

GRANDWOOD RANCH
LETTER OF INTENT
PRELIMINARY PLAN

Owners/Applicants: Grandwood Enterprises, LLC
William F. Herebic II, Manager
270 Lodgepole Way, Monument, CO 80132
719-651-9152

Consultants: Matrix Design Group
2435 Research Pkwy, Colorado Springs, CO 80920
719-575-0100

Engineering: Matrix Design Group
2435 Research Pkwy, Colorado Springs, CO 80920
719-575-0100

Vivid Engineering Group, Inc.
1053 Elkton Drive, Colorado Springs, CO 80907
719-896-4356

ERO Resources Corporation
1842 Clarkson Street, Denver, CO 80218
303-830-1188

LSC Transportation Consultants, INC.
545 East Pikes Peak Avenue, Suite 210, Colorado Springs, CO 80903
719-633-2868

Monson, Cummins & Shohet, LLC
13511 Northgate Estates Drive, Suite 250, Colorado Springs, CO 80921
719-471-1212

Forestree Development, LLC
7377 Osage Road, Larkspur, CO 80118
720-530-6527

Site Location: Northeast corner of Higby Road and Fairplay Drive. El Paso County Tax
Schedule Number 6119000003.

Request: Request by Grandwood Enterprises, LLC for approval of a preliminary
plan to develop forty-eight single family residential lots at a minimum of
2.5 acres each, a 0.25 acre Tract for a future potential well site, a 10.59
acre Tract and a 3.69 acre Tract for drainage and detention, cistern for
fire protection, and open space/conservation area (collectively the
"Property"). Grandwood Enterprises requests an Early Grading Permit
upon approval of the Preliminary Plan and Zone Change. Grandwood
Enterprises also requests a waiver of the Water Finding until the Final
submittal.

Site and Plan Information/Justification for Request:

The proposed preliminary plan is consistent with the goals and objectives set forth in the 2000 Tri-Lakes Comprehensive Plan.

Preliminary Plan: Forty-eight single family residential lots each containing a minimum of 2.5 acres, a 3.69 acre Tract for a drainage detention basin, cistern for fire protection, and open space/conservation area, and a 10.59 acre Tract for a drainage detention basin, cistern for fire protection, and open space/conservation area are proposed, and a 0.25 acre Tract for a future well site. The future well site location would be reserved for use by Woodmoor Water and Sanitation or TriView Metropolitan District. The Property falls within Sub-Areas #9 Ponderosa Breaks and #10 Gleneagle/Academy View of the 2000 Tri-Lakes Comprehensive Plan. The recommendations for the Property, as shown in the Concept Plan for these Sub-Areas, Map 7.1, are Low Density. Sub-Area #9 Ponderosa Breaks is described in the 2000 Tri-Lakes Comprehensive Plans thusly, *"The northern portion of the Sub Area is zoned for 2.5 acres (i.e. Arrowwood and Bent Tree)."*

The forty-eight single family lots and Tracts will be subject to a comprehensive set of Covenants, Conditions, and Restrictions and Owners' Associations. In addition to other duties, the Owners' Association will be responsible for insurance with compliance with the plan for augmentation for the use of the Dawson aquifer groundwater.

In addition to the forty-eight residential lots, the Preliminary Plan contains three tracts. Tract B is a 0.25 acre parcel intended to be future potential well site. Tract C is a 3.69 acre parcel intended for a drainage detention facility which will handle developed flows for the single family lots on the western portion of the Property, a 33,000 gallon underground cistern for fire protection of the western portion of the Property, and open space/conservation of riparian habitat. Tract A is a 10.59 acre parcel intended for a drainage detention facility which will handle developed flows for the single family lots on the eastern portion of the Property and a 33,000 gallon underground cistern for fire protection of the eastern portion of the Property and open space/conservation of riparian habitat.

Vehicular Access: Two vehicular access points are provided onto Higby Road, a 60' right of way County owned and maintained Roadway. Applicant proposes to dedicate 30' along Higby Road northward onto the Property as required. The easterly access point from Higby Road onto the Property is a proposed "Rural Local" cul de sac serving twenty-one single family residences. The westerly access point from Higby Road onto the Property is proposed to be a continuation of Furrow Road built to "Rural Major Collector" standards northward to the existing southerly terminus of Furrow Road. A "Rural Local" cul de sac serving eighteen single family residences is proposed to the east of the T- Intersection. A "Rural Local" cul de sac serving nine single family residences is proposed to the west of the T-Intersection. There will be no driveway access permitted onto Higby Road and Furrow Road.

Grading and Drainage: Two detention basins will control developed stormwater flows within the Property. One drainage channel will control the release of stormwater from an existing detention basin to the east of the Property. Grading will commence following installation of erosion control measures and notice to proceed from El Paso County.

Development Phasing: Three phases of construction are anticipated. The first phase of construction will be twenty-one single family residential lots on the easterly cul de sac. The second phase of construction will be eighteen single family residential lots east of Furrow Road. The third phase of construction will be nine single family residential lots west of Furrow Road.

Water: Water will be provided by individual wells. A plan for augmentation for use of Dawson aquifer groundwater for residential use for 300 years has been submitted for consideration.

Criteria for Approval - Land Development Code Section 7.2.1(D)(2)(e):

In approving a Preliminary Plan, the BoCC/PCD Staff shall find that:

1. The proposed subdivision is in general conformance with the goals, objectives, and policies of the Master Plan (EPC Policy Plan) including the Small Area Plan (2000 Tri-lakes Comprehensive Plan), the 2040 Major Transportation Corridors Plan (MTCP) and the El Paso County Parks Master Plan:

The El Paso County Master Plan (EPC Policy Plan) addresses issues directly related to the future development of the Grandwood Ranch Subdivision. These Policies include:

- *Policy 6.1.10 – Ensure that new development will not create a disproportionately high demand on public services and facilities by virtue of its location, design or timing.* The proposed subdivision is located within the 2000 Tri-lakes Comprehensive Plan. The Comprehensive Plan recognizes and encourages development of the type and density proposed. Commitments to serve the subdivision have been provided by utility suppliers and the local Fire District. Mitigation requirements related to drainage impacts and transportation impacts have been identified within the Grandwood Subdivision's Preliminary Drainage Report and the Traffic Impact Study.
- *Policy 6.1.11 – Plan and implement land development so that it will be functionally and aesthetically integrated within the context of adjoining property and uses.* The proposed subdivision is located within the Ponderosa Breaks Subarea 9 of the 2000 Tri-lakes Comprehensive Plan. This subarea recommends single family residential land uses to a minimum lot size of 2.5 acres. The proposed subdivision is consistent with this land use recommendation. Beyond the issue of land use, this subarea recommends the following related to physical design goals and objectives;
 - *Preserve adequate roadway right-of-way for future development. Improve north-south access roads, including Furrow and Roller Coaster Roads, to provide for both motorized and non-motorized traffic.* Furrow Road, a collector roadway, is designed to extend from the existing Timber Meadows subdivision south to intersect with Higby Road.
 - *Manage, preserve, protect, and enhance the vegetation to ensure the long term health of the ponderosa forest.* Proper forest management and wildfire hazards mitigation go hand in hand. The Grandwood Wildfire Mitigation Plan, prepared

by Forestree Development, LLC, provides detailed strategies to protect and enhance the ponderosa forest while providing the level of wildfire hazard mitigation necessary to ensure the safety and security of the Grandwood community.

- *Require erosion control measures and slope stabilization for all new development.* The Grandwood Preliminary Drainage Report, Grading & Erosion Control Plan and Storm Water Management Plan (SWMP) all address issues related to erosion control and slope stabilization.
- *Goal 6.4 – Develop and maintain rural residential areas in a manner which protects their integrity, addresses the carrying capacity of the natural environment and provides for an adequate level of non-urban facilities and services.* The proposed 2.5 acre home sites are consistent with the transitional rural residential character of the Ponderosa Breaks Sub-area community. The proposed density allows for the future subdivision of the parcel to develop such that the land's topography, natural systems, water resources, geology and surface drainage can accommodate and adequately facilitate 2.5 acres home sites. Areas of geologic hazards, sensitive environmental assets or drainage concerns have been identified and integrated into areas outside of the proposed building envelopes ensuring residential structural safety and integrity. Water service will be provided via on site wells operated under a State approved Water Augmentation Plan. Wastewater will be accomplished via individual on site septic systems. Reports regarding the suitability of the property to safely accommodate the wells and septic systems have been provided. Fire protection will be provided in accordance with the fire codes adopted by the Tri-lakes Monument Fire Protection District. Electric, natural gas, telephone and communication data transfer will be accomplished via underground service systems.
- *Policy 6.4.3 – Allow rural residential development in those areas of sufficient “carrying capacity: including roadway capacity, water supply, septic suitability, educational facilities and organized structural fire protection.* Reports addressing fire protection, water resources, wastewater treatment suitability and transportation impacts have been provided.
- *Policy 6.4.9 – Continue to develop reasonable and consistent levels of service standards for rural residential subdivision.* See Policy 6.4.3 above. The identified reports and letters required with a Preliminary Plan application package have addressed both current and future levels of service standards for rural residential subdivisions. Where substandard conditions are found to exist, the identified mitigation measures will be implemented such that no declines in future levels of service standards are expected.

The 2040 Major Transportation Corridor Plan (MTCP) indicates Higby Road to be a 2 lane minor arterial and Furrow Road to be a 2 lane collector. No bicycle lanes are indicated for these roadways. The Grandwood Preliminary Plan accommodates the required right-of-way widths for these two roadways. See Traffic Impact Report prepared by LSC Transportation Consultants. Regional park needs for future Grandwood residents are accommodated by the nearby Fox Run Regional Park.

The El Paso County 2013 Parks Master Plan does not indicate the need for additional regional parks within this area nor the need for additional regional trails or bicycle lanes. Because the Grandwood subdivision is a large lot subdivision with open space recreational opportunities, no neighborhood or urban parks are required or proposed.

2. The subdivision is consistent with the purposes of the El Paso County Land Development Code. The underlying purpose of the El Paso County Land Development Code is to protect the

health, safety and welfare of the citizens of El Paso County. The following Criteria for Approval responses evidences the application's consistency with the purposes of the Code.

3. The subdivision is in conformance with the subdivision design standards and any approved sketch plan; The proposed subdivision design is in conformance with subdivision design standards as evidenced by staff and agency document review responses. There are no previous agreements or sketch plans related to this parcel.

4. A waiver has been requested to defer requirements until the Final Plat process. Water service will be provided by individual on site wells permitted and operated under a State approved Water Augmentation Plan. Water quantity and dependability will be assessed by the County Attorney's Office and the State Division of Water Resources based upon the subdivision's Water Augmentation Plan and Water Supply Report submitted by the applicant. Water quality will be assessed by the El Paso County Health Department based upon water quality testing provided by the applicant.

5. A sewage disposal system has been established complying with all State and County sewage disposal system standards; Wastewater collection and treatment will be provided via individual onsite septic systems. Septic suitability will be assessed by the El Paso County Health Department based upon the Onsite Wastewater Treatment Systems Report provided by the applicant.

6. All areas of the proposed subdivision, which may involve soil or topographical conditions presenting hazards or requiring special precautions, have been identified and the proposed subdivision is compatible with such conditions. The subdivision's Geology and Wastewater Evaluation Report evaluated expansive/settlement prone soil, erodible soils, corrosive soils, mine subsidence, slope stability, flooding potential, seismicity, radiation and groundwater conditions. The Report concluded "*It is our opinion that the project site exhibits no geologic hazards that pose a significant risk to the proposed project or adjacent properties that cannot be mitigated through proper land usage planning, foundation design, engineering design and/or construction practice.*" Mitigation recommendations have been provided within the Report should any geologic hazards be encountered during individual lot geologic evaluation.

7. Adequate drainage improvements complying with State law and the requirements of this Code and the ECM are provided by the design; See Preliminary Drainage Report, Storm Water Management Plan (SWMP) and Grading and Erosion Control Plan prepared by Vivid Engineering Group and submitted by the applicant evidencing compliance with this requirement.

8. Legal and physical access is or will be provided to all parcels by public rights-of-way or recorded easements, acceptable to the County in compliance with this Code and the ECM; All proposed lots have direct physical and legal vehicular access onto proposed dedicated public right-of-ways. See Preliminary Plan drawings prepared by Matrix Design Group and submitted by the applicant evidencing compliance with this requirement. In addition to public right-of-way required to provide legal and physical access to the individual lots, public right-of-way will also be provided by the extension of Furrow Road between the Timber Meadows subdivision and Higby Road (collector road classification) and Higby Road (minor arterial classification) as required by the 2040 Major Transportation Corridor Plan. See the Grandwood Traffic Impact Report prepared by LSC Transportation Consultants for additional specific transportation related requirements.

9. The proposed subdivision has established an adequate level of compatibility by;

(1) incorporating natural physical features into the design and providing sufficient open spaces considering the type and intensity of the subdivision; Approximately 13.87 acres

or 9% of the Grandwood subdivision's land area is natural open space. The primary function of the open space is to provide wetland habitat preservation. A secondary function of the open space is to provide passive recreational and trail opportunities for the subdivision's residences. The open space is primarily located within existing natural drainage ways facilitating streams, ponds and riparian habitat.

(2) incorporating site planning techniques to foster the implementation of the County's plans, and encourage a land use pattern to support a balanced transportation system, including auto, bike and pedestrian traffic, public or mass transit if appropriate, and the cost effective delivery of other services consistent with adopted plans, policies and regulations of the County; As encouraged by the 2000 Tri-lakes Comprehensive Plan, the physical design of the Grandwood subdivision utilizes rural residential cul-de-sacs which directly access either collector roadways (Furrow Rd) or minor arterial roadways (Higby Rd) thereby eliminating new traffic impacts onto existing rural residential roadways. Inter-subdivision pedestrian and bicycle traffic will utilize the rural residential cul-de-sac roadways. Public or mass transit opportunities are currently not available within this area of the County. Should they become available in the future, public or mass transit will be able to utilize Furrow Rd (collector classification) and/or Higby Rd (minor arterial classification).

(3) incorporating physical design features in the subdivision to provide a transition between the subdivision and adjacent land uses; All existing or proposed subdivisions adjoining the Grandwood subdivision are single family residential land uses. Subdivisions to the west and south of Grandwood are primarily urban scale lots while subdivisions to the north and east are primarily rural scale 2.5 acre lots. The proposed Grandwood 2.5 acre lots require no transition of land uses.

(4) incorporating identified environmentally sensitive areas, including but not limited to, wetlands and wildlife corridors, into the design; The proposed Grandwood open space provides permeant protection to natural drainage ways, wildlife habitat, wildlife corridors and Federally protected wetlands.

(5) incorporating public facilities or infrastructure, or provisions therefore, reasonably related to the proposed subdivision so the proposed subdivision will not negatively impact the levels of service of County services and facilities; The proposed Grandwood subdivision's roadway infrastructure will positively impact surround roadways levels of service by providing a southerly Furrow Road exit.

10. Necessary services, including police and fire protection, recreation, utilities, open space and transportation system, are or will be available to serve the proposed subdivision; Police protection for the Grandwood subdivision will be provided by the El Paso County Sheriff's Office. The subdivision is located within and will be serviced by the Tri-lakes Monument Fire Protection District (see service commitment letter). Electric service will be provided by Mountain View Electric Association and natural gas service will be provided by Black Hills Energy Corporation (see utility service commitment letters). Recreational opportunities will be provided via the nearby Fox Run Regional Park. The public vehicular circulation network has been designed to provide safe and convenient vehicular circulation to and throughout the subdivision (see LSC's Traffic Impact Report).

11. The subdivision provides evidence to show that the proposed methods of fire protection comply with Chapter 6 of the Land Development Code; Per the requirements of the Tri-lakes Monument Fire Protection District and Chapter 6 of the Land Development Code, 2 proposed 30,000 gallon cisterns will provide localized fire protection water sources. In addition, numerous wildfire hazards mitigation techniques are included within the Grandwood Wildfire Mitigation

Plan prepared by Forestree Development, LLC. The Grandwood Property Owners Association will participate in the District's Firewise Communities Program and has integrated wildfire hazards mitigation measures into their communities Covenants and Restrictions. The developer has also provided a fire break system via the subdivision's internal roadways (see Fire Protection Report, District Service Commitment Letter and District application review response).

12. The proposed subdivision meets other applicable sections of Chapter 6 and 8 of the Land Development Code; Chapter 6 of the LDC deals with general development standards while Chapter 8 deals with subdivision design, improvements and dedication standards. Compliance with these standards is documented and ensured through the various State and County departmental and agency review responses.

Districts Serving the Property:

Lewis-Palmer School District 38
Mountain View Electric Association
Black Hills Energy
Tri-Lakes Monument Fire Protection District



Planning and Community
Development Department
2880 International Circle
Colorado Springs, Colorado 80910

DEVIATION REQUEST AND DECISION FORM

Updated: 6/17/2019

Phone: 719.520.6300
Fax: 719.520.6695
Website: www.elpasoco.com

PROJECT INFORMATION

Project Name : Grandwood Ranch
Schedule No.(s) : 6119000003
Legal Description : S2N2, EX PT TO HIGBY RD CONV BY REC# 205092691 W/MR SEC 19-11-66

APPLICANT INFORMATION

Company : Grandwood Enterprises
Name : Bill Herebic
☒ Owner ☐ Consultant ☐ Contractor
Mailing Address : 270 Lodgepole Way
Monument, CO 80232

Phone Number : 719-651-9152
FAX Number : N/A
Email Address : Herebic5@msn.com

ENGINEER INFORMATION

Company : LSC Transportation Consultants, Inc.
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Suite 304
Colorado Springs, CO 80909
Phone Number : 719-633-2868
FAX Number : 719-633-5430
Email Address : Jeff@LSCTrans.com

Colorado P.E. Number : 31684

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

Date

Engineer's Seal, Signature
And Date of Signature



DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

Deviation No. 3 (4-15-2020): A deviation from the standards of or in Sections **2.3.4.B** and **2.3.7.C.4** of the Engineering Criteria Manual (ECM) is requested. The request is for intersection approach grades and “mid-block” centerline roadway grades exceeding the maximum allowable in the ECM. The details are described below. See attached Deviation No. 3 Exhibit by LSC and the attached plan and profile exhibit prepared by Matrix Design Group.

Identify the specific ECM standard which a deviation is requested:

2.3.4.B Maximum and Minimum Grades for Roadways

Table 2-15: Minimum and Maximum Roadway Grades (Rural Collector)

- Minimum centerline grade (rural) – 1%
- Maximum centerline grade (rural) – 8%

2.3.7.C.4 Intersection Alignment (Vertical Alignment)

Tables 2-22 & 2-23: Intersection Grades by Roadway Functional Classification (Rural Collector & Rural Minor Arterial)

- Minimum intersection grade (rural) – 1%
- Maximum intersection grade (rural) – 4%
- Minimum intersection profile grade length – 125 feet

State the reason for the requested deviation:

Furrow Road (Proposed)

The design plans were prepared to minimize the intersection approach grades and roadway centerline grades. However, the natural grade is approximately 10% for about 900 to 1,000 feet south of Minglewood Trail. The change in elevation between the current terminus of Furrow Road (at Lamplight) and Higby Road and the horizontal distance between these two locations requires a deviation to the centerline roadway grade.

- North of the intersection (between the intersections of Copper Valley Court and Minglewood Tr.), the centerline roadway grade is proposed to be 9.8%

The centerline roadway grade deviation is needed to meet the intersection grade standard at the proposed Furrow Road/Copper Valley Court intersection.

Higby Road/Furrow Road Intersection (Proposed New Intersection)

The location for the Higby/Furrow intersection has been coordinated with this applicant and the Homeplace Ranch property owner to the south. It is our understanding that shifting the intersection to the west would require significantly more grading on the south side of the roadway.

- The proposed westbound approach to the Higby Road/Furrow Road intersection is about 6.5 percent
- West of the proposed intersection, the grades moderate for the eastbound intersection approach.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

Furrow Road (Proposed)

The proposed "mid-block" centerline roadway grade north of the intersection (between the intersections of Copper Valley Court and Minglewood Trail) would exceed the ECM maximum. The centerline roadway grade is proposed to be 9.8%. The ECM standard for Rural Collectors is 8% maximum (10% maximum grade permitted at the discretion of the ECM Administrator). The proposed section of 9.8% grade would exceed the 8% standard by 1.8%. The proposed 9.8% meets (by 0.2%) the allowable maximum grade permitted with ECM Administrator approval (10%). See the attached deviation exhibit and the attached plan and profile exhibit prepared by Matrix Design Group.

Higby Road/Furrow Road Intersection (Proposed Intersection)

The location for the Higby/Furrow intersection has been coordinated with this applicant and the Homeplace Ranch property owner to the south. It is our understanding that shifting the intersection to the west would require significantly more grading on the south side of the roadway.

- The westbound approach grade to the proposed Higby Road/Furrow Road intersection would be about 6.5 percent.
- West of the proposed intersection, the grades moderate for the eastbound intersection approach.

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☒ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☐ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

Furrow Road

Furrow Road between Higby Road and the south terminus of Furrow Road at Minglewood Trail are "fixed" points in terms of elevation and the horizontal distance between. The natural grade is approximately 10% for about 900 to 1,000 feet south of Minglewood Trail. Given the change in elevation between the current terminus of Furrow Road (at Minglewood/Lamplight) and Higby Road and the horizontal distance between these two locations, a deviation is required to the centerline roadway grade to meet the intersection grade standard at the proposed Furrow Road/Copper Valley Court intersection.

Higby Road/Furrow Road

The location for the Higby/Furrow intersection has been coordinated with this applicant and the Homeplace Ranch property owner to the south. It is our understanding that shifting the intersection to the west would require significantly more grading on the south side of the roadway. Also, it is our understanding that shifting the intersection to the west would impact the Preble's Meadow Jumping Mouse habitat.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

Furrow Road

The design plans were prepared to minimize the intersection approach grades and roadway centerline grades. However, the natural grade is approximately 10% for about 900 to 1,000 feet south of Minglewood Trail. Given the change in elevation between the current terminus of Furrow Road (at Minglewood/Lamplight) and Higby Road and the horizontal distance between these two locations, a deviation to the centerline roadway grade is needed in order to meet the intersection grade standard at the proposed Furrow Road/Copper Valley Court intersection. The proposed 9.8% meets (by 0.2%) the allowable maximum grade permitted with ECM Administrator approval (10%).

The deviation will not adversely affect safety or operations.

Furrow Road/Copper Valley Court

The ECM standard for Rural Collectors is 8% maximum (10% maximum grade permitted at the discretion of the ECM Administrator). The proposed 9.8% meets (by 0.2%) the allowable maximum grade permitted with ECM Administrator approval (10%).

Higby Road

The westbound approach grade to the proposed Higby Road/Furrow Road intersection would be about 6.5 percent. Future Stop signs would likely be placed on the northbound and southbound approaches with no stop condition on the westbound approach for the westbound through movement. The applicant will **dedicate ROW** for westbound right turn and left turn lanes (with length adjusted for the downgrade) on Higby Road if needed in the future. Note: The TIS shows the recommended eastbound left turn lane.

The deviation will not adversely affect maintenance and its associated cost.

The roadway grades would not affect the ability of County maintenance vehicles and snowplows to complete their work.

The deviation will not adversely affect aesthetic appearance.

Roadway cross-sections will be constructed to County standards. There will be no adverse effect on appearance with respect to the requested grades.

The deviation meets the design intent and purpose of the ECM standards.

The proposed 9.8% grade on Furrow would meet (by 0.2%) the allowable maximum grade permitted with ECM Administrator approval (10%).

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

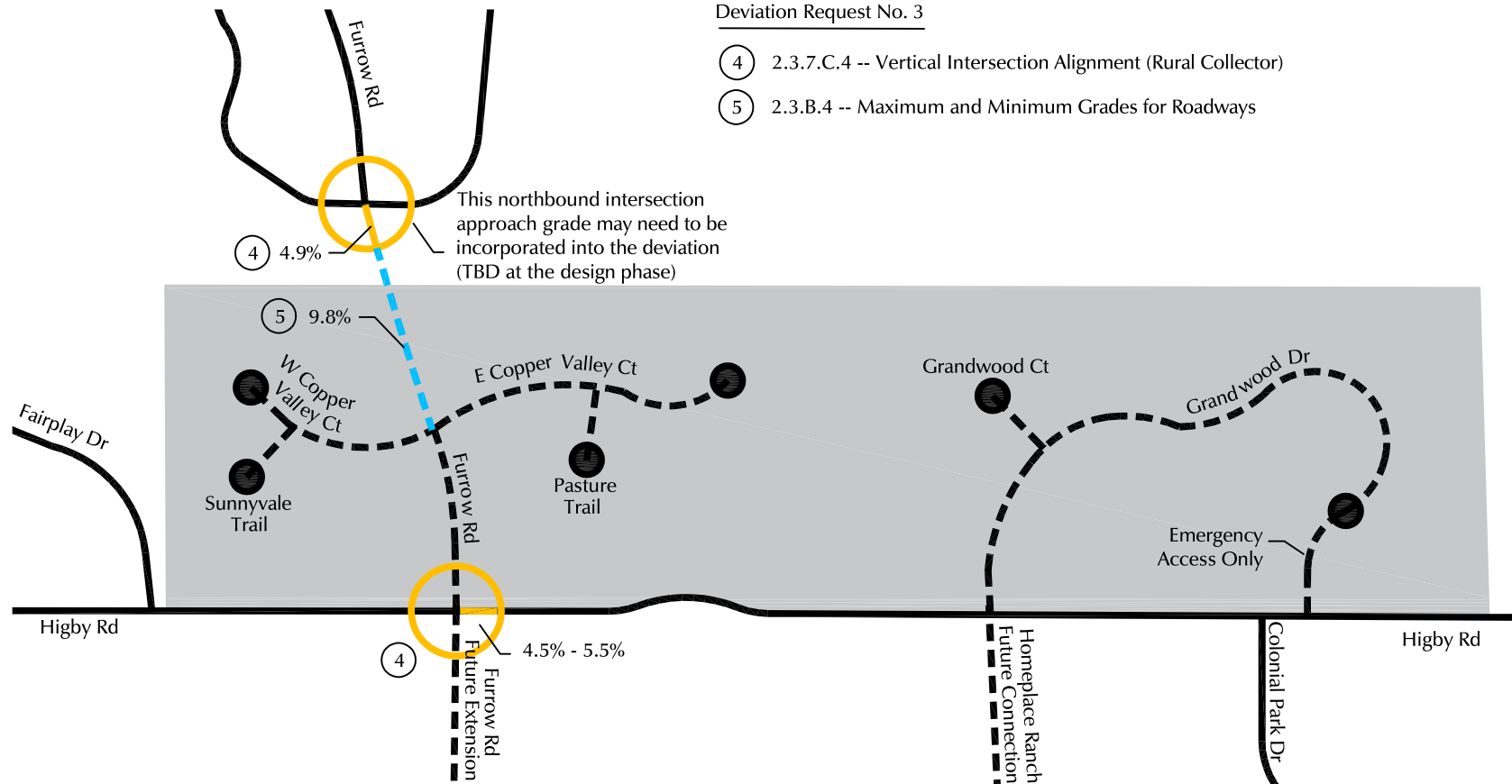
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Not to scale

Deviation Request No. 3

- (4) 2.3.7.C.4 -- Vertical Intersection Alignment (Rural Collector)
- (5) 2.3.B.4 -- Maximum and Minimum Grades for Roadways

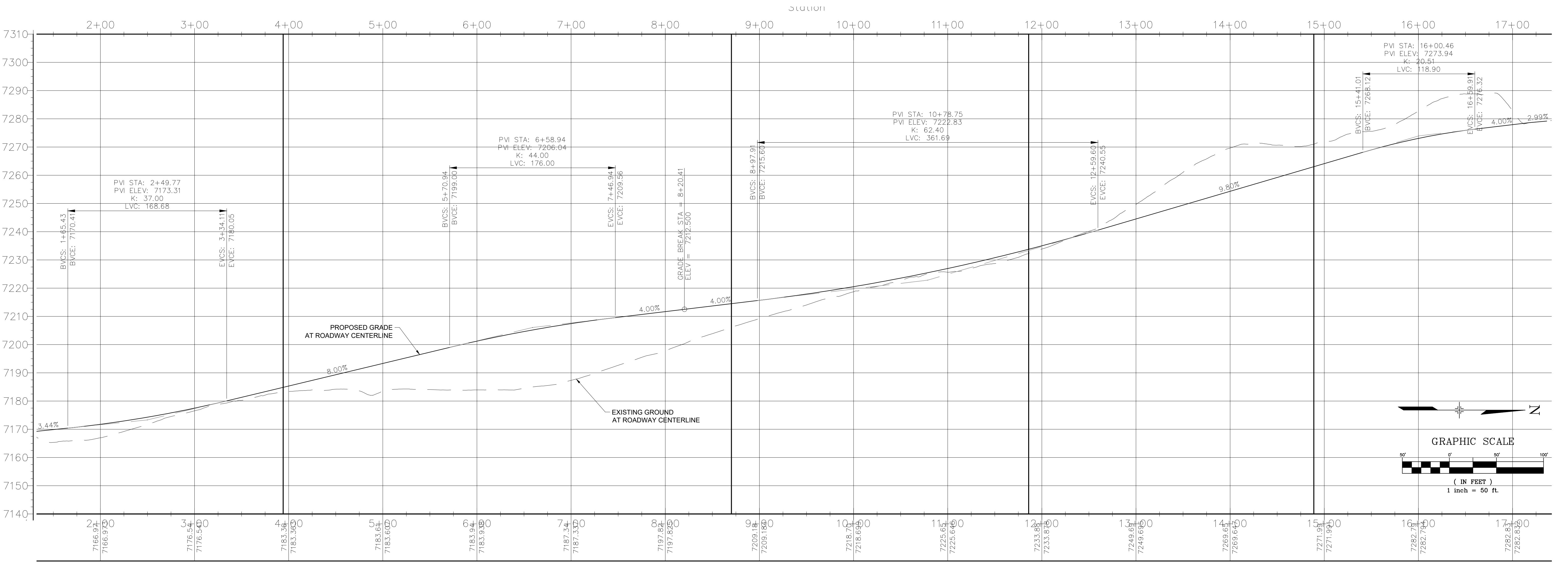
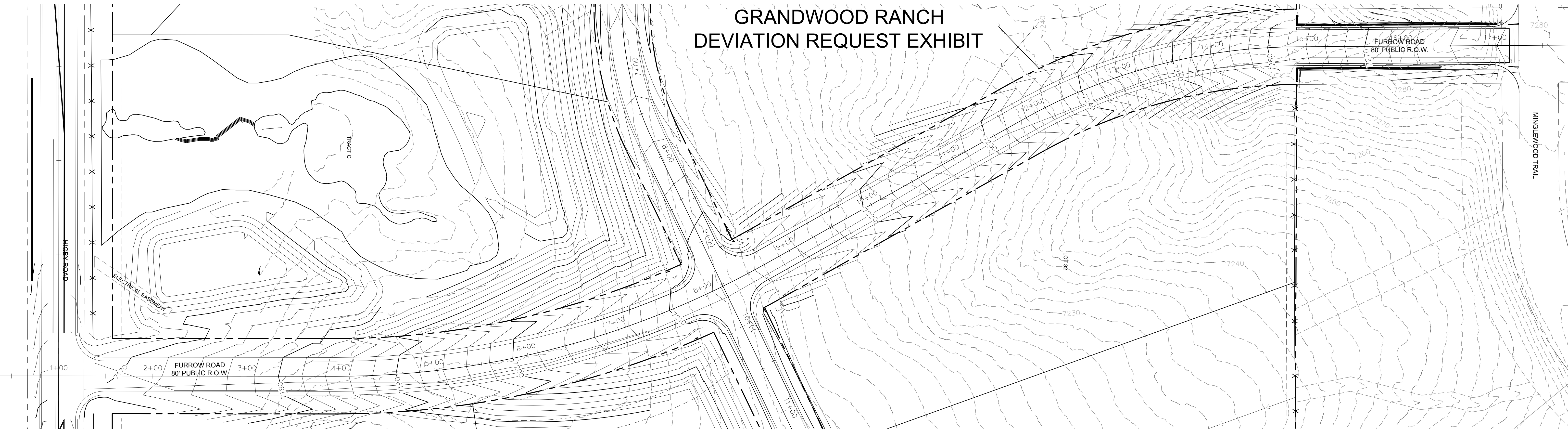


- Existing roadway
- Intersection approach for which deviation is requested
- "Mid-block" roadway grade for which deviation is requested
- - - Proposed roadway
- Intersection and approach leg(s) for which deviation is requested
- XX% Maximum intersection roadway centerline grade or intersection approach grade (per plan and profile sheet)

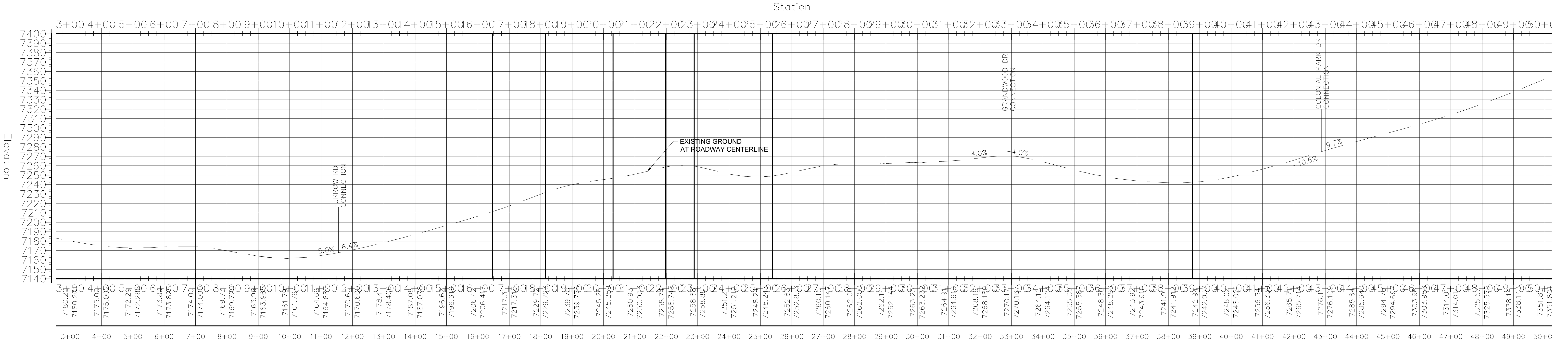
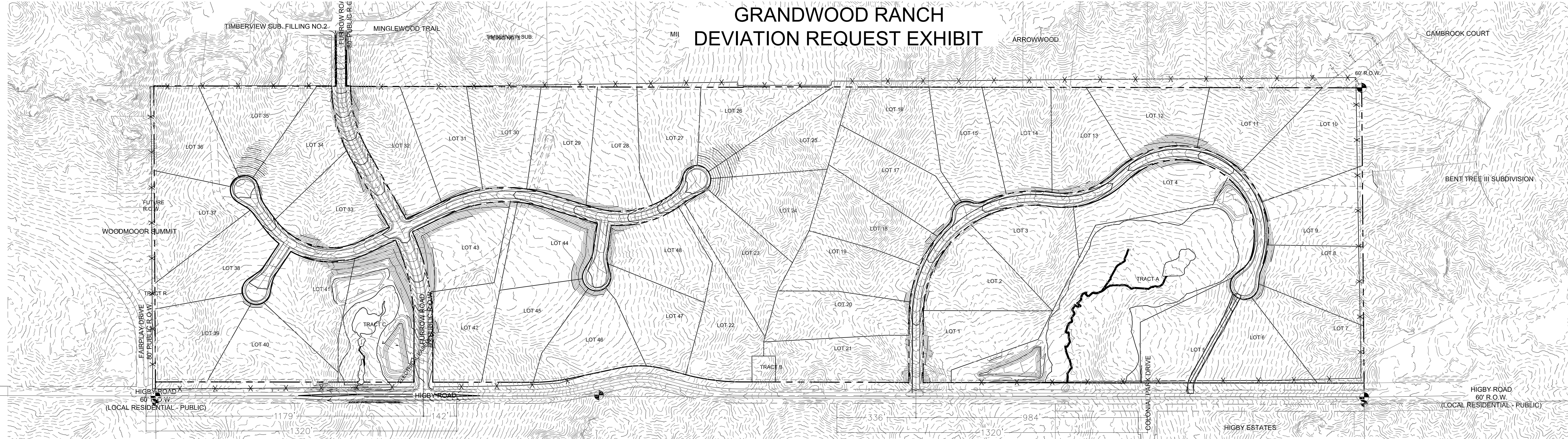


Deviation Exhibit 3
**Centerline
Roadway Grades**
Grandwood Ranch (LSC# 185020)

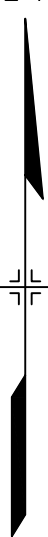
GRANDWOOD RANCH
DEVIATION REQUEST EXHIBIT



GRANDWOOD RANCH
DEVIATION REQUEST EXHIBIT



N



GRAPHIC SCALE



(IN FEET)
1 inch = 200 ft.



**Planning and Community
Development Department**
2880 International Circle
Colorado Springs, Colorado 80910
Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM

Updated: 6/26/2019

PROJECT INFORMATION

Project Name :	Grandwood Ranch
Schedule No.(s) :	6119000003
Legal Description :	S2N2, EX PT TO HIGBY RD CONV BY REC# 205092691 W/MR SEC 19-11-66

APPLICANT INFORMATION

Company :	Grandwood Enterprises
Name :	Bill Herebic
	<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Consultant <input type="checkbox"/> Contractor
Mailing Address :	270 Lodgepole Way, Monument, CO 80132
Phone Number :	719-651-9152
FAX Number :	
Email Address :	Herebic5@msn.com

ENGINEER INFORMATION

Company :	Matrix Design Group	
Name :	Gregory Shaner	Colorado P.E. Number : 36307
Mailing Address :	2435 Research Pkwy, Suite 300, Colorado Springs, CO 80920	
Phone Number :	719.575.0100	
FAX Number :		
Email Address :	Gregory.Shaner@Matrixdesigngroup.com	

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

Date

Engineer's Seal, Signature
And Date of Signature

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DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section **2.3.2** of the Engineering Criteria Manual (ECM) is requested.

Identify the specific ECM standard which a deviation is requested:

Section 2.3.2 Design Standards by Functional Classification – Table 2-5 Roadway Design Standards for Rural Collectors and Locals for the Major Rural Collector design criteria

State the reason for the requested deviation:

It is proposed to extend the existing collector, Furrow Road, through the Grandwood Ranch development and connect to the existing major arterial, Higby Road. Due to existing steep and varying terrain directly south of the intersection between Furrow Road and Minglewood Trail, retaining walls are required to make the Furrow Road extension to avoid disturbance within Lot 52 and Lot 4 of the Timberview Subdivision Filing No. 2.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

To allow room for construction of retaining walls and grading operations, a modified major rural collector section is being proposed for the extents of improvements within the existing Timberview Subdivision Filing No. 2. The proposed section replaces the typical roadside swale with curb and gutter to properly convey stormwater runoff and to allow feasible space for retaining wall construction without disturbing adjacent property owners. Curb and gutter will also serve as protection against erosion at the base of the retaining walls. Once the Furrow Road extensions reaches the Grandwood Ranch development site, the standard EPC Major Rural Collector section will be assumed for the remainder of the roadway extension.

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☒ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☒ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

Existing steep and varying terrain results in extensive grading to tie-back to existing grade. Retaining walls must be constructed to make the Furrow Road extensions to avoid disturbance of existing and occupied lots with the Timberview Subdivision Filing No. 2. With limited right-of-way for construction of retaining walls, curb and gutter will for the extents of development within the Timberview Subdivision will provide adequate space for the Furrow Road extensions and associated construction. The proposed curb and gutter will reduce the roadway section by 10' on each side of the road, allowing sufficient room for retaining wall construction and grading. Curb and gutter will also serve as protection against erosion at the base of the retaining walls

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The use of curb and gutter adjacent to existing property owners will provide protection for said property owners while property conveying existing and future traffic volumes and properly convey stormwater runoff into the Grandwood Ranch development.

The deviation will not adversely affect safety or operations.

The requested deviation will have no adverse affects on safety and/or operations. The proposed curb and gutter will provide a safety barrier between vehicles traveling through Furrow Road and the required retaining walls.

The deviation will not adversely affect maintenance and its associated cost.

The requested deviation will have no adverse affects on maintenance and its associated costs.

The deviation will not adversely affect aesthetic appearance.

The requested deviation will have no adverse affects on aesthetic appearance.

The deviation meets the design intent and purpose of the ECM standards.

The requested deviation meets the design intent and purpose listed within the ECM standards.

The deviation meets the control measure requirements of Part I.E.3 and Part I.E.4 of the County's MS4 permit, as applicable.

The requested deviation meets control measure requirements of the MS4 Permit.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

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1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2. BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3. APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4. APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

1.5. TECHNICAL GUIDANCE

The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

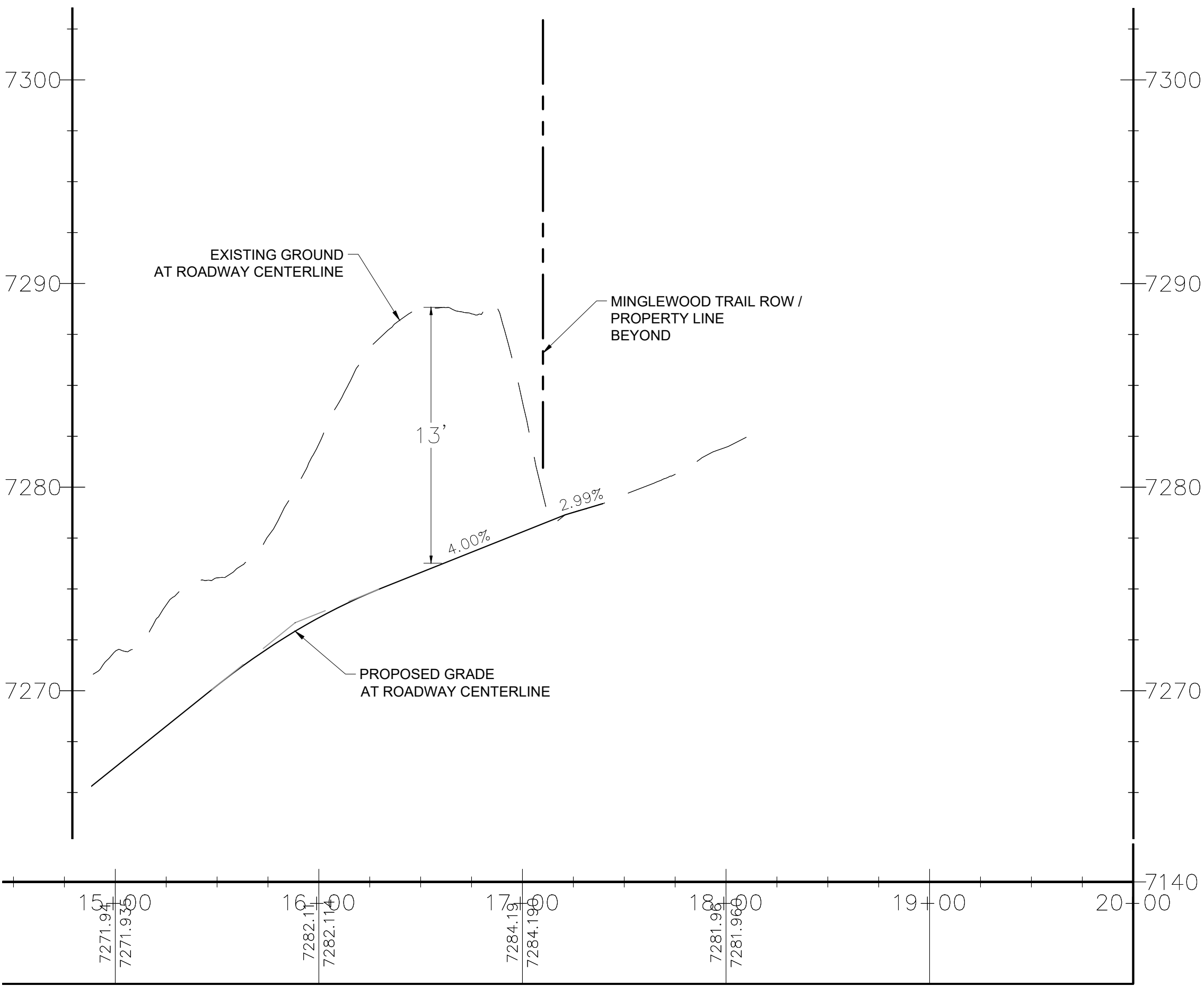
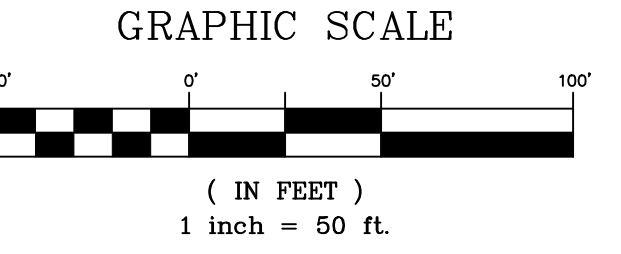
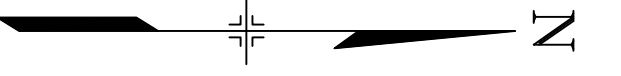
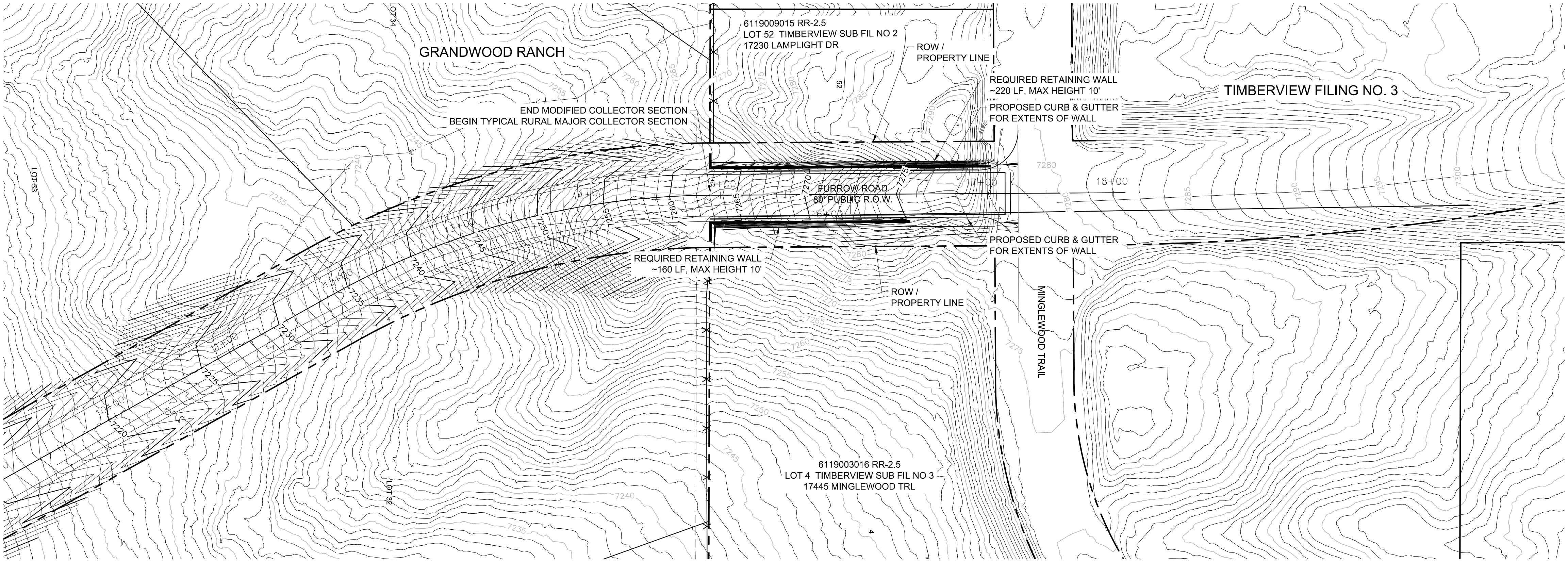
1.6. LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

1.7. REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC.

GRANDWOOD RANCH
DEVIATION REQUEST EXHIBIT





Planning and Community
Development Department
2880 International Circle
Colorado Springs, Colorado 80910

Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM

Updated: 6/17/2019

PROJECT INFORMATION

Project Name : Grandwood Ranch
Schedule No.(s) : 6119000003
Legal Description : S2N2, EX PT TO HIGBY RD CONV BY REC# 205092691 W/MR SEC 19-11-66

APPLICANT INFORMATION

Company : Grandwood Enterprises
Name : Bill Herebic
☒ Owner ☐ Consultant ☐ Contractor
Mailing Address : 270 Lodgepole Way
Monument, CO 80232

Phone Number : 719-651-9152
FAX Number : N/A
Email Address : Herebic5@msn.com

ENGINEER INFORMATION

Company : LSC Transportation Consultants, Inc.
Name : Jeffrey C. Hodsdon
Mailing Address : 2504 E. Pikes Peak Ave
Suite 304
Colorado Springs, CO 80909
Phone Number : 719-633-2868
FAX Number : 719-633-5430
Email Address : Jeff@LSCTrans.com
Colorado P.E. Number : 31684

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

Date

Engineer's Seal, Signature
And Date of Signature



DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

DEVIATION NO. 2 (Rev. 4/15/2020) - A deviation from the standards of or in Section 2.3.8.A of the Engineering Criteria Manual (ECM) is requested.

Identify the specific ECM standard which a deviation is requested:

2.3.8.A Roadway Terminations - Cul-de-Sacs

Cul-de-sacs shall have a maximum length of 1,600 feet for rural condition. The request is to allow a non-through street, Grandwood Drive, with a length of 2,542 feet. Please refer to Deviation 2 Exhibit. An emergency-use only connection is proposed from the end of the cul-de-sac to Higby Road, as shown in the exhibit.

State the reason for the requested deviation:

- Challenging topography on the site and along the adjacent Higby Road, including vertical and horizontal curves
- Preservation of natural land features within the site – which is the reason for the two separate proposed development areas
- El Paso County intersection spacing requirement for Minor Arterials
- Except for the Higby Road frontage and a right-of-way stub connection to Cambrook Ct., no other opportunity for a public road connection exists.
- A road connection via existing platted ROW in Bent Tree to Cambrook Ct. was investigated as an option. However, such a connection would result in excessive slopes.
- The layout of 2.5-acre lots (which are significantly greater than suburban or urban lots), the shape of the parcel and the developable area force the proposed road layout. An alternate layout that would meet the standard would be impractical.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

- The cul-de-sac termination on the east access (located 2,542 feet from Higby Road) would exceed the ECM standard of 1,600 feet by 942 feet.
- The proposed cul-de-sac is shown in the attached exhibit Figure 2 (site plan).
- An emergency-use only connection is proposed from the end of the cul-de-sac to Higby Road, as shown in the attached deviation exhibit.
- Twenty-one 2.5-acre lots would access this proposed cul-de-sac roadway. Five of these lots would also have frontage along Higby Road, although the homesite driveway accesses would be taken from the proposed internal road.
- Please refer to the attached letter from the fire district.

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☒ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☐ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

- Sensitive natural features within the site to the west that are worthy of preservation.
- Limited connectivity to public roads. Although there is an established public right-of-way northeast to Cambrook Ct., a road connection to Cambrook Ct. via this ROW in Bent Tree would result in excessive slopes. See attached Exhibit by Matrix Design Group showing extensive slope work that would be required.
- Challenging topography along Higby Road that prevents access spacing from meeting County requirements.
- Twenty-one total lots would access the cul-de-sac. The Land Development Code indicates, "A corner lot is not counted in the maximum number of lots on a dead-end road when the fire department determines that adequate emergency access is provided to the corner lot by an alternative road." Five of these lots would also have frontage along Higby Road, although the homesite driveway access would be taken from the proposed internal road.
- An emergency-use only connection to Higby Road is proposed. Please refer to the attached letter from the fire district.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

- The proposed subdivision roadway will be built to county standards.
- An emergency-use only connection is proposed to Higby Road.
- The proposed number of dwelling units (21 units) on a non-through street would not exceed the limit (25 units) established by the Land Development Code. Therefore, an LDC waiver would not be necessary.

The deviation will not adversely affect safety or operations.

- The projected ADT of 232 vehicles/day (vpd) would be relatively low and significantly lower than the design ADT for a Rural Local road (750 vpd).
- Regarding emergency services, the applicant is in the process of procuring fire department approval.
- An emergency-use-only connection to Higby Road is proposed. Please refer to the attached letter from the fire district.

The deviation will not adversely affect maintenance and its associated cost.

- The deviation will not adversely affect maintenance cost as the roadway will be built to county Rural Local roadway standards and a county-standard cul-de-sac "bulb" will be constructed at the terminus of the road (which will accommodate County maintenance vehicles and snow plows).
- The homeowners' association will maintain the emergency access connection.

The deviation will not adversely affect aesthetic appearance.

- The roadway will be built to Rural Local roadway standards.
- The subdivision has been designed to minimize the disturbance of natural features on the site. The approval of the deviation will result in a more aesthetically appealing project due to preservation of natural features.
- The homeowners' association will be responsible for maintaining the emergency access road and easement (including the aesthetic appearance).
- The deviation would result in significantly better aesthetic appearance than a resulting road connection up to Cambrook Court. See attached Exhibit by Matrix Design Group showing extensive slope work that would be required.

The deviation meets the design intent and purpose of the ECM standards.

- The intent can be met, given the relatively low traffic volume and the addition of the emergency-only connection.
- The number of lots does not exceed the threshold number requiring a waiver of the Land Development Code.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

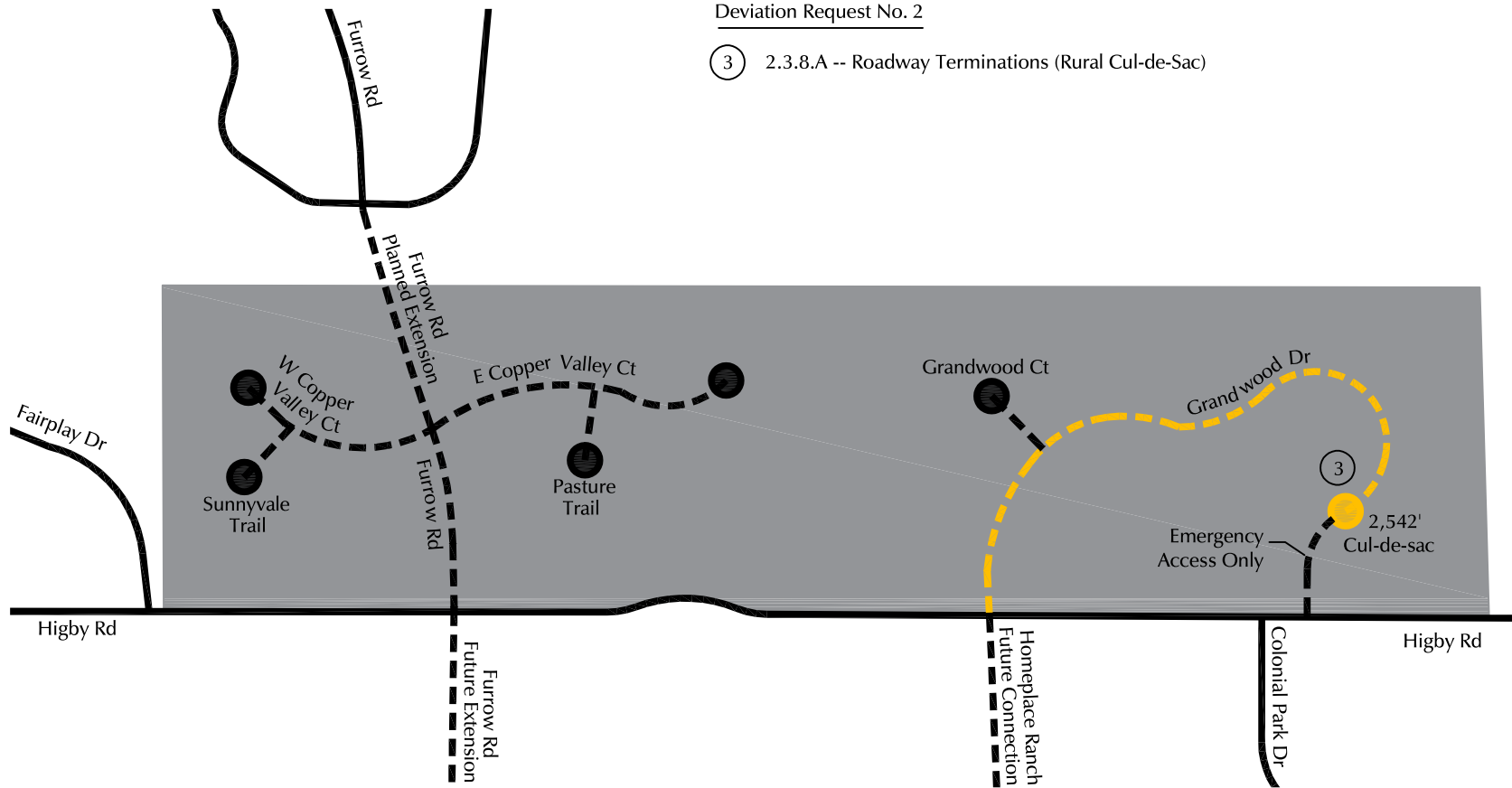
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Deviation Request No. 2

③ 2.3.8.A -- Roadway Terminations (Rural Cul-de-Sac)



Not to scale



- Existing roadway
- Proposed roadway
- Portion of roadway for which deviation is requested
- Site property boundary
- Proposed length of non-through street



Deviation Exhibit 2
Length of Cul-de-Sac
 Grandwood Ranch (LSC# 185020)

TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT

16055 Old Forest Point, Suite 103

Monument, CO 80132

Bus: (719) 484-0911 Fax (719) 481-3456



Jamey Bumgarner, Fire Marshal

March 9, 2020

Grandwood Ranch Secondary Access

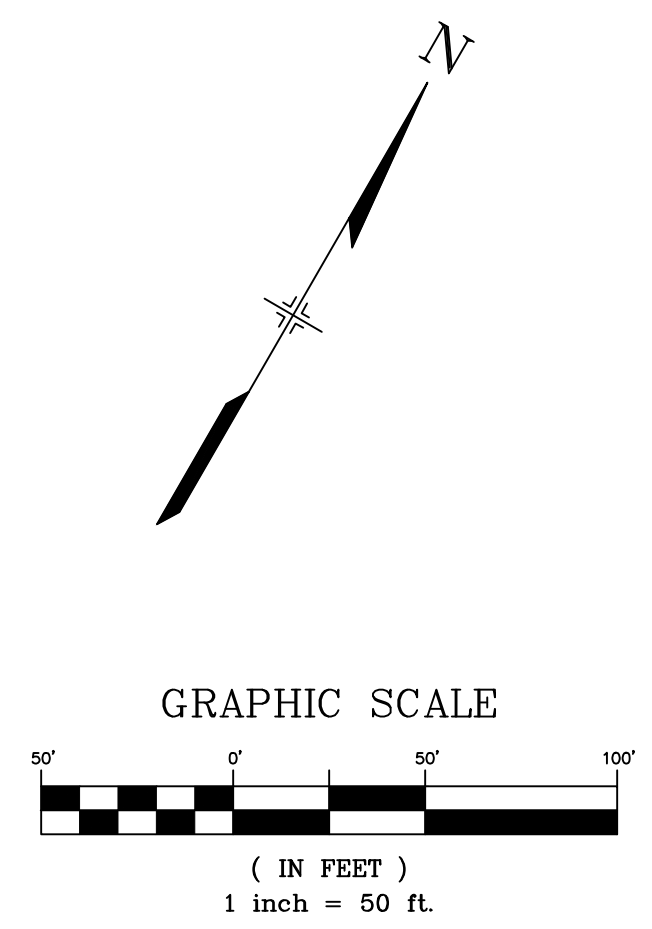
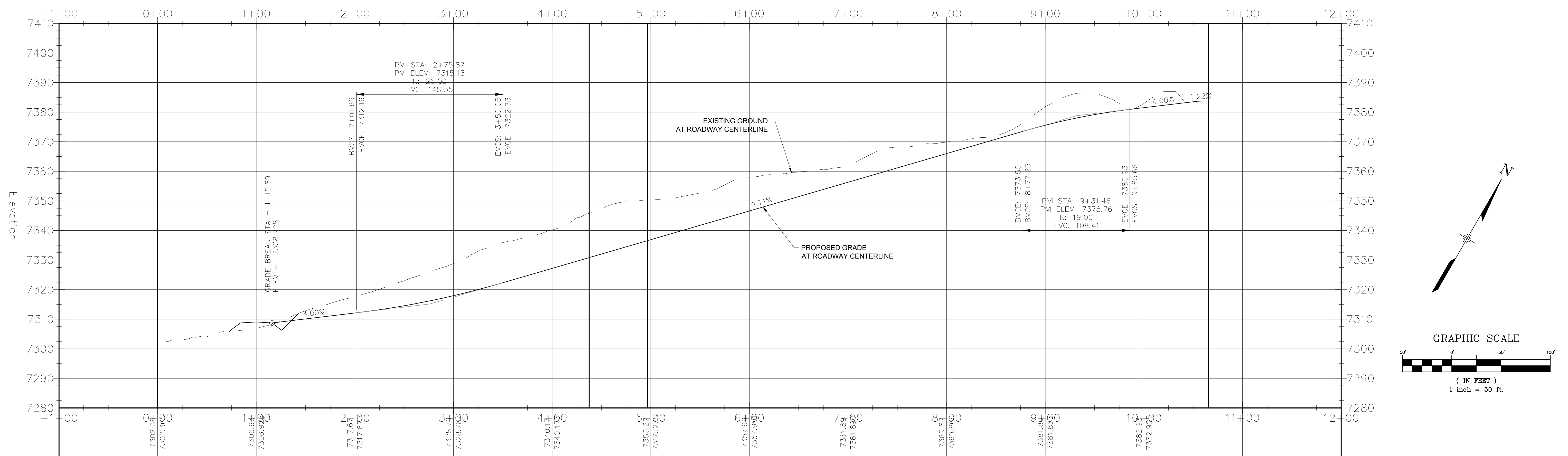
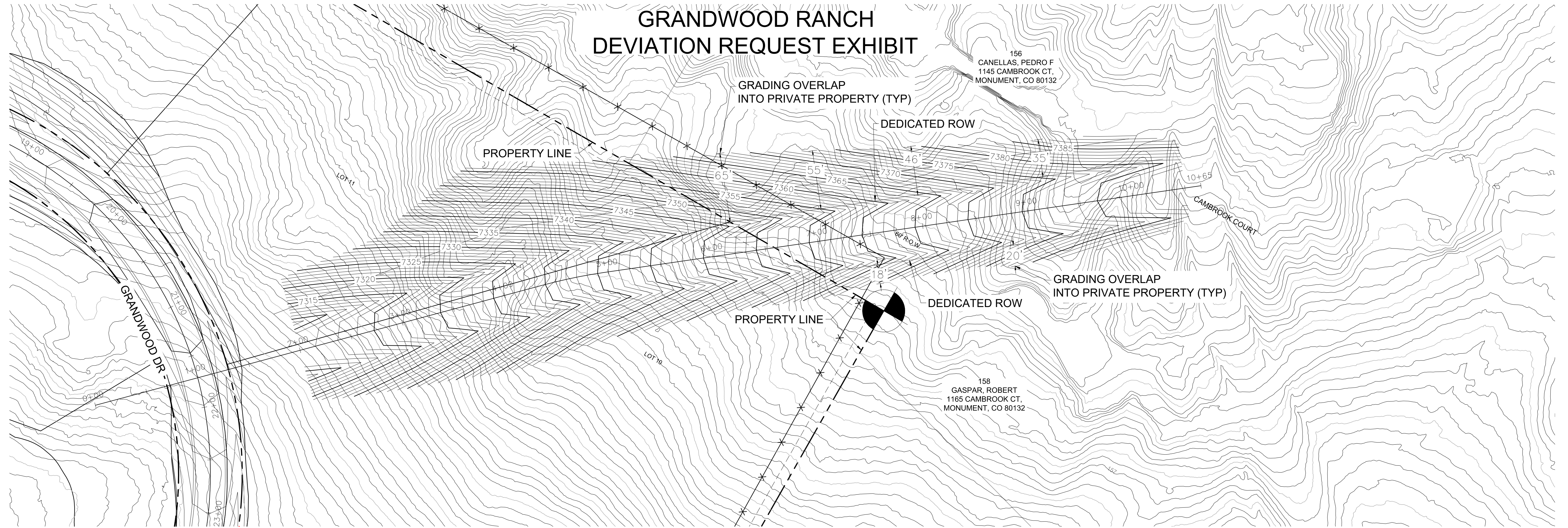
The letter is to confirm our support for the secondary emergency access into the proposed Grandwood Ranch Subdivision from Higby Road. This proposed location between lots 5 and 6 will provide access to emergency responders during a response to an emergency. The new site will also assist responders during evacuation by giving more direct access if needed.

Should you have additional questions, please feel free to contact me.

Respectfully,

Jamey Bumgarner

Fire Marshal





Planning and Community
Development Department
2880 International Circle
Colorado Springs, Colorado 80910

DEVIATION REQUEST AND DECISION FORM

Updated: 6/17/2019

Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

PROJECT INFORMATION

Project Name : Grandwood
Schedule No.(s) : 6119000003
Legal Description : S2N2, EX PT TO HIGBY RD CONV BY REC# 205092691 W/MR SEC 19-11-66

APPLICANT INFORMATION

Company : Grandwood Enterprises
Name : Bill Herebic
☒ Owner ☐ Consultant ☐ Contractor
Mailing Address : 270 Lodgepole Way
Monument, CO 80232

Phone Number : 719-651-9152
FAX Number : N/A
Email Address : Herebic5@msn.com

ENGINEER INFORMATION

Company : LSC Transportation Consultants, Inc.
Name : Jeffrey C. Hodsdon
Mailing Address : 2504 E. Pikes Peak Ave., Suite 304
Colorado Springs, CO 80909

Phone Number : 719-633-2868
FAX Number : 719-633-5430
Email Address : jeff@LSCtrans.com

Colorado P.E. Number : 31684

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

Date

Engineer's Seal, Signature
And Date of Signature



DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section **2.2.5.B, 2.2.5.D, and 2.3.2** of the Engineering Criteria Manual (ECM) is requested.

Identify the specific ECM standard which a deviation is requested:

2.2.5.B and 2.2.5.D (Roadway Access Criteria – Rural Minor Arterial and Collector Access Standards),
2.3.2 (Design Standards by Function Classification)

Standard 2.2.5.B and 2.2.5.D (Roadway Access Criteria – Rural Minor Arterial and Rural Major Collector Access Standards, respectively) requires intersection spacing of 1/4-mile (1,320 feet). This standard is also reflected in the ECM Tables 2-4 and 2-5 (Roadway Design Standards for Rural Expressways and Arterials and Rural Collectors and Locals, respectively).

State the reason for the requested deviation:

Higby Road

This deviation would allow for the future Furrow Road connection to be located a reasonable distance east of Fairplay Drive and west of the proposed Grandwood Court access while taking into account challenging topographical constraints along Higby Road. It is our understanding that the intersection location of Higby/Furrow is the result of working with the property owner on the south side of Higby Road.

Furrow Road

Access is needed for the development and Furrow Road is a lower classification than Higby Road.
The spacing is a function of the relatively short fixed distance between the Furrow/Minglewood intersection and Higby Road.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The standard requires intersection spacing of 1/4-mile (1,320 feet) back from the ROW line of an arterial street.

- The centerline of Grandwood Court/Higby Road would be 980 feet west of the Higby Road/Colonial Park Drive intersection
- The centerline of the Furrow Road/Higby Road intersection would be 1,175 feet east of the intersection of Higby Road/Fairplay Drive
- The centerline of the Furrow Road/Copper Valley Court intersection would be 707 feet north of the intersection of Furrow Road/Higby Road
- The centerline of the Furrow Road/Copper Valley Court intersection would be 879 feet south of the intersection of Furrow Road/Minglewood Trail/Lamplight Drive

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☒ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☐ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

Grandwood Court

This location is appropriate as, although short of the ECM 1,320-foot spacing criteria from Colonial Park Drive, this proposed eastern access location (Grandwood Court) would maximize the distance possible from Colonial Park Drive and the vertical/horizontal curve constraints to the west (with associated short sight distances, as shown in the plan and profile drawings). Also, this access would align with the planned connection from Home Place Ranch. A copy of the Home Place Ranch layout is also attached.

E/W Copper Valley Court

Due to the existing linear distance between Higby and Minglewood Trail, it is not possible to place an intersection both ¼ mile from Higby Road and ¼ mile from Minglewood Trail. The intersection has been placed approximately halfway between the two. This selected location allows for a sufficient separation distance from Higby Road while creating the best possible scenario with respect to centerline roadway grades and intersection approach grades, given the change in elevation between the current south end of Furrow Road and Higby Road. The roadway grade shown is less than 10 percent and the intersection approach grades are not shown to exceed four percent. No auxiliary turn lanes are required at this intersection and the sight distance can be met.

Furrow Road

A future Furrow Road intersection location at the standard ¼ mile spacing from Fairplay Drive is NOT recommended due to topography and roadway grades. The field-measured existing grade on Higby Road at the proposed Furrow Road extension is about 4.5 percent at the access centerline. West of Furrow Road, the grade is moderate to about 3.5 percent on the eastbound intersection approach (grade moderates as the distance west from the intersection increases). East of Furrow Road (on the westbound approach to the intersection), the grade is about 6.5 percent (shown in Deviation Exhibit 3).

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

Grandwood Court

Although short of the ECM 1,320-foot spacing criteria, the proposed eastern access location (Grandwood Court) would maximize the distance possible from Colonial Park Drive and the vertical/horizontal curve constraints to the west.

E/W Copper Valley Ct.

Due to the existing linear distance between Higby and Minglewood Trail, it is not possible to place an intersection both 1/4 mile from Higby Road and 1/4 mile from Minglewood Trail. The intersection has been placed approximately halfway between the two.

Furrow Road

Although short of the ECM 1,320-foot spacing criteria, the proposed Furrow/Higby intersection location would maximize the distance possible from Fairplay Drive while also taking into consideration vertical and horizontal curve sight distance constraints to the east.

The deviation will not adversely affect safety or operations.

Grandwood Court

With a 35-mph posted speed limit on Higby Road (design speed of 40 mph), the field-measured sight distances for both approaches from the proposed east site access location (Grandwood Court) exceeds the required 445-foot requirement for passenger vehicles per ECM Table 2-21. The field-measured sight distance looking to the west from Grandwood Court is 645 feet, while the field-measured sight distance looking to the east from Grandwood Court is 1,990 feet. Both measurements meet ECM standards for sight distance.

E/W Copper Valley Ct.

This selected location allows for a sufficient separation distance from Higby Road while creating the best possible scenario with respect to centerline roadway grades and intersection approach grades, given the change in elevation between the current south end of Furrow Road and Higby Road. The roadway grade shown is less than 10 percent and the intersection approach grades are not shown to exceed four percent. No auxiliary turn lanes are required at this intersection and the sight distance can be met.

Furrow Road

Based on the spot-grades along Higby Road east of the proposed west site access point (Furrow Road), the prescribed stopping sight distance is 333 feet (downgrade of approximately six percent). With a 35-mph posted speed limit on Higby Road (design speed of 40 mph), the field-measured sight distances for both approaches from the proposed Furrow Road extension exceeds the required 445-foot requirement for passenger vehicles per ECM Table 2-21. The field-measured sight distances from the proposed Furrow Road/Higby Road intersection are 1,302 feet and 650 feet while looking to the west and to the east, respectively. Both measurements meet ECM standards for sight distance.

The deviation will not adversely affect maintenance and its associated cost.

The spacing will not affect the maintenance cost as the spacing will not negatively affect the ability for snowplow and maintenance vehicles to enter and exit these side streets.

The deviation will not adversely affect aesthetic appearance.

The spacing will not affect the aesthetics. The spacing is not short to the extent that affects the general appearance of the road corridor. The spacing will be consistent with other intersections in the area.

The deviation meets the design intent and purpose of the ECM standards.

Grandwood Court

The proposed eastern access location (Grandwood Court), although short of the ECM 1,320-foot spacing criteria, would maximize the distance possible from Colonial Park Drive and the vertical/horizontal curve constraints to the west.

E/W Copper Valley Ct.

This selected location allows for a sufficient separation distance from Higby Road while creating the best possible scenario with respect to centerline roadway grades and intersection approach grades, given the change in elevation between the current south end of Furrow Road and Higby Road. The roadway grade shown is less than 10 percent and the intersection approach grades are not shown to exceed four percent. No auxiliary turn lanes are required at this intersection and the sight distance can be met.

Furrow Road

The proposed Furrow Road/Higby intersection, although short of the ECM 1,320-foot spacing criteria, would maximize the distance possible from Fairplay Drive and the vertical/horizontal curve sight distance constraints to the east.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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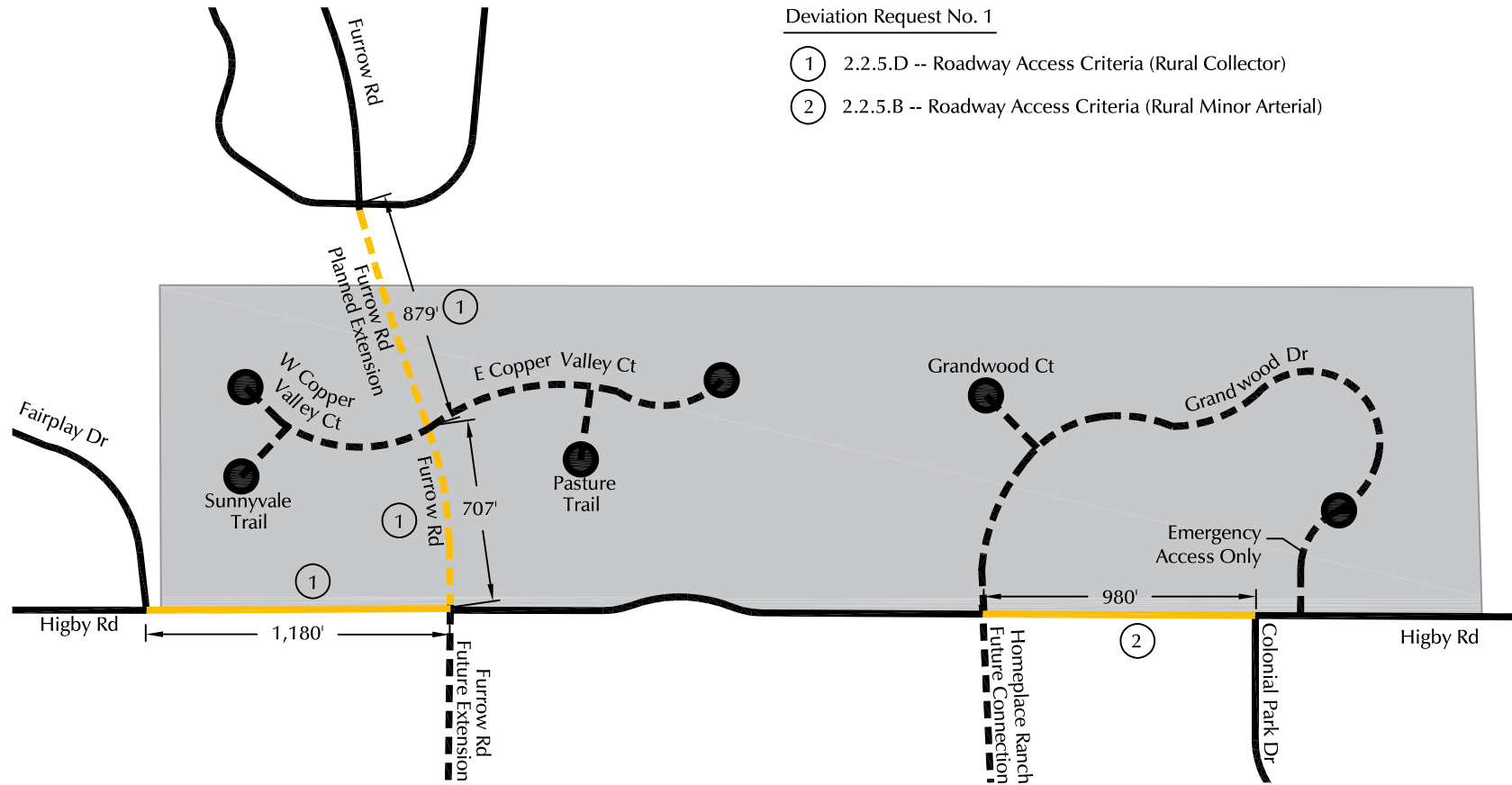
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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

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Deviation Request No. 1

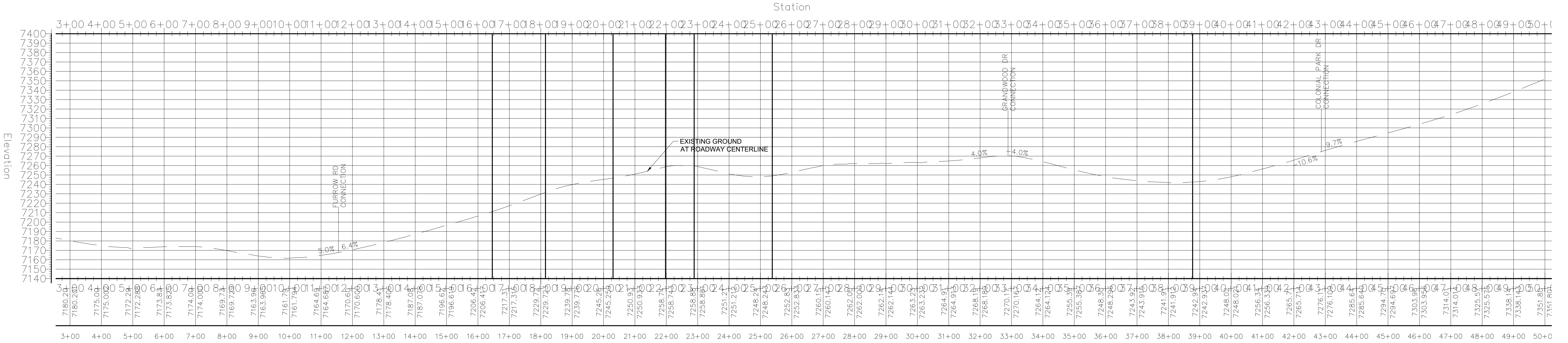
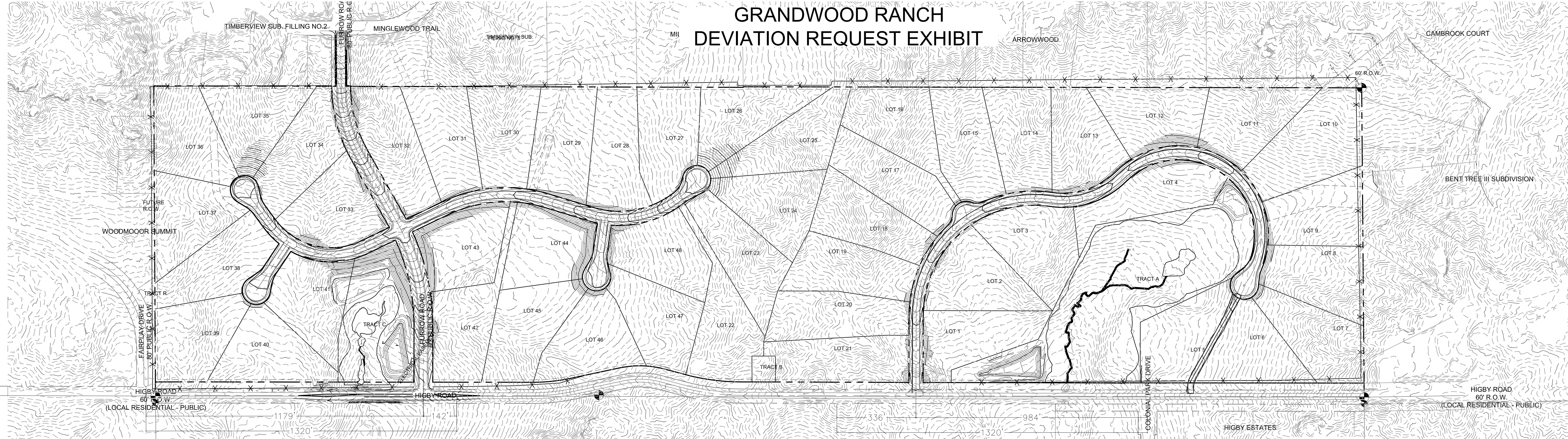
- ① 2.2.5.D -- Roadway Access Criteria (Rural Collector)
- ② 2.2.5.B -- Roadway Access Criteria (Rural Minor Arterial)



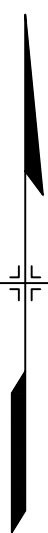
- Existing roadway
- - - Proposed roadway (including future roadways by others)
- Portion of roadway for which deviation is requested
- Site property boundary
- |← xxx' →| Intersection centerline spacing

Deviation Exhibit 1
Proposed Intersection Spacing
Grandwood Ranch (LSC# 185020)

GRANDWOOD RANCH
DEVIATION REQUEST EXHIBIT



N



GRAPHIC SCALE



(IN FEET)
1 inch = 200 ft.



Planning and Community
Development Department
2880 International Circle
Colorado Springs, Colorado 80910

Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM

Updated: 6/17/2019

PROJECT INFORMATION

Project Name : Grandwood Ranch
Schedule No.(s) : 6119000003
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APPLICANT INFORMATION

Company : Grandwood Enterprises
Name : Bill Herebic
☒ Owner ☐ Consultant ☐ Contractor
Mailing Address : 270 Lodgepole Way
Monument, CO 80232

Phone Number : 719-651-9152
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ENGINEER INFORMATION

Company : LSC Transportation Consultants, Inc.
Name : Jeffrey C. Hodsdon
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Email Address : Jeff@LSCTrans.com
Colorado P.E. Number : 31684

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Signature of owner (or authorized representative)

Date

Engineer's Seal, Signature
And Date of Signature



DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

DEVIATION NO. 4 (Rev. 4/17/2020) - A deviation from the standards of or in Section 2.3.2 of the Engineering Criteria Manual (ECM) is requested for the proposed extension of Furrow Road from Minglewood Trail to Higby Road (a proposed Rural Major Collector per the MTCP). Please refer to Deviation Exhibit 4.

Identify the specific ECM standard which a deviation is requested:

2.3.2 Design Standards by Functional Classification

Table 2-5: Roadway Design Standards for Rural Collectors and Locals

Criteria for a Rural Major Collector Roadway

- Design speed/posted speed
- Minimum centerline horizontal curve radius
- Outside gravel shoulder width
- Intersection spacing criteria
- Design ADT
- Right-of-Way

State the reason for the requested deviation:

- Challenging topography on the site.
- The significant elevation difference south to north across the site combined with the relatively short fixed horizontal distance between Furrow/Minglewood and Higby Road and the fixed intersection location of Furrow/Minglewood.
- The goal of preserving as much as possible, the natural land features within the site.
- The need to provide access to the site. Furrow Road is a lower classification than Higby Road. The need for access creates the need to provide a section of roadway with a four-percent grade.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The following alternatives to Rural Major Collector standards are requested, per criteria in Table 2-5 of the ECM:

(Please refer to the LSC Exhibit No. 4 and the attached plan & profile exhibit by Matrix Design Group)

- Design speed on Furrow Road of 40 mph instead of 50 mph
- Posted speed limit on Furrow Road of 35 mph instead of 45 mph
- Minimum centerline curve radius of 600 feet instead of the prescribed 930 feet
- 2-foot outside gravel shoulders instead of a 4-foot gravel shoulders.
- A potential ADT of 5,500 vehicles/day (long-term) instead of 3,000 vehicles/day
- 80-foot right of way instead of a 90-foot right of way.

The following proposed intersection spacings are covered in Deviation #1 – Intersection Spacing

- Intersection spacing on Furrow Road of 707 feet between Copper Valley Court and Higby Road instead of 1/4-mile
- Intersection spacing on Furrow Road of 879 feet between Copper Valley Court and Minglewood instead of 1/4-mile

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

- ☐ The ECM standard is inapplicable to the particular situation.
- ☒ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- ☐ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

- Challenging topography on the site.
- The significant elevation difference south to north across the site combined with the relatively short fixed horizontal distance between Furrow/Minglewood and Higby Road and the fixed intersection location of Furrow/Minglewood.
- The need to meet roadway and intersection grade criteria for the roadway despite the fixed distance and significant elevation difference south to north across the site. The roadway grades are covered in Deviation No. 3.
- The goal of preserving as much as possible, the natural land features within the site.
- The need to provide access to the site. Furrow Road is a lower classification than Higby Road. The need for access creates the need to provide a section of roadway with a four-percent grade.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The deviation will allow an MTCP roadway connection to be built. This roadway connection has been planned for many years. The roadway will meet the County's geometric criteria for a Rural Minor Collector which will add a significant benefit to the citizens and traveling public in this area – especially long term once the connection from Gleneagle to the south is established.

The deviation will not adversely affect safety or operations.

- A projected long total ADT of 5,500 vehicles/day (vpd) is projected for this roadway segment. Almost all the traffic would be background traffic and the resulting background traffic will depend on many factors. One intersection with light turning volumes is proposed for this section. Access has been minimized to the extent possible. As such, there will be minimal interference to the background traffic traveling through this subdivision. The request to allow two-foot gravel shoulders instead of four-foot gravel shoulders is to minimize further grading. Also, this width is consistent with the proposed design speed. The proposed lower design speed is appropriate given the length of this roadway segment, the horizontal geometry achievable given the topography, the distance to the neighborhood to the north and the intersection with Higby Road to the south. It is also appropriate considering the given the grades.
- The proposed 80-foot right of way is consistent with a Rural Minor Collector. The proposed design speed and cross section is consistent with that classification/ROW. Also, there is limited ROW to the north through Timberview.

The deviation will not adversely affect maintenance and its associated cost.

- The deviation will not adversely affect maintenance cost, as the gravel shoulders are 2 feet narrower for Rural Minor Collectors than Rural Major Collectors. As such, 2 feet less of pavement would need to be maintained on each side.

The deviation will not adversely affect aesthetic appearance.

- The aesthetic appearance will not be adversely affected, as the design will be paved, with County and MUTCD standard pavement markings that would be consistent with County roads.
- The deviation would result in significantly better aesthetic appearance than a resulting road built to Major Collector standards as the amount of grading and disturbance of the topography would result in significantly higher impact. See attached plan & profile exhibit by Matrix Design Group.

The deviation meets the design intent and purpose of the ECM standards.

- Proposed modifications to the above-referenced design elements of the Rural Minor Collector classifications would be more appropriate for this particular section of Furrow Road than those of a Rural Major Collector.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section _____ of the ECM is hereby granted based on the justification provided.

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Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

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ECM ADMINISTRATOR COMMENTS/CONDITIONS:

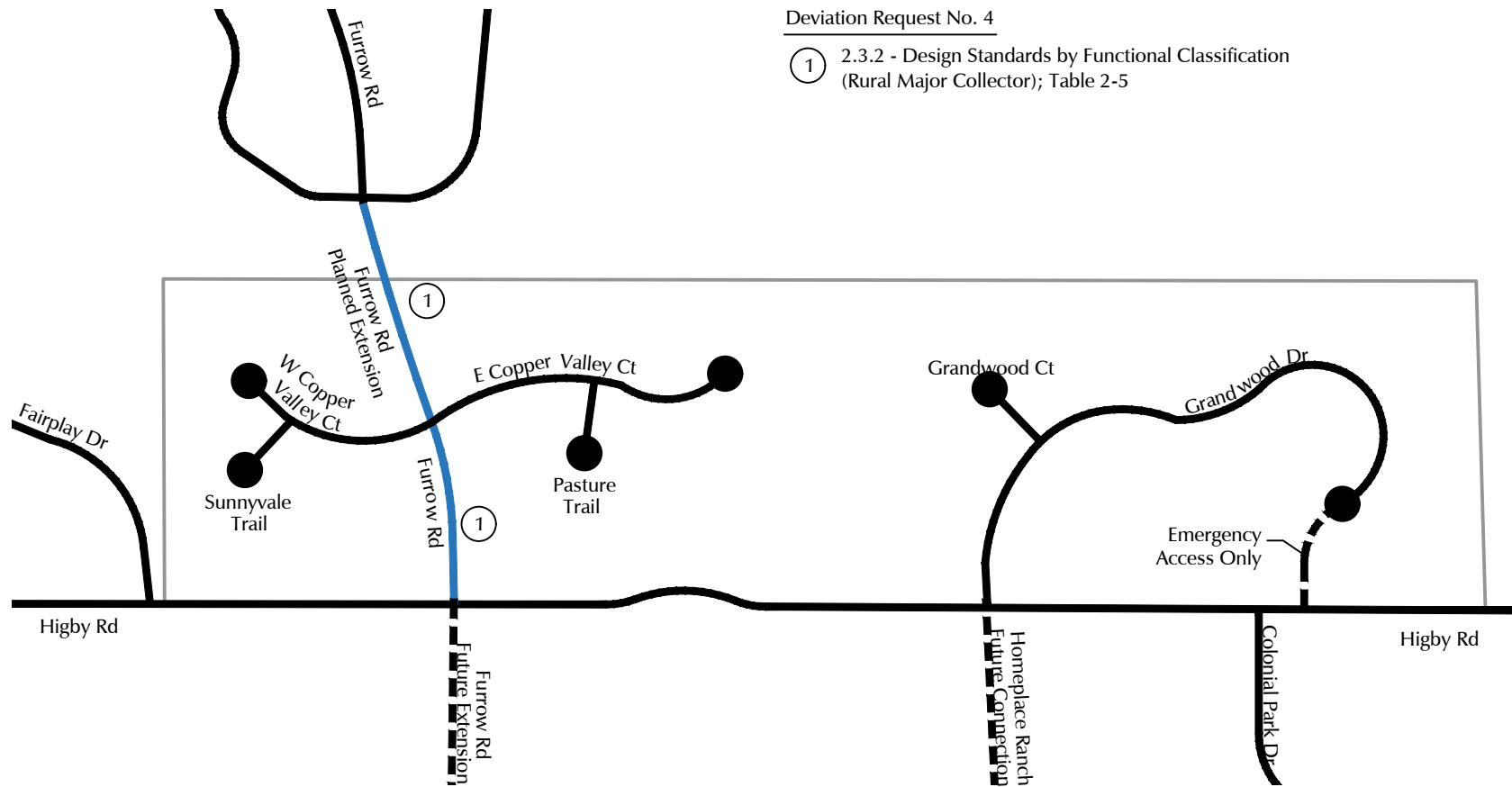
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Deviation Request No. 4

① 2.3.2 - Design Standards by Functional Classification
(Rural Major Collector); Table 2-5



Not to
scale



- Existing roadway
- Proposed roadway (including future roadways by others)
- Portion of roadway for which deviation is requested
- Site property boundary

Rural Major Collector Design Standards

Deviation Exhibit 4
Grandwood Ranch (LSC# 185020)

GRANDWOOD RANCH DEVIATION REQUEST EXHIBIT

