

Drainage Letter

For:

Reigning Hope Indoor Arena

September 18, 2019

Prepared for

Reigning Horse Indoor Arena
14489 Holmes Rd
Black Forest, CO 80905

Prepared By:

Wallace Engineering, Structural Consultants, Inc.
Structural and Civil Consultants
Scott Rodehaver, P.E.
9800 Pyramid Court, Suite 350
Englewood, Colorado 80112
303.350.1690
srodehaver@wallacesc.com
Wallace Project #1975017

Purpose:

The purpose of this report is to explore the existing and proposed drainage conditions on the Reigning Hope Project site at 15589 Holmes Rd, Black Forest, Colorado 80908

PDC File No. PRR1935



Wallace Engineering
Structural Consultants, Inc.
9800 Pyramid Court, Suite 350
Englewood, Colorado 80112
303.350.1690, 800.364.5858
www.wallacesc.com

Engineer's Statement

The attached drainage plan and letter were prepared under by direction and supervision and are correct to the best of my knowledge and belief. Said drainage letter has been prepared according to the criteria established by the County for drainage letters and said letter is in conformity with the master plan of the drainage basin. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Name: Scott Rodehaver, P.E.



Seal

Developer's Statement

I, the developer have read and will comply with all of the requirements specified in this drainage letter.

Susanne Hoff

Business Name

By: Susanne Hoffmann

Title: Owner

Address: 14445 Holmes Rd, Cts C8 80908

El Paso County Only:

Filed in accordance with requirements of the Drainage Criteria Manual, Volumes 1 and 2, El Paso County Engineering Criteria Manual and Land Development Code as amended

Jennifer Irvine, P.E., County Engineer/ECM Administrator

Date

Conditions:



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General Description

Reigning Hope Project is a 4.15 acre lot in Black Forest, Colorado. The lot is located at the north end of Holmes Rd as shown in Appendix A. The site has three buildings currently, and is covered by gravel roads, some scattered trees, and grass area. A new indoor horse area is proposed on the north side of the property. The project site is located in the Black Squirrel Creek and East Cherry Creek drainage basin. No portions of the site are within a FEMA designated floodplain.

Existing Drainage

The site is located in the Kettle Creek Drainage Basin. The drainage from the site flows in two directions. The south half flows to the south and the north half flows north off the site. The south end of the site drains from the east to west, toward the center of the site, and then to the south and off the site. There is a drainage ditch along Holmes Rd where the drainage from the south end of the property flows. The north half of the site flows to the north, towards an existing gravel road. It then flows off the property and into a channel to the north. See existing drainage plan in Appendix B.

Proposed Drainage

The proposed site will have a new indoor horse-riding arena on the north end of the site. The flow from the north of the property will be directed around the new arena towards the north. The drainage to the south of the proposed arena will be collected in a swale and directed around the existing building, and towards the existing drainage swale along Holmes Road. This will flow to the public ROW will not affect the adjacent properties. There is a proposed 18" concrete culvert under the existing driveway for the drainage of subbasin B. The calculations for the culvert design are included in appendix F. The drainage pattern will be similar to the existing drainage pattern, with the addition of the new arena, and the associated swales and channels. See the proposed drainage plan in Appendix D. The total 100-yr flow for the proposed site is 3.94 cfs.

Hydrologic Calculations:

This site was analyzed using the rational method, and a full spreadsheet of calculations is included in appendix C and E for the existing and proposed peak flowrate on the site. The peak flowrate for the 100 year storm on the existing site is 2.31 cfs for the north subbasin (A), and 1.58 cfs for the south subbasin (B), with a total flow off the site of 3.89 cfs. The proposed site also has a peak runoff for the 100 year storm of 1.93 for north subbasin (A) in the north and 2.01 for the south subbasin (B) with a total flow off the site of 3.94 cfs. This is a small increase in flow and can be considered negligible.

Four Step Process

This site complies with the four-step process for reducing run off volumes for proposed development. Step 1 of the process is to reduce runoff by disconnecting impervious area and removing unnecessary impervious area. The proposed site is designed with only the required impervious area on the site. Step 2 is to treat and slowly release the WQCV. This site has existing drainage swales and the WQCV will be released through that existing swale. The third step of the process is to stabilize the stream channels. The stream will be stabilized using BMPs to stabilize the existing runoff stream. The fourth step is to implement source controls. The site will have source control BMPs such as pervious areas to slow and treat the runoff on the site

Conclusion

The Reigning Hope Indoor Arena project is a 4.15-acre site in Black Forest, Colorado. It will consist of a new arena addition, and the corresponding drainage and swales for the new arena. The drainage patterns and volumes will be very similar to the existing site at Reigning Hope, and there will not be any adverse effects to the surrounding properties due to the proposed development at this site.

Appendix A
Vicinity Map





Appendix B
Existing Drainage Plan





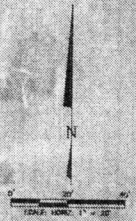
POA-1

SUBBASIN-A

SUBBASIN-B

POA-2

LEGEND	
EXISTING CONTOUR	
GRAVEL ROAD	
DRAINAGE BASIN	
FLOW ARROW	



EXISTING DRAINAGE PLAN

<p>THIS DRAWING IS THE PROPERTY OF GMS, INC., AND IS NOT TO BE REPRODUCED, COPIED, OR USED FOR ANY OTHER PROJECT OR PURPOSES WITHOUT THE WRITTEN AGREEMENT OF GMS, INC.</p>	<p>SITE OVERVIEW 17000 STATE ROAD 101, COLUMBIA, SC 29922 803.733.1111</p>	
	<p>GMS, INC. 17000 STATE ROAD 101, COLUMBIA, SC 29922 803.733.1111</p>	

Appendix C
Existing Hydrology Results

EXISTING CONDITIONS

Date 4/29/2019 Sheet No. 1 of 3
 Job# 1975017 Reigning Hope Indoor Arena
 Subject Existing Drainage Calculations

Composite Runoff Coefficients

Land Use Or Surface Characteristics	% Imp.	Runoff Coefficients (HSG A&B)**			
		C ₂	C ₅	C ₁₀	C ₁₀₀
Hardscape (Asph & Conc)	100.0%	0.89	0.90	0.92	0.96
Roofs	90.0%	0.71	0.73	0.75	0.81
Gravel	80.0%	0.57	0.59	0.63	0.70
Lawns (A & B Soils, 2-7%)	0.0%	0.02	0.08	0.15	0.35
Lawns (C & D Soils, 2-7%)	0.0%	0.04	0.15	0.25	0.50

Design Layout

Subbasin	Total Area (acres)	Total Area (sf)	Land Use Area per Subbasin											Weighted Imperviousness	Total Weighted Runoff Coefficients			
			Hardscaping		Roofs		Gravel		Lawns (A&B Soils)		Lawns (C&D Soils)		% Check		2-year	5-year	10-year	100-year
			Area (sf)	%	Area (sf)	%	Area (sf)	%	Area (sf)	%	Area (sf)	%						
A	0.83	36,344	0	0.0%	283	0.8%	13,773	37.9%	22571	62.1%	0	0.0%	100.8%	31.02%	0.23	0.28	0.34	0.49
B	0.77	33,680	0	0.0%	791	2.3%	1,179	3.5%	31710	94.2%	0	0.0%	100.0%	4.91%	0.06	0.11	0.18	0.37
Total	1.61	70,024	0	0.0%	1,074	1.5%	14,952	21.4%	54281	77.5%	0	0.0%	100.4%	18.5%	0.15	0.20	0.26	0.43

** Colorado Springs Drainage Manual, Chapter 6, Table 6-6.

XB = Existing Basin

XOS = Existing Off-Site Basin

EXISTING CONDITIONS

Date 4/29/2019 Sheet No. 2 of 3
 Job# 1975017 Reigning Hope Indoor Arena
 Subject Existing Drainage Calculations

Time of Concentration

Rational Method

Subbasin Data			Initial / Overland, t _i Time (T _i) = 0.395(1.1-C _s)L ^{1/2} (S ^{1/3}) [*]				Travel Time, t _t (T _t) = (L)/(V*60) where (V = C _v Sw ^{1/2}) ^{**}						Urban Basins T _c Check			Final	Remarks
Design Point	Coeff. C _s	Area (Ac)	Length (ft)	Δ Elev. (ft)	Slope (ft/ft)	T _i (min.)	Length (ft)	Δ Elev. (ft)	Slope (ft/ft)	Conveyance Coefficient (C _v) ^{***}	Velocity (fps)	T _t (min.)	Computed T _c (min.)	Total Length (ft)	T _c =(L/180)+10 (min.)	T _c (min.)	Contributing Basins
POA-1	0.28	0.83	130.00	2.7	0.021	13.45	192	2.1	0.011	10	1.05	3.06	16.51	322.00	11.79	16.51	XA
POA-2	0.11	0.77	122.00	2.5	0.020	15.73	222	6.5	0.029	10	1.71	2.16	17.90	344.00	11.91	17.90	XB
-																	-
-																	-
-																	-

* Colorado Springs Drainage Manual, Chapter 6, Eq. 6-8
 ** Colorado Springs Drainage Manual, Chapter 6, Eq. 6-9 and table 6-7 for C_v Coefficients
 *** Colorado Springs Drainage Manual, Chapter 6, Table 6-7

EXISTING CONDITIONS

Date 4/29/2019 Sheet No. 3 of 3
 Job# 1975017 Reigning Hope Indoor Arena
 Subject Existing Drainage Calculations

Hydrologic Analysis

Basin	Design Point	Area (ac)	Time of Concentration Tc (min)	Runoff Coefficients				Rainfall Intensity*				Peak Discharge			
				C ₂	C ₅	C ₁₀	C ₁₀₀	I 2-yr (in/hr)	I 5-yr (in/hr)	I 10-yr (in/hr)	I 100-yr (in/hr)	Q 2-yr (cfs)	Q 5-yr (cfs)	Q 10-yr (cfs)	Q 100-yr (cfs)
A	POA-1	0.83	16.51	0.23	0.28	0.34	0.49	2.70	3.38	3.94	5.67	0.53	0.79	1.11	2.31
B	POA-2	0.77	17.90	0.06	0.11	0.18	0.37	2.60	3.26	3.80	5.47	0.11	0.28	0.53	1.58

* IDF Equations From Colorado Springs Drainage Manual, Chapter 6, Figure 6-5
 $I_{100} = -2.52 \ln(tc) + 12.735$
 $I_{50} = -2.25 \ln(tc) + 11.375$
 $I_{25} = -2.00 \ln(tc) + 10.111$
 $I_{10} = -1.75 \ln(tc) + 8.847$
 $I_5 = -1.50 \ln(tc) + 7.583$
 $I_2 = -1.19 \ln(tc) + 6.035$

Appendix D
Proposed Drainage Plan





POA-2

12" CONCRETE
CULVERT

LEGEND	
PROPOSED CORRIDOR	—————
DRAINAGE BASIN	—————
FLOW ARROW	—————

0 30 60
SCALE: 1" = 30'

POA-1

SUBBASIN-A

SUBBASIN-B

PROPOSED DRAINAGE PLAN

DATE: 10/15/2010
DRAWN BY: J. HARRIS
CHECKED BY: M. HARRIS
SCALE: 1" = 30'

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	PROJECT NO.: 10000 W. 100th St. SHEET NO.: 10000 W. 100th St.	DATE: 10/15/2010 SCALE: 1" = 30'		

Appendix E
Proposed Hydrology Results



PROPOSED CONDITIONS

Date 9/18/2019 Sheet No. 1 of 3
 Job# 1975017 Reigning Hope Indoor Arena
 Subject Proposed Drainage Calculations

Composite Runoff Coefficients

Land Use Or Surface Characteristics	% Imp.	Runoff Coefficients (HSG A&B)**			
		C ₂	C ₅	C ₁₀	C ₁₀₀
Hardscape (Asph & Conc)	100.0%	0.89	0.90	0.92	0.96
Roofs	90.0%	0.71	0.73	0.75	0.81
Gravel	80.0%	0.57	0.59	0.63	0.70
Lawns (A & B Soils, 2-7%)	0.0%	0.02	0.08	0.15	0.35
Lawns (C & D Soils, 2-7%)	0.0%	0.04	0.15	0.25	0.50

Design Layout

Subbasin	Total Area (acres)	Total Area (sf)	Land Use Area per Subbasin											Weighted Imperviousness	Total Weighted Runoff Coefficients			
			Hardscaping		Roofs		Gravel		Lawns (A&B Soils)		Lawns (C&D Soils)		% Check		2-year	5-year	10-year	100-year
			Area (sf)	%	Area (sf)	%	Area (sf)	%	Area (sf)	%	Area (sf)	%						
A	0.75	32,671	0	0.0%	4,956	15.2%	2,258	6.9%	25,457	77.9%	0	0.0%	100.0%	19.18%	0.16	0.21	0.27	0.44
B	0.86	37,353	1,782	4.8%	791	2.1%	5,479	14.7%	29,301	78.4%	0	0.0%	100.0%	18.41%	0.16	0.21	0.27	0.44
Total	1.61	70,024	1,782	2.5%	5,747	8.2%	7,737	11.0%	54,758	78.2%	0	0.0%	100.0%	18.8%	0.16	0.21	0.27	0.44

** Colorado Springs Drainage Manual, Chapter 6, Table 6-6.
 XB = Existing Basin
 XOS = Existing Off-Site Basin

PROPOSED CONDITIONS

Date 9/18/2019 Sheet No. 2 of 3
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Subbasin Data			Initial / Overland, t Time (Ti) = 0.395(1.1-C _s)L ^{1.49} /(S ^{1.49}) [*]				Travel Time, t _t (Tt) = (L)/(V*60) where (V = C _v Sw ^{1/2}) ^{**}						Urban Basins Tc Check			Final	Remarks
Design Point	Coeff. C _s	Area (Ac)	Length (ft)	Δ Elev. (ft)	Slope (ft/ft)	Ti (min.)	Length (ft)	Δ Elev. (ft)	Slope (ft/ft)	Conveyance Coefficient (C _v) ^{***}	Velocity (fps)	Tt (min.)	Computed Tc (min.)	Total Length (ft)	Tc=(L/180)+10 (min.)	Tc (min.)	Contributing Basins
POA-1	0.21	0.75	29.00	0.217	0.007	9.64	260	1.33	0.005	10	0.72	6.06	15.70	289.00	11.61	15.70	XA
POA-2	0.21	0.86	67.00	0.81	0.012	12.57	392	6.5	0.017	10	1.29	5.07	17.64	459.00	12.55	17.64	XB
-																	-
-																	-
-																	-

* Colorado Springs Drainage Manual, Chapter 6, Eq. 6-8
 ** Colorado Springs Drainage Manual, Chapter 6, Eq. 6-9 and table 6-7 for C_v Coefficients
 *** Colorado Springs Drainage Manual, Chapter 6, Table 6-7

PROPOSED CONDITIONS

Date 9/18/2019 Sheet No. 3 of 3
 Job# 1975017 Reigning Hope Indoor Arena
 Subject Proposed Drainage Calculations

Hydrologic Analysis

Basin	Design Point	Area (ac)	Time of Concentration Tc (min)	Runoff Coefficients				Rainfall Intensity*				Peak Discharge			
				C ₂	C ₅	C ₁₀	C ₁₀₀	I 2-yr (in/hr)	I 5-yr (in/hr)	I 10-yr (in/hr)	I 100-yr (in/hr)	Q 2-yr (cfs)	Q 5-yr (cfs)	Q 10-yr (cfs)	Q 100-yr (cfs)
A	POA-1	0.75	15.70	0.16	0.21	0.27	0.44	2.76	3.45	4.03	5.80	0.34	0.55	0.83	1.93
B	POA-2	0.86	17.64	0.16	0.21	0.27	0.44	2.62	3.28	3.82	5.50	0.35	0.58	0.88	2.08

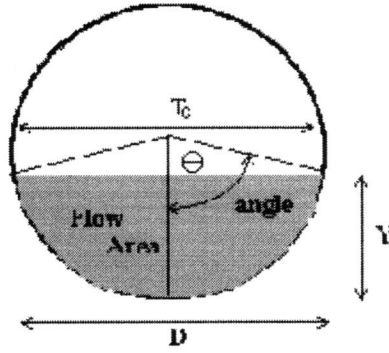
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 $I_{10} = -1.75 \ln(tc) + 8.847$
 $I_5 = -1.50 \ln(tc) + 7.583$
 $I_2 = -1.19 \ln(tc) + 6.035$

Appendix F
Culvert Calculations

CIRCULAR CONDUIT FLOW (Normal & Critical Depth Computation)

Project: **Reigning Hope**

Pipe ID: **18"**



Design Information (Input)

Pipe Invert Slope	$S_o =$	0.0520	ft/ft
Pipe Manning's n-value	$n =$	0.0170	
Pipe Diameter	$D =$	18.00	inches
Design discharge	$Q =$	1.84	cfs

Full-flow Capacity (Calculated)

Full-flow area	$A_f =$	1.77	sq ft
Full-flow wetted perimeter	$P_f =$	4.71	ft
Half Central Angle	$\theta =$	3.14	radians
Full-flow capacity	$Q_f =$	18.37	cfs

Calculation of Normal Flow Condition

Half Central Angle ($0 < \theta < 3.14$)	$\theta =$	0.96	radians
Flow area	$A_n =$	0.28	sq ft
Top width	$T_n =$	1.23	ft
Wetted perimeter	$P_n =$	1.44	ft
Flow depth	$Y_n =$	0.32	ft
Flow velocity	$V_n =$	6.65	fps
Discharge	$Q_n =$	1.84	cfs
Percent Full Flow	$\text{Flow} =$	10.0%	of full flow
Normal Depth Froude Number	$Fr_n =$	2.47	supercritical

Calculation of Critical Flow Condition

Half Central Angle ($0 < \theta_c < 3.14$)	$\theta_c =$	1.25	radians
Critical flow area	$A_c =$	0.53	sq ft
Critical top width	$T_c =$	1.42	ft
Critical flow depth	$Y_c =$	0.51	ft
Critical flow velocity	$V_c =$	3.47	fps
Critical Depth Froude Number	$Fr_c =$	1.00	

Letter of Intent
Special Use Permit
Rural Home Occupation

OWNER/Applicant

Kesti Suggs executive owner of Chuckie's Place, a non-profit corporation, DBA as Reigning Hope
14445 Holmes Road
Colorado Springs, CO 80908

Site Location, size and zoning

Site is located at the north end of Holmes road, north of the Holmes and Shoup intersection.

4.15 Acres zoned

Request and Justification

The Request is for the approval of a structure variance to allow a 63 foot by 75 foot, 1 story structure.

Justification

Reigning Hope was approved for a special use and variance of the property at 14445 Holmes Road, which allows Reigning Hope to operate its activities of working with physically and emotional disadvantaged individuals, using occupational therapy, with horses. Therapy activities occur in an enclosed "outdoor arena" and adjacent "sensory trail". Reigning Hope is requesting for structural approval for an indoor arena for inclement weather. The outdoor arena and sensory trail currently exist (in addition to a horse barn and workshop). The sensory trail is a walking trail that includes various stations that provide sensory experiences of touch, smell, sound, and physical challenges.

There will be no change to the current configuration of the property to accommodate the use. Reigning Hope activities will occur on 2 acres of the 4.15-acre lot.

The business will operate on a by appointment basis during daytime hours of 8:00 am to 5:00 pm Monday through Saturday. The type of therapy activities occurring are:

1. Individual therapy sessions held with 4 individuals present: a client, a therapist, a parent or guardian and an individual from Reigning Hope controlling the therapy horse. Each family is assisted differently due to therapy needs, siblings can also be included in therapy sessions. Sessions will run approximately one hour. One- two vehicles.



Water needs for these activities is limited to drinking water and a handicapped accessible bathroom inside the currently existing workshop. There is currently electric service to the horse barn and workshop which have interior and exterior lighting. There is no need for gas service.

Parking is adequate from the asphalt millings to in front of the workshop and indoor. No parking allowed on access road, north of the property, which is on the private drive of the Hoffman's Property.

Impacts to adjacent properties will be minimal if at all. The activities are minimally visible from the road and where there is a line of sight from residences there are trees on this property.

This structure is compatible with the surrounding area. The use is equestrian in nature and a number of properties in the area have horses as well as other domestic animals. It is so low impact an activity that it will have no negative effect on the health, safety or welfare of neighboring inhabitants. The horses already reside on the property to no adverse effect and the activity only brings in a limited number of people at a time to interact with them.

The proposed structure use will meet air, water, odor and noise standards and should have no effect on property values as there is limited visibility to it. There will be no adverse effect on wildlife or wetlands. There appears to be no off-site impacts as the use is wholly contained on the property.

Existing and proposed facilities, structures, roads, etc.

All the facilities, structures, roads, etc. at this location are existing and are comprised of the following:

Residence of approximately 1,728 square foot house

Workshop/garage 60x40

4 stall horse barn with hay storage

Fenced paddock 100x60

Fenced paddock 100x40

5 loafing shed – 8 x 8 sheds

Waiver Request- NA

Need for change in Zone classification- NA

Total number of Acres:

The property is on 4.15 acres of which approximately 2 will be leased for business use.

Number of residential units and densities:

There is one residential unit occupied by 5 individuals

Number of industrial sites proposed: NA

Approximate floor area ration of industrial and/or commercial uses- NA

Number of Mobile home unites and densities- NA

Typical lot sizes-NA

Type of proposed recreational facilities- NA

If phased construction, how will it be phased- NA

Anticipated schedule of development

How water and sewer will be provided

Proposed uses, relationship between uses and densities – NA

Areas of required landscaping – We are proposing alternative plan not to have landscaping due to location of the arena being out of site of the public.

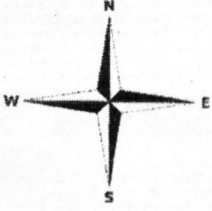
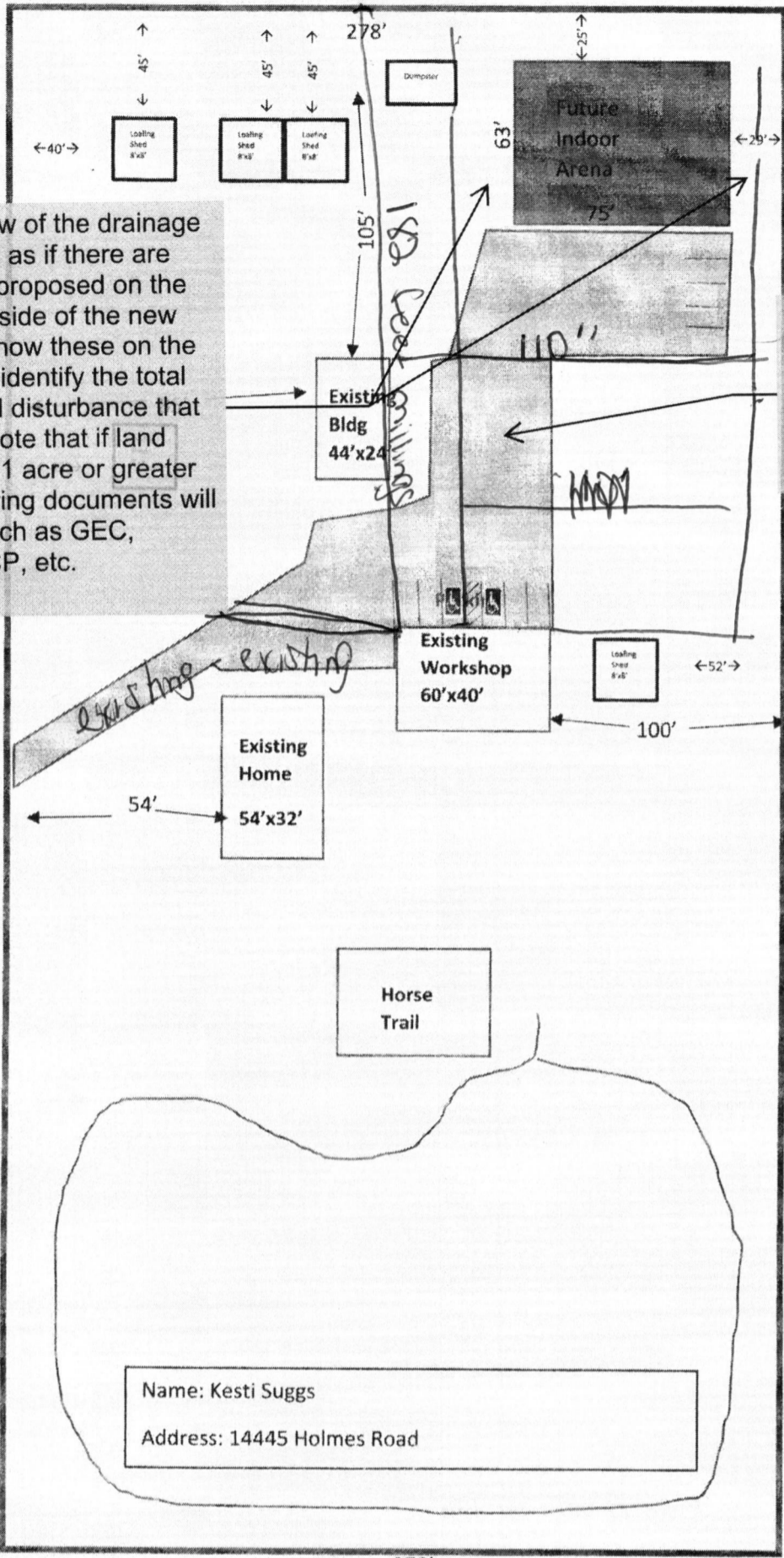
No electrical available

No signage available

Proposed access locations

Access will be the 14445 Holmes Driveway.

Approximate acres and percent of land to be set aside as open space, not including parking, drive and access roads. NA



John & Brenda
 From the review of the drainage plan it appears as if there are access drives proposed on the east and west side of the new bldg. Please show these on the site plan. Also identify the total amount of land disturbance that is proposed. Note that if land disturbance is 1 acre or greater other engineering documents will be required such as GEC, SWMP, ESQCP, etc.

Please indicate the surface material of the driveway/parking areas. Also indicate what is existing and what is proposed

Taylor Irvin Trust
 5880 Vessey Road

Charles & Cheryl Ernst
 14410 Holmes Road

Jeremy Verecke
 14350 Holmes Road

The parties responsible for this plan have familiarized themselves with all current accessibility criteria and specifications and the proposed plan reflects all site elements required by the applicable ADA design standards and guidelines as published by the United States Department of Justice. Approval of this plan by El Paso County does not assure compliance with the ADA or any regulations or guidelines enacted or promulgated under or with respect to such laws.

Name: Kesti Suggs
 Address: 14445 Holmes Road

Patrick & Kelly McGowan 14355 Holmes Road

Letter of Intent
Special Use Permit
Rural Home Occupation

OWNER/Applicant

Kesti Suggs executive owner of Chuckie's Place, a non-profit corporation, DBA as Reigning Hope
14445 Holmes Road
Colorado Springs, CO 80908

The letter of intent from the approved special use indicated that there will be no changes to the configuration of the property. Please indicate how the configuration will change. Note that per conditions of approval of the special use, the approval is limited to what was depicted in the previously approved letter of intent and site plan drawings. If the PCD director determines that the change is substantial then it shall be subject to review and approval by the BOCC.

Site Location, size and zoning

Site is located at the north end of Holmes road, north of the Holmes and group intersection.

4.15 Acres zoned

Request and Justification

The Request is for the approval of a structure variance to allow a 63 foot by 75 foot, 1 story structure.

Justification

Reigning Hope was approved for a special use and variance of the property at 14445 Holmes Road, which allows Reigning Hope to operate its activities of working with physically and emotional disadvantaged individuals, using occupational therapy, with horses. Therapy activities occur in an enclosed "outdoor arena" and adjacent "sensory trail". Reigning Hope is requesting for structural approval for an indoor arena for inclement weather. The outdoor arena and sensory trail currently exist (in addition to a horse barn and workshop). The sensory trail is a walking trail that includes various stations that provide sensory experiences of touch, smell, sound, and physical challenges.

There will be a change to the current configuration of the property to accommodate this structure of 63x75 square feet. Reigning Hope activities will occur on 3 acres of the 4.15-acre lot.

The business will operate on a by appointment basis during daytime hours of 8:00 am to 5:00 pm Monday through Saturday. The type of therapy activities occurring are:

1. Individual therapy sessions held with 4 individuals present: a client, a therapist, a parent or guardian and an individual from Reigning Hope controlling the therapy horse. Each family is assisted differently due to therapy needs, siblings can also be included in therapy sessions. Sessions will run approximately one hour. One- two vehicles.

special use approval indicated activities would occur on 2 acres.

Please clarify if this paved driveway is new/proposed. Identify the total amount of land disturbance that is proposed. Note that if land disturbance is 1 acre or greater additional engineering documents will be required.

Water needs for these activities is limited to drinking water and a handicapped accessible bathroom inside the currently existing workshop. There is currently electric service to the horse barn and workshop which have interior and exterior lighting. There is no need for gas service.

Parking is adequate from the paved driveway to in front of the workshop and indoor. No parking on ROW access road. *Asphalt Millings*

Impacts to adjacent properties will be minimal if at all. The activities are minimally visible from the road and where there is a line of sight from residences there are trees on this property.

This structure is compatible with the surrounding area. The use is equestrian in nature and a number of properties in the area have horses as well as other domestic animals. It is so low impact an activity that it will have no negative effect on the health, safety or welfare of neighboring inhabitants. The horses already reside on the property to no adverse effect and the activity only brings in a limited number of people at a time to interact with them.

The proposed structure use will meet air, water, odor and noise standards and should have no effect on property values as there is limited visibility to it. There will be no adverse effect on wildlife or wetlands. There appears to be no off-site impacts as the use is wholly contained on the property.

Existing and proposed facilities, structures, roads, etc.

All the facilities, structures, roads, etc. at this location are existing and are comprised of the following:

- Residence of approximately 1,728 square foot house
- Workshop/garage 60x40
- 4 stall horse barn with hay storage
- Fenced paddock 100x60
- Fenced paddock 100x40

Please revise this last sentence to match what was provided in the letter of intent for the approved special use application(AL1815). That letter of intent stated: "No parking will be allowed on access road, north of the property, which is on the private drive on the Hoffman's Property."

Waiver Request- NA

Need for change in Zone classification- NA

Total number of Acres:

The property is on 4.15 acres of which approximately 2 will be leased for business use.

Number of residential units and densities:

There is one residential unit occupied by 5 individuals

Number of industrial sites proposed: NA

Approximate floor area ration of industrial and/or commercial uses- NA

The letter of intent from the approved special use and the submitted site plan indicate 5 loafing sheds 8x8. Please list that here.

Number of Mobile home unites and densities- NA

Typical lot sizes-NA

Type of proposed recreational facilities- NA

If phased construction, how will it be phased- NA

Anticipated schedule of development

How water and sewer will be provided

Proposed uses, relationship between uses and densities – NA

Areas of required landscaping – NA

Proposed access locations

Access will be the 14445 Holmes Driveway.

Approximate acres and percent of land to be set aside as open space, not including parking, drive and access roads. NA

