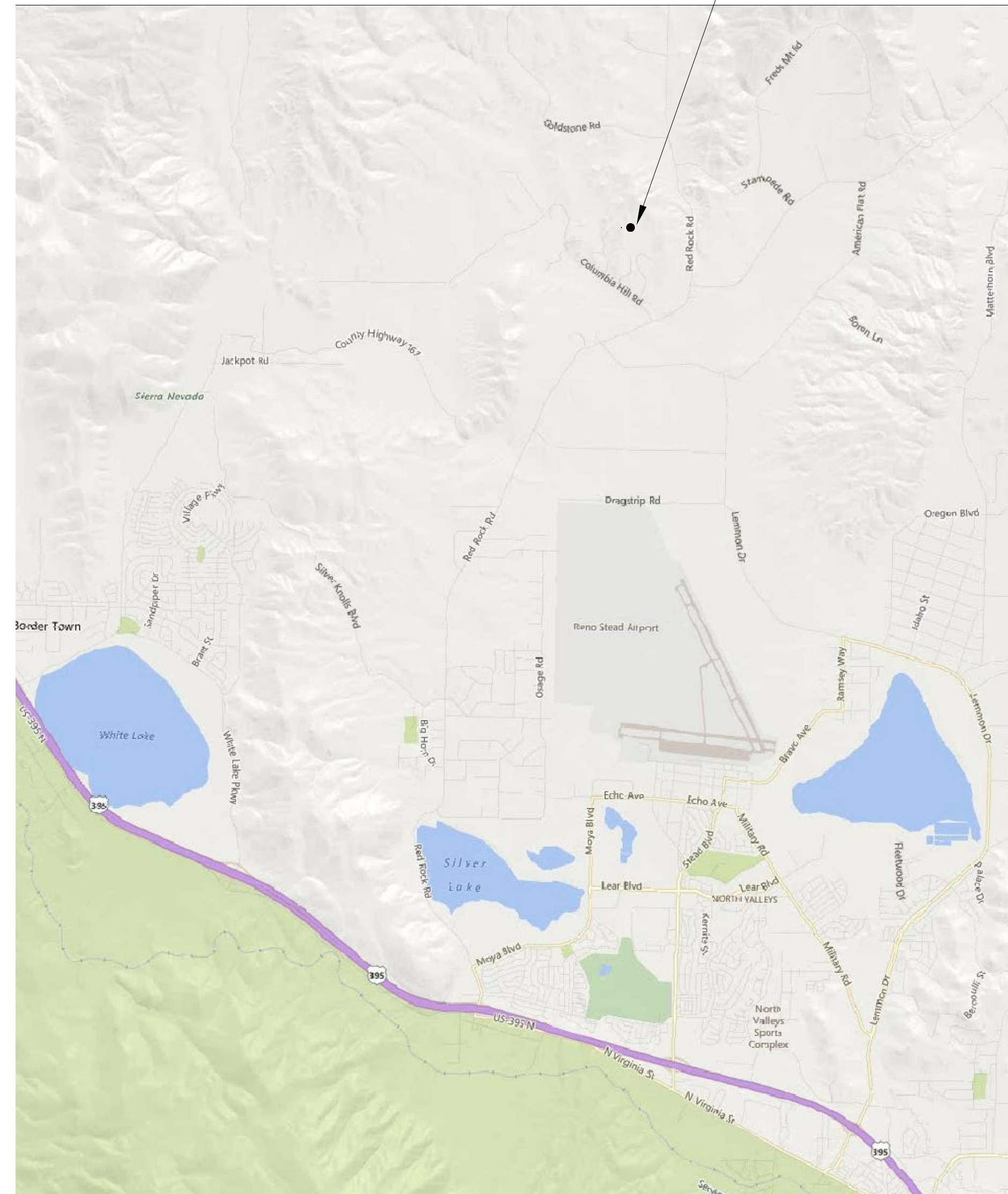
OWNER:
RICK EDWARDS
120 COLUMBIA HILL COURT
775-722-0678

APN: 079-342-09

CIVIL ENGINEER:
H-H ENGINEERING
1853 WOODTRAIL COURT
SPARKS, NV 89434

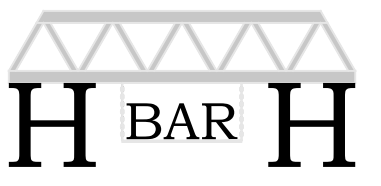
FRED HATCHER
775-287-8632

PROJECT
LOCATION



1 VICINITY MAP
Scale: 1:5000

Sheet List Table	
Sheet Number	Sheet Title
C.1	TITLE SHEET
C.2	Site Map
C.3	UPPER ROAD PLAN
C.4	P1
C.5	P2
C.6	SECTIONS
C.7	CUT FILL



H -BAR-H
ENGINEERING

1853 WOODTRAIL CT.
SPARKS, NV 89434
775-287-8632
FRED@HBARH.NET

DRIVEWAY GRADING DESIGN FOR:
RICK EDWARDS

GRADING PLAN DRAWINGS

120 COLUMBIA HILL COURT, RENO, NEVADA
APN: 079-342-09

REVISIONS

△	
△	
△	

SCALE:
DRAWN: FH
CHECKED: FH
DATE: 03/06/19

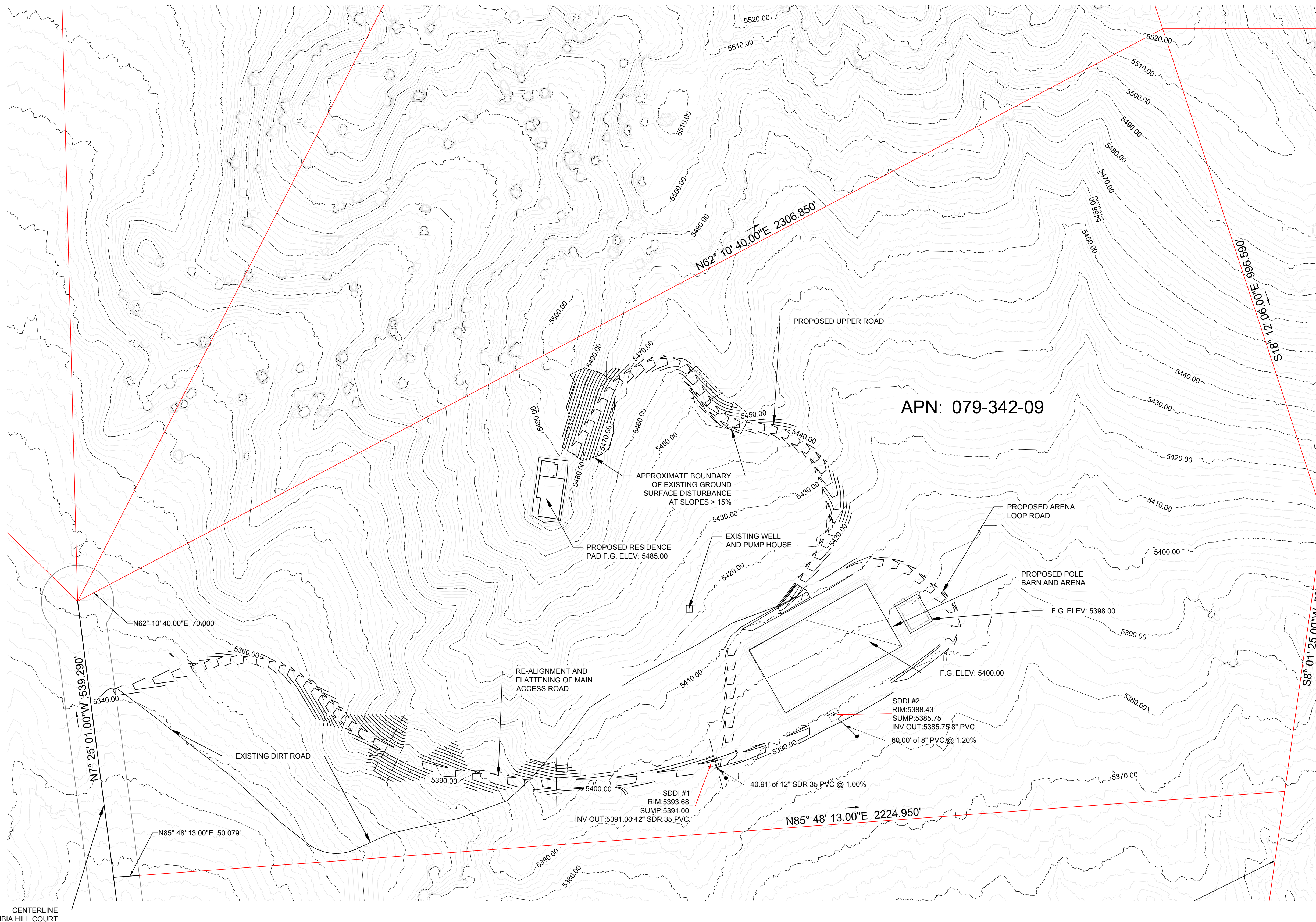
ENGINEER OF RECORD:
FRED HATCHER JR., P.E.
STAFF ENGINEER:
-

SHEET
C.1

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
CF EG TO LOWER ROAD Surface1	1.000	1.100	61900.17 Sq. Ft.	2270.88 Cu. Yd.	2302.25 Cu. Yd.	31.38 Cu. Yd.<Fill>
CF EG TO BARN ARENA LOOP Surface1	1.000	1.100	17641.37 Sq. Ft.	160.11 Cu. Yd.	241.40 Cu. Yd.	81.29 Cu. Yd.<Fill>
CF EG TO UPPER ROAD 1	1.000	1.100	39973.16 Sq. Ft.	1347.98 Cu. Yd.	1321.61 Cu. Yd.	26.37 Cu. Yd.<Cut>
CF EG TO HOUSE PAD	1.000	1.100	11406.87 Sq. Ft.	252.64 Cu. Yd.	282.39 Cu. Yd.	29.75 Cu. Yd.<Fill>
Totals			130921.58 Sq. Ft.	4031.62 Cu. Yd.	4147.66 Cu. Yd.	116.04 Cu. Yd.<Fill>

19,918 SF OF GRADING ON SLOPES GREATER THAN 15%
 20,055 SF OF GRADING ON SLOPES LESS THAN 15%



OWNER SHALL STOCKPILE OR BERM, AT THE DAYLIGHT LINES, THE TOPSOIL STRIPPINGS DURING CONSTRUCTION. AS EACH AREA IS COMPLETED, THE TOPSOIL SHALL BE SPREAD ON THE DISTURBED SLOPES ADJACENT TO THE ROAD.

ALL AREAS DISTURBED OUTSIDE OF THE ROADBED SHALL BE REVEGETATED USING A SEED MIX OF NATIVE PLANTS TO INCLUDE JUNIPER TREE SEEDS, APPLIED TO THE TOPSOIL STRIPPINGS.

THE OWNER SHALL MAINTAIN A DUST CONTROL PROGRAM, TO INCLUDE A WATER TRUCK OR BUFFALO, AND MUST CONFORM TO SEC 040.030 OF WASHOE COUNTY AIR POLLUTION REGULATIONS.

LEGEND

- EXISTING MINOR CONTOUR (2 FT INTERVAL)
- EXISTING MAJOR CONTOUR (10 FT INTERVAL)
- PROPOSED MINOR CONTOUR (2 FT INTERVAL)
- PROPOSED MAJOR CONTOUR (10 FT INTERVAL)

ALL IMPROVEMENTS WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST COUNTY CODES AND THE LATEST COUNTY STANDARD SPECIFICATIONS AND DETAILS.

A STREET EXCAVATION PERMIT IS REQUIRED FOR ANY WORK TO BE PERFORMED WITHIN THE WASHOE COUNTY RIGHT-OF-WAY.

THE WASHOE COUNTY ROAD DEPARTMENT (328-2180) MUST APPROVE THE NEW DRIVEWAY APPROACH INSTALLATION PRIOR TO PERMIT CERTIFICATE OF OCCUPANCY.

ENGINEER OF RECORD:
 FRED HATCHER JR., P.E.

STAFF ENGINEER

WELL/SEPTIC INFORMATION

UNLESS NOTED OTHERWISE:
 No Private Well Within 100' of PL
 No Public Sewer Within 400' of PL
 No Public Water System Available
 No 100 Year Flood Plain Within 100' of PL
 No Surface Water Within 1/4 Mile
 No Easements Through Property

H BAR H

H -BAR-H
 ENGINEERING

1853 WOODTRAIL CT.
 SPARKS, NV 89434
 775-287-8632
 FRED@HBARH.NET

DRIVEWAY GRADING DESIGN FOR:
 TERU LANGSDALE AND RICK EDWARDS
 GRADING PLAN DRAWINGS

120 COLUMBIA HILL COURT, RENO, NEVADA
 APN: 079-342-09

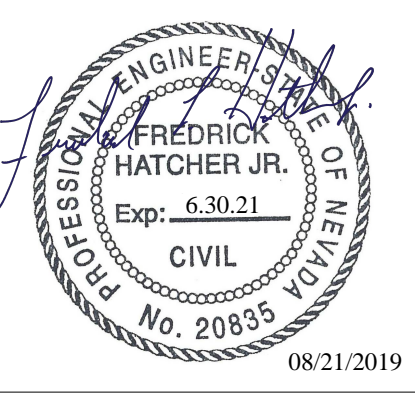
REVISIONS

1	04.30.2019
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SCALE:
 DRAWN: FH
 CHECKED: FH
 DATE: 03/06/19

ENGINEER OF RECORD:
 FRED HATCHER JR., P.E.

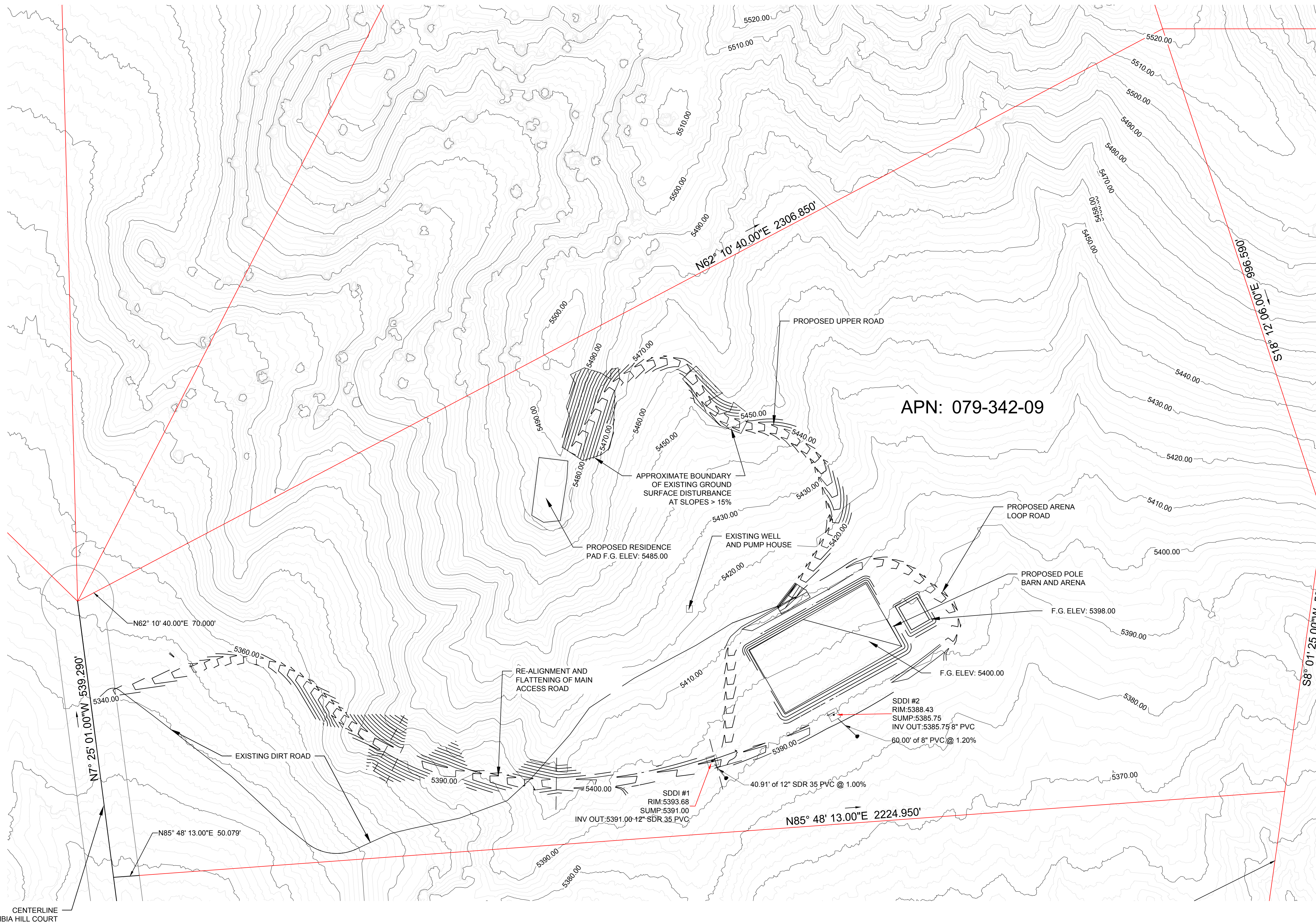
STAFF ENGINEER



Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
CF EG TO LOWER ROAD Surface1	1.000	1.100	61900.17 Sq. Ft.	2270.88 Cu. Yd.	2302.25 Cu. Yd.	31.38 Cu. Yd.<Fill>
CF EG TO BARN ARENA LOOP Surface1	1.000	1.100	17641.37 Sq. Ft.	160.11 Cu. Yd.	241.40 Cu. Yd.	81.29 Cu. Yd.<Fill>
CF EG TO UPPER ROAD 1	1.000	1.100	39973.16 Sq. Ft.	1347.98 Cu. Yd.	1321.61 Cu. Yd.	26.37 Cu. Yd.<Cut>
CF EG TO HOUSE PAD	1.000	1.100	11406.87 Sq. Ft.	252.64 Cu. Yd.	282.39 Cu. Yd.	29.75 Cu. Yd.<Fill>
Totals			130921.58 Sq. Ft.	4031.62 Cu. Yd.	4147.66 Cu. Yd.	116.04 Cu. Yd.<Fill>

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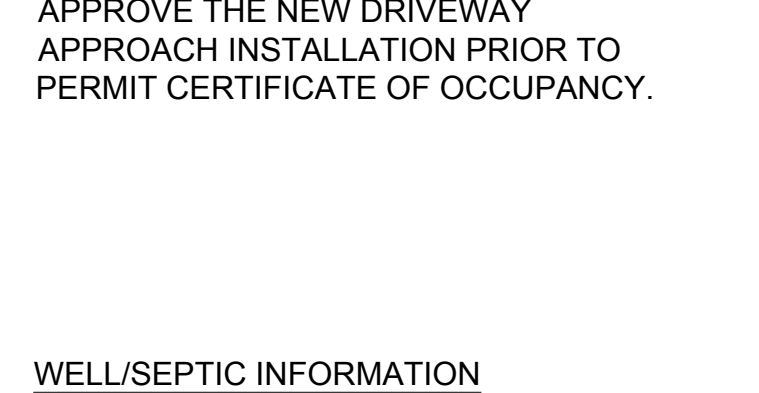
- LEGEND**
- EXISTING MINOR CONTOUR (2 FT INTERVAL)
 - EXISTING MAJOR CONTOUR (10 FT INTERVAL)
 - PROPOSED MINOR CONTOUR (2 FT INTERVAL)
 - PROPOSED MAJOR CONTOUR (10 FT INTERVAL)

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STAFF ENGINEER



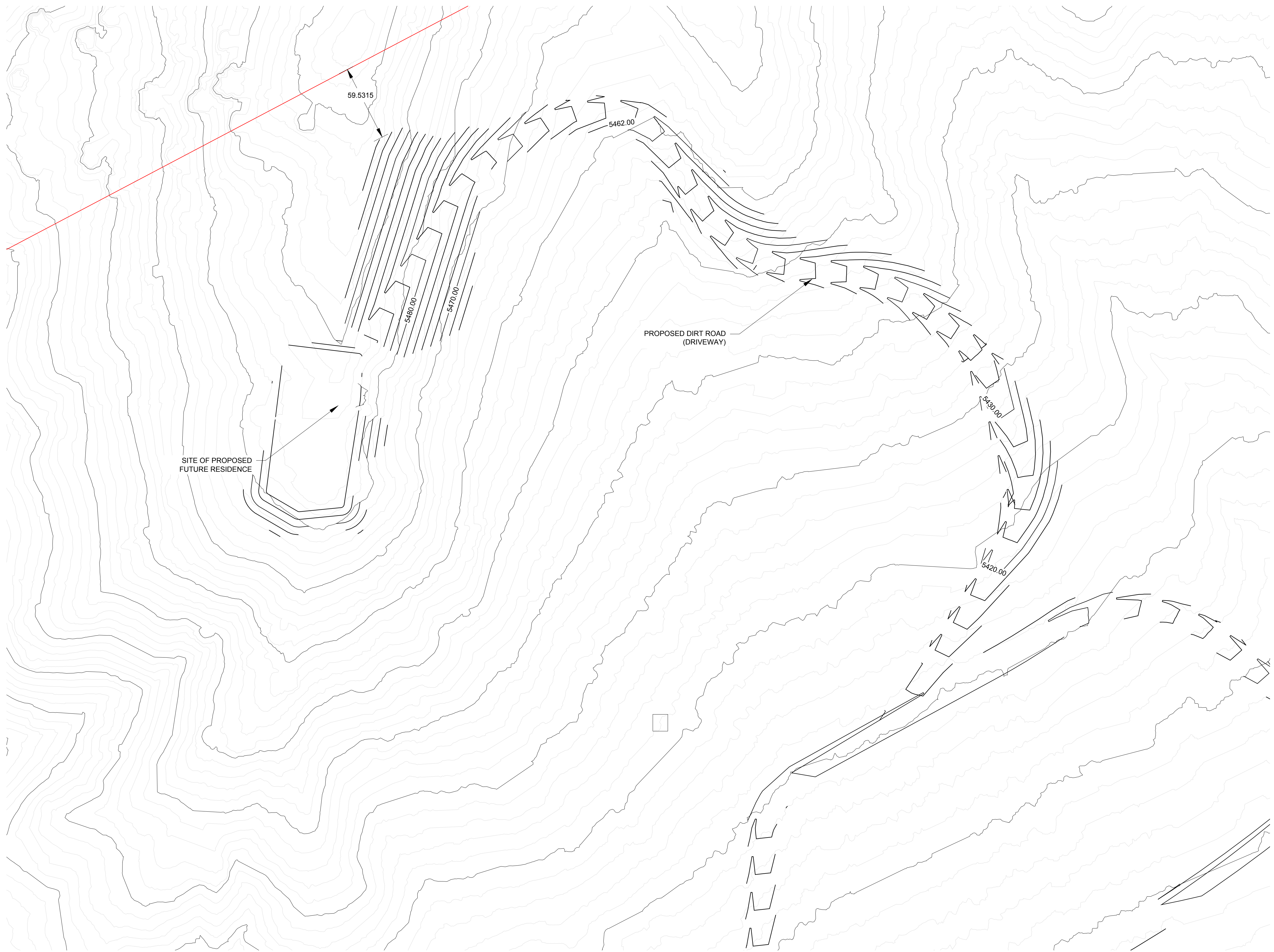
WELL/SEPTIC INFORMATION

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No Public Sewer Within 400' of PL
No Public Water System Available
No 100 Year Flood Plain Within 100' of PL
No Surface Water Within 1/4 Mile
No Easements Through Property

REVISIONS

1	04.30.2019
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SCALE:
DRAWN: FH
CHECKED: FH
DATE: 03/06/19



- LEGEND**
- EXISTING MINOR CONTOUR (2 FT INTERVAL)
 - EXISTING MAJOR CONTOUR (10 FT INTERVAL)
 - PROPOSED MINOR CONTOUR (2 FOOT INTERVAL)
 - PROPOSED MAJOR CONTOUR (10 FT INTERVAL)



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DRIVEWAY GRADING DESIGN FOR:
RICK EDWARDS
GRADING PLAN DRAWINGS
120 COLUMBIA HILL COURT, RENO, NEVADA
APN: 079-342-09

REVISIONS

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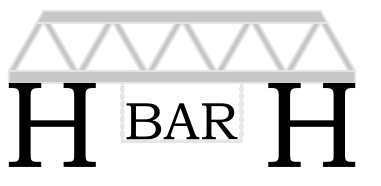
DRAWN: FH
CHECKED: FH
DATE: 03/06/19

ENGINEER OF RECORD:
FRED HATCHER JR., P.E.

STAFF ENGINEER
-

1 PROPOSED UPPER ROAD PLAN
Scale: 1:40

SHEET
C.3



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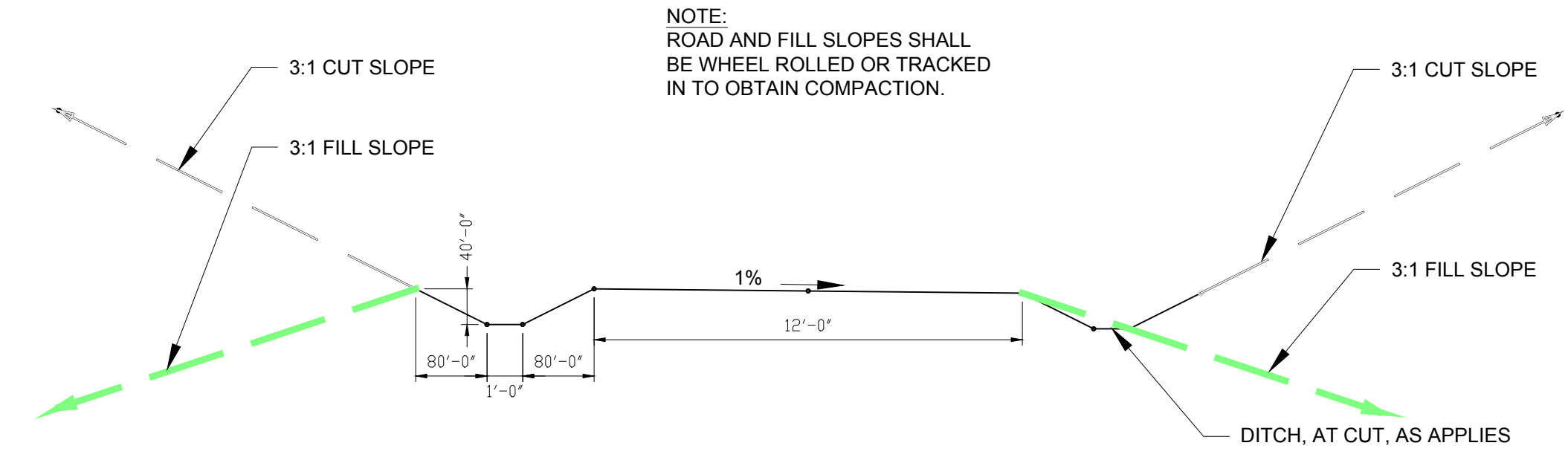
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ENGINEER OF RECORD:
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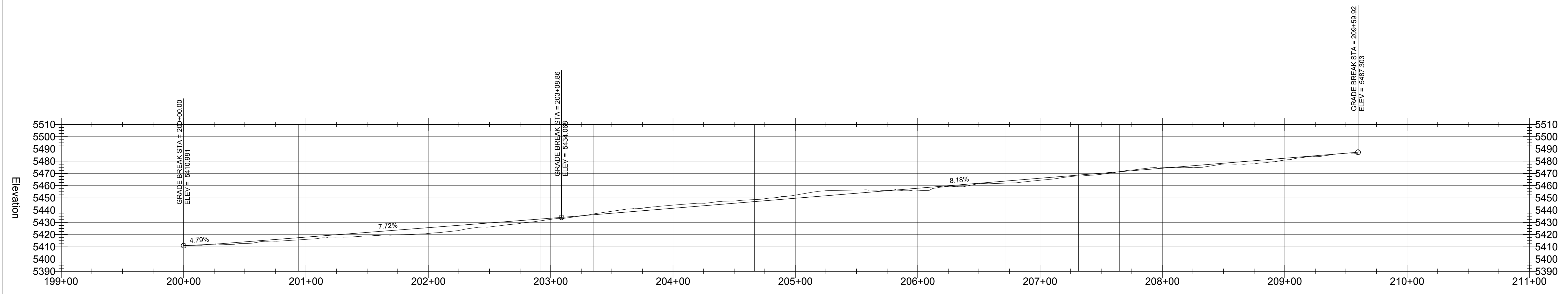
STAFF ENGINEER
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SHEET

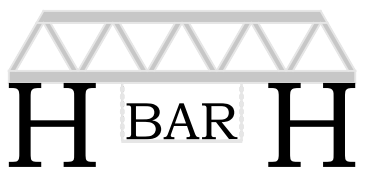
C.4



2 TYPICAL DIRT ROAD (DRIVEWAY) SECTION
Scale: 1:4



1 UPPER ROAD (DRIVEWAY) PROFILE
Scale: 1:40



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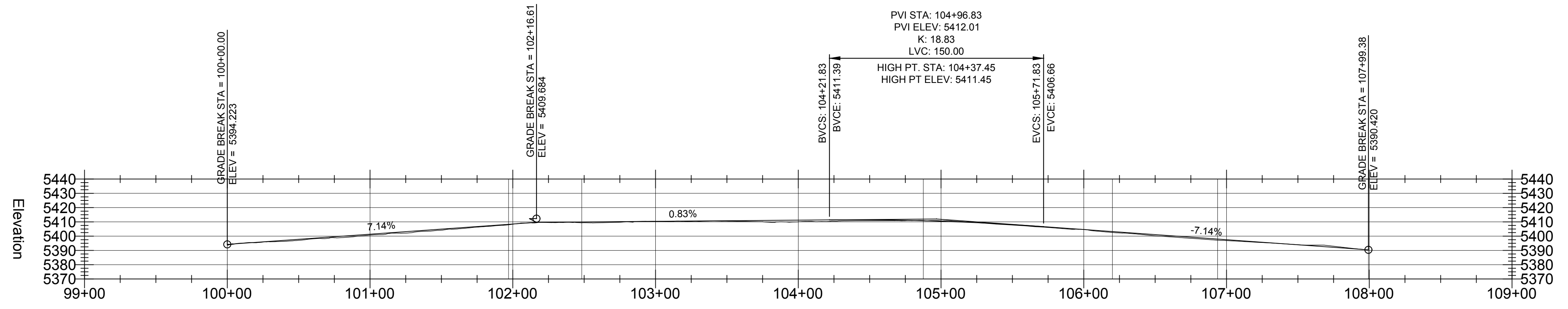
REVISIONS

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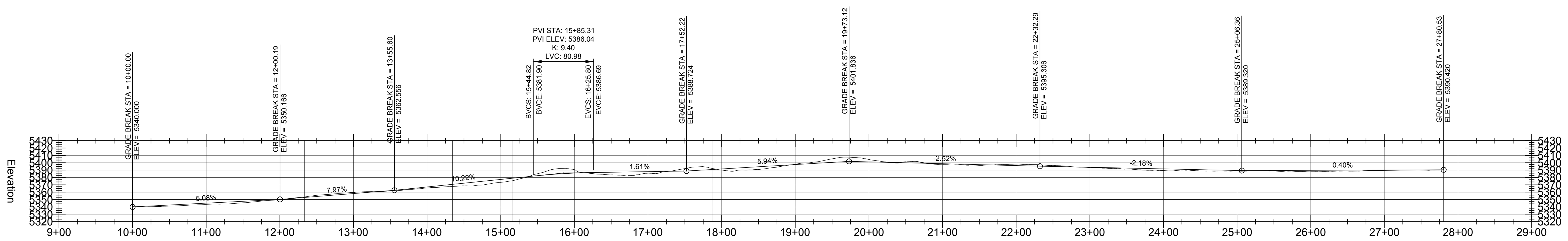
SCALE:
 DRAWN: FH
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 DATE: 03/06/19

ENGINEER OF RECORD:
 FRED HATCHER, JR., P.E.
 STAFF ENGINEER:
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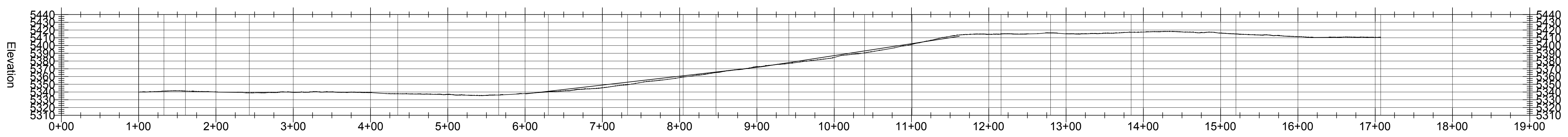
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C.5



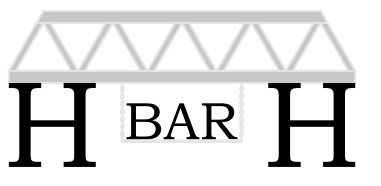
PROPOSED ARENA LOOP ROAD CENTERLINE PROFILE



PROPOSED REALIGNED ROAD PROFILE



EXISTING ROAD CENTERLINE PROFILE



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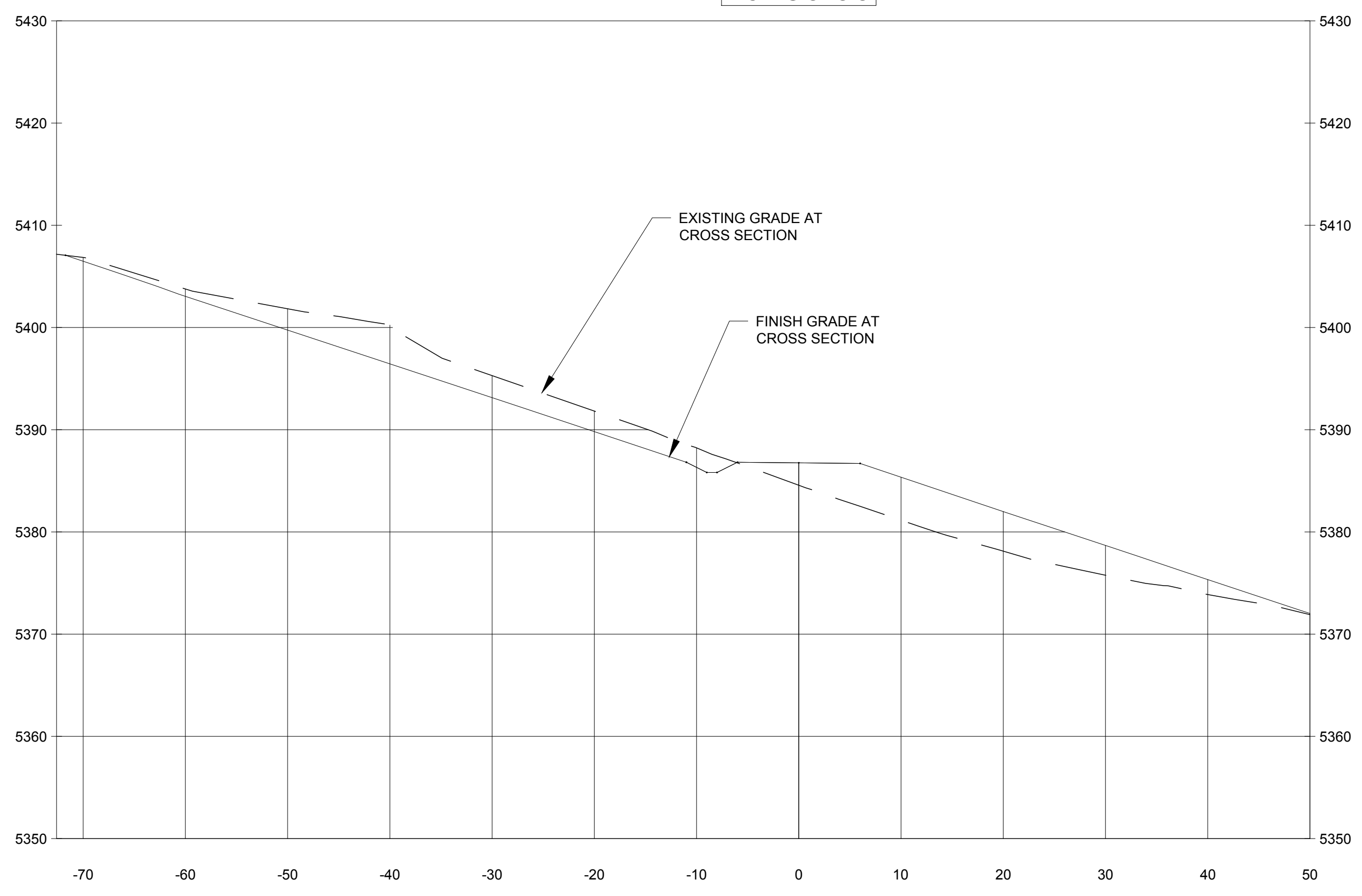
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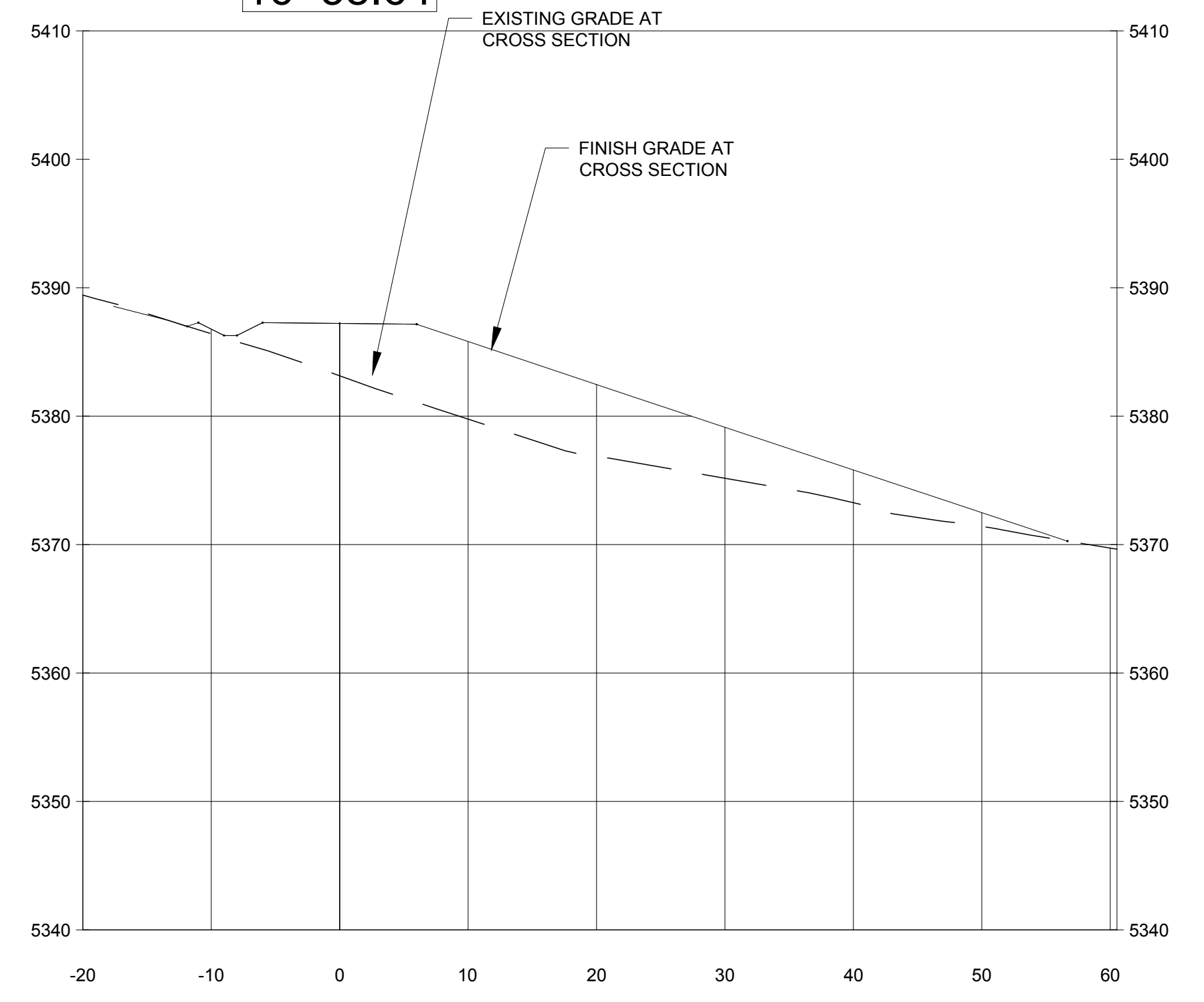
SHEET

C.6

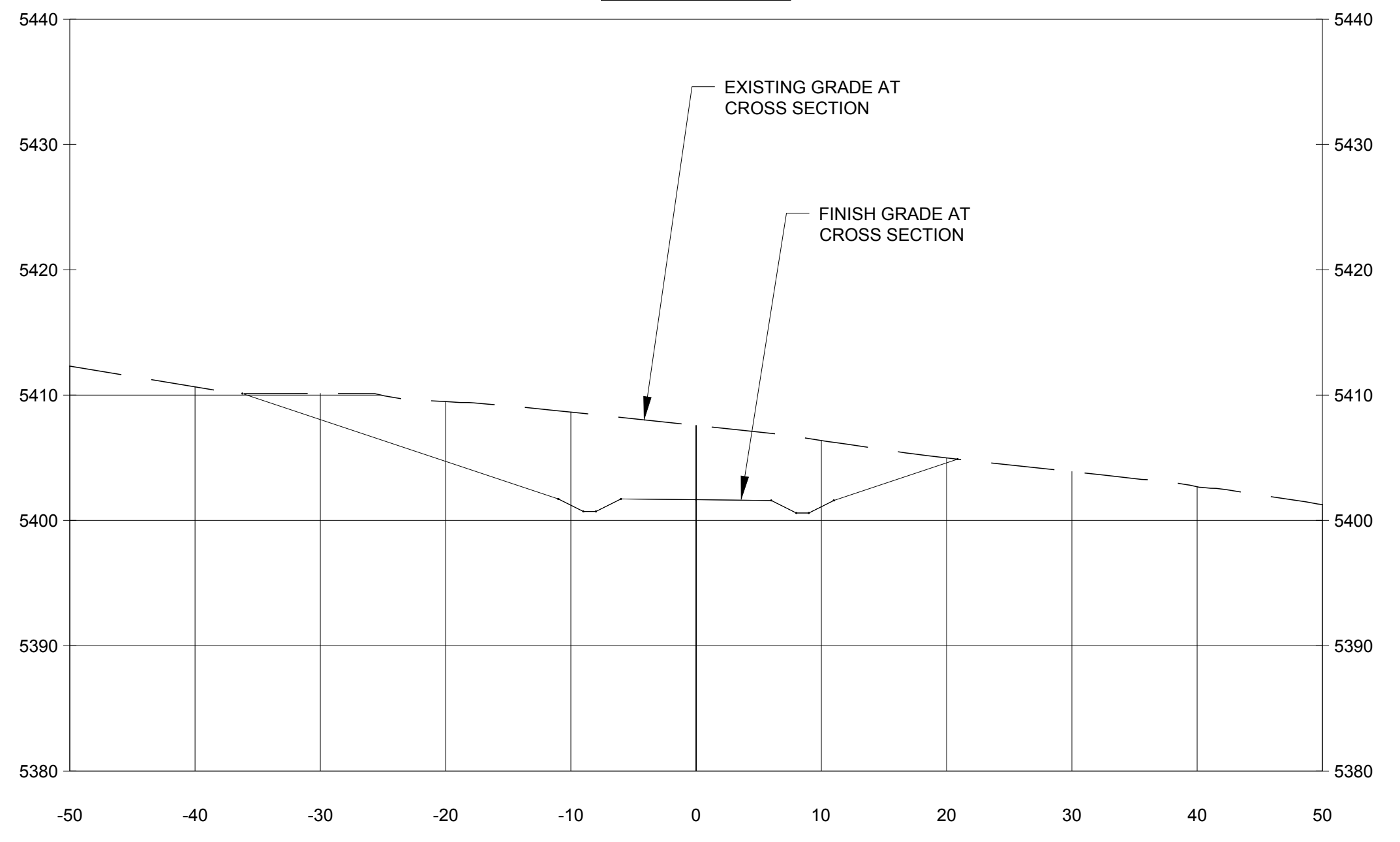
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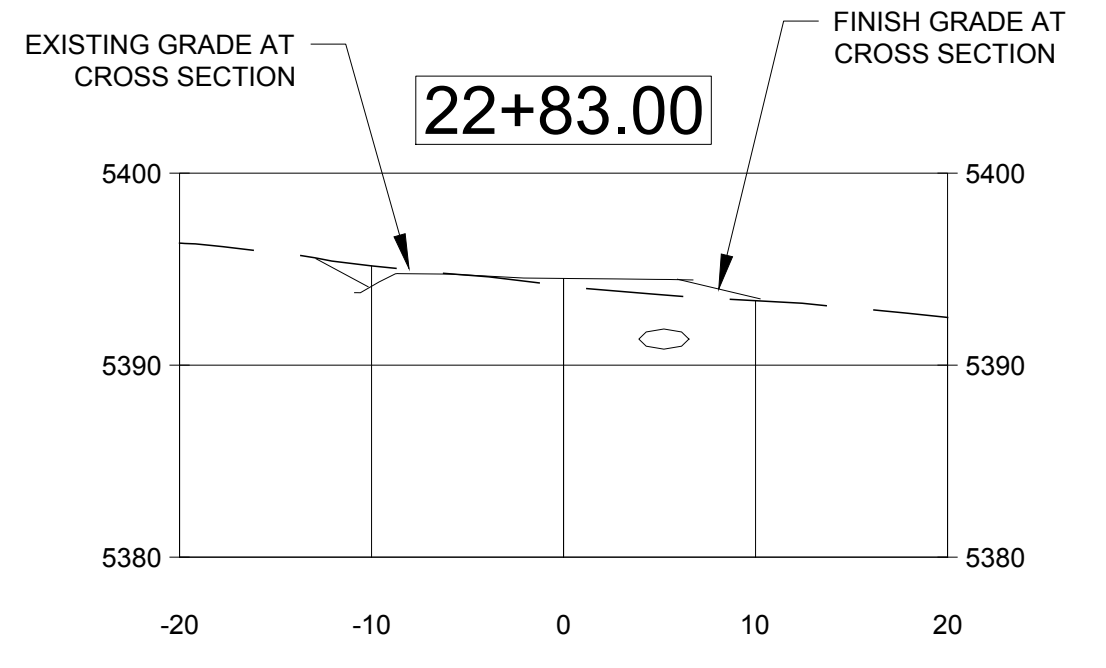
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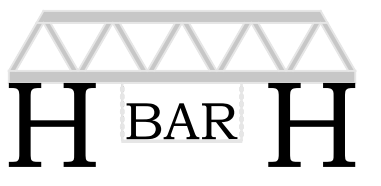
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22+83.00

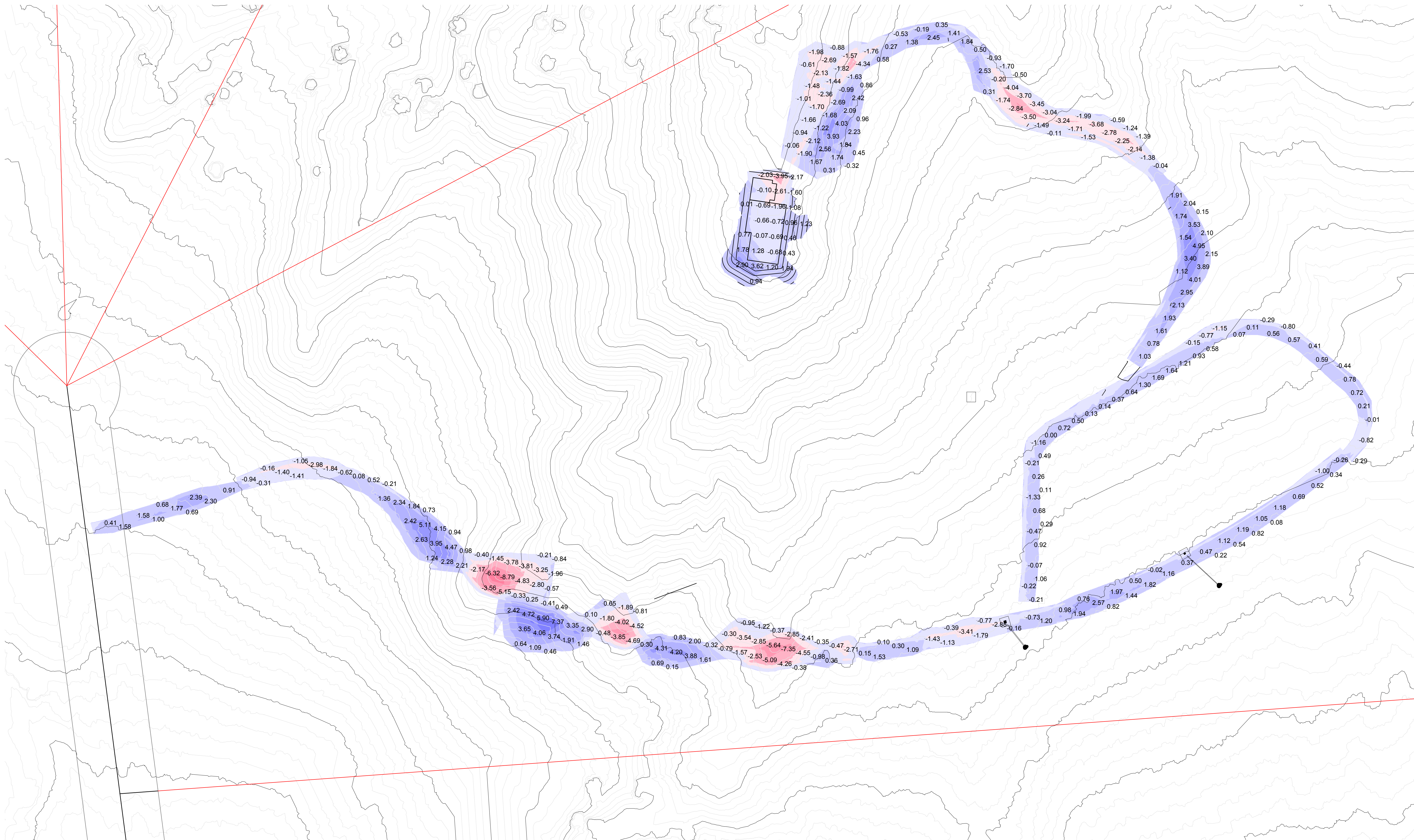


Surface	Area (Sq. Ft.)	Max Cut	Max Fill	Mean Cut/Fill
EG to Arena	54,197.18	-7.62'	6.30'	-0.13'
EG to Arena Loop Road	17,641.37	-2.44'	1.99'	0.09'
EG to House Pad	11,406.87	-4.61'	4.48'	0.01'
EG to Lower Road	61,900.17	-9.98'	7.69'	-0.08'
EG to Upper Road	39,973.16	-6.18'	5.37'	-0.10'



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STAFF ENGINEER:
-

1 CUT FILL MAP
Scale: 1:60

SHEET
C.7