

STAFF REPORT  
January 5, 2006

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**No. 05PL242 - Layout Plat**

**ITEM 50**

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GENERAL INFORMATION:

PETITIONER	Wyss Associates, Inc. for Canyon Springs, LLC
REQUEST	<b>No. 05PL242 - Layout Plat</b>
EXISTING LEGAL DESCRIPTION	The balance of the N1/2 NW1/4, Section 26; a portion of the E1/2 SE1/4, Section 22; and a portion of the SW1/4 less Fire House Subdivision, less Lot H1 of the SE1/4 SW1/4 and less lot H2 all located in Section 23, T2N, R6E, BHM, Pennington County, South Dakota
PROPOSED LEGAL DESCRIPTION	Lots 1 through 87, Canyon Springs Preserve located in Sections 22, 23 and 26, T2N, R6E, BHM, Pennington County, South Dakota
PARCEL ACREAGE	Approximately 270.14 acres
LOCATION	8885 Nemo Road
EXISTING ZONING	Planned Unit Development (Pennington County)
SURROUNDING ZONING	
North:	Pennington County
South:	Pennington County
East:	Pennington County
West:	Pennington County
PUBLIC UTILITIES	Community water and private on-site wastewater
DATE OF APPLICATION	12/9/2005
REVIEWED BY	Vicki L. Fisher / Bob Dominicak

RECOMMENDATION:

Staff recommends that the Layout Plat be approved with the following stipulations:

1. Upon submittal of a Preliminary Plat application, a grading plan and an erosion and sediment control plan for all improved areas shall be submitted for review and approval;
2. Upon submittal of a Preliminary Plat application, a drainage plan shall be submitted for review and approval. In particular, the drainage plan shall provide on-site detention as needed. In addition, the plat document shall be revised to provide drainage easements as necessary;
3. Upon submittal of a Preliminary Plat application, sewer plans prepared by a Registered Professional Engineer showing the extension of sanitary sewer mains and service lines shall be submitted for review and approval or a Variance to the Subdivision Regulations

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

---

- shall be obtained. If individual on-site wastewater systems are proposed, then an on-site wastewater plan prepared by a Professional Engineer demonstrating that the soils are suitable for on-site wastewater systems must be submitted for review and approval. In addition, the individual wastewater disposal systems shall be designed by a Professional Engineer meeting all requirements as per the South Dakota Department of Environment and Natural Resources;
4. Upon submittal of a Preliminary Plat application, a water system analysis verifying the source and adequacy of water quantity and storage capacity for domestic and fire flows shall be submitted for review and approval. In addition, fire hydrants shall be provided at all intersections and intermediate points between intersections with spacing not to exceed 450 feet and at high points in the profile or a Variance to the Subdivision Regulations shall be obtained;
  5. Upon submittal of a Preliminary Plat application, road construction plans for Nemo Road shall be submitted for review and approval. In particular, the construction plans shall show the installation of curb, gutter, street light conduit, water and sewer along Nemo Road or a Variance to the Subdivision Regulations shall be obtained;
  6. Upon submittal of a Preliminary Plat application, road construction plans for Mainline 1, Spur 1-A and Spur 2-F shall be submitted for review and approval. In particular, the streets shall be located in a minimum 52 foot right-of-way and constructed with a minimum 27 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer or a Variance to the Subdivision Regulations shall be obtained;
  7. Upon submittal of a Preliminary Plat application, road construction plans for the cul-de-sac streets shall be submitted for review and approval. In particular, the cul-de-sac streets shall be located in a minimum 49 foot right-of-way and constructed with a minimum 24 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer or a Variance to the Subdivision Regulations shall be obtained. In addition, the construction plans shall identify the construction of a permanent turnaround at the end of the cul-de-sacs and an intermediate turnaround every 600 feet, where applicable, with a minimum 110 foot diameter right-of-way and a minimum 92 foot diameter paved surface or a Variance to the Subdivision Regulations shall be obtained;
  8. Upon submittal of a Preliminary Plat application, road construction plans for Spur 1-G shall be submitted for review and approval. In particular, the street shall be located in a minimum 49 foot right-of-way and constructed with a minimum 24 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer or a Variance to the Subdivision Regulations shall be obtained;
  9. Upon submittal of a Preliminary Plat application, road construction plans for the north-south section line highway and the east-west section line highway shall be submitted for review and approval. In particular, the road construction plans shall show the streets constructed with a minimum 27 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer or a Variance to the Subdivision Regulations shall be obtained or the section line highways shall be vacated;
  10. Upon submittal of a Preliminary Plat application, a geotechnical report including pavement design shall be submitted for review and approval;
  11. An Exception to the Street Design Criteria Manual to allow a 1,400 foot long cul-de-sac in lieu of a maximum 500 foot long cul-de-sac shall be granted for Spur 1-L with the stipulation that one intermediate turnaround be provided to accommodate fire apparatus and that the street be constructed with a minimum 24 foot wide paved surface;
  12. An Exception to the Street Design Criteria Manual to allow a 655 foot long cul-de-sac in

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

---

- lieu of a maximum 500 foot long cul-de-sac shall be granted for Spur 1-K with the stipulation that the street be constructed with a minimum 24 foot wide paved surface;
13. An Exception is hereby granted to allow a 15% gradient along a portion of Mainline 1 in lieu of a maximum 12% gradient as per the Street Design Criteria Manual and a maximum 10% gradient as per the International Fire Code with the stipulation that the street be constructed with a minimum 27 foot wide paved surface;
  14. An Exception is hereby denied to waive the requirement to provide visitor parking at a ratio of one paved parking stall per dwelling located within three hundred feet of the residence along Mainline 1, Spur 1-G, Spur 1-L, Spur 2-F and Spur 1-A;
  15. Upon submittal of a Preliminary Plat application, a cost estimate of the subdivision improvements shall be submitted for review and approval;
  16. Prior to Preliminary Plat approval by the City Council, Approach Permit(s) shall be obtained from the Pennington County Highway Department. In addition, acceleration and turning lane(s) shall be provided along Nemo Road as determined by the Pennington County Highway Department;
  17. Prior to submittal of a Final Plat, the plat document shall be revised to provide non-access easements in compliance with the Street Design Criteria Manual;
  18. Prior to submittal of a Final Plat application, a Wild Fire Mitigation Plan shall be submitted for review and approval and the plan shall be implemented;
  19. Prior to submittal of a Final Plat, the applicant shall submit proposed street names to the Emergency Services Communication Center for review and approval. In addition, the plat document shall be revised to show the approved street names;
  20. Prior to submittal of a Final Plat application, the applicant shall submit proof of the legal entity which will provide the mechanism for street maintenance and snow removal. In particular, an agreement with Pennington County shall be submitted for review and approval indicating that the proposed street shall be accepted by Pennington County for road maintenance and snow removal; or evidence shall be submitted for review and approval that a road district has been established in accordance with SDCL 31-12A-1; or a legally binding agreement shall be submitted for review and approval by the City Council which guarantees sufficient financial commitment to provide these services;
  21. Prior to submittal of a Final Plat application, the applicant shall submit proof of the legal entity which will provide the mechanism for maintenance of the community water facility for review and approval;
  22. Prior to submittal of a Final Plat application, the applicant shall submit proof of the legal entity which will provide the mechanism for maintenance of the common area for review and approval;
  23. Upon submittal of a Final Plat application, the plat document shall be revised to show a ten foot wide planting screen easement along Nemo Road or a Variance to the Subdivision Regulations shall be obtained. In addition, the planting screen easement shall not conflict with utility easement(s);
  24. Upon submittal of a Final Plat application, a note shall be placed on the plat document stating that "a reserve drainfield area shall be identified upon submittal of a building permit" and that "on-site wastewater disposal systems shall be mound systems, holding tanks or evapotranspiration systems only if percolation and profile information is not sufficient for conventional systems". In addition, a note shall be placed on the plat document stating that "all wastewater disposal systems be a minimum of 50 feet from all exposed rock cliffs and major drainage ditches within the development; and,
  25. Upon submittal of a Final Plat application, surety for any required subdivision

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

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improvements that have not been completed shall be posted and the subdivision inspection fees shall be paid.

**GENERAL COMMENTS:**

The applicant has submitted a Layout Plat to subdivide a 310.14 acres into 87 residential lots and a 10.699 acre lot separated from the balance of the property by Nemo Road right-of-way. In addition, the applicant has submitted a Variance to the Subdivision Regulations to waive the requirement to install pavement, curb, gutter, sidewalk, street light conduit, water and sewer along Nemo Road and proposed streets within the development. (See companion item #05SV084.)

The property is located approximately three miles northwest of the City limits of Rapid City along Nemo Road and adjacent to the Doty Fire Station. Currently, a single family residence and a barn are located on the property.

The Layout Plat is an informal preliminary review of a proposed subdivision to identify any major issues prior to platting. It is intended to provide the subdivider with an informal process where major issues may be identified and general agreements may be reached with Rapid City as to the form of the plat. Comments regarding the Layout Plat are based on the level of detail provided. All specific details of the subdivision may not be addressed as part of the Layout Plat approval but the major concerns and issues are identified based on the information provided. All applicable Subdivision Regulations, Zoning Regulations, Street Design Criteria Manual, and any other applicable regulations will need to be met as part of the Preliminary and Final Plat. Any waiver from the Rapid City Municipal Code or the Street Design Criteria Manual will require a formal variance request or a special exception whichever is applicable.

**STAFF REVIEW:**

A small portion of the property is located within the City's three mile platting jurisdiction with the balance of the property located in Pennington County's platting jurisdiction. As such, staff has reviewed the Preliminary Plat for the 57 lots, or portions thereof, that are located in the City's platting jurisdiction and has noted the following considerations:

**Drainage:** As part of the Preliminary Plat application, a drainage plan must be submitted for review and approval. In addition, a grading plan and an erosion and sediment control plan for all improved areas must be submitted for review and approval. The plat document must be revised to provide drainage easements as needed. It appears that on-site detention may be needed. Staff is recommending that upon submittal of a Preliminary Plat application, a drainage and grading plan, as well as an erosion and sediment control plan, be submitted for review and approval and the plat document be revised to provide drainage easements as identified.

**Sewer:** The applicant has indicated that the property will be served by individual on-site wastewater systems. As such, the an on-site wastewater plan must be prepared by a Professional Engineer demonstrating that the soils are suitable for on-site wastewater systems and submitted for review and approval. The Pennington County Board of Commissioners have recently approved a Planned Unit Development for the subject property to allow on-site wastewater systems with the stipulation that the individual

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

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wastewater disposal systems be designed by a Professional Engineer meeting all requirements as per the South Dakota Department of Environment and Natural Resources Staff is recommending that upon submittal of a Preliminary Plat application, a sewer system plan be submitted for review and approval as identified.

Water: The applicant has indicated that a central water system will serve the proposed development. A water system analysis verifying the source and adequacy of the source, as well as quantity and storage capacity to provide domestic and fire flows must be submitted for review and approval. Staff is recommending that upon submittal of a Preliminary Plat application, a water system plan be submitted for review and approval as identified. In addition, fire hydrants must be provided at all intersections and intermediate points between intersections with spacing not to exceed 450 feet and at high points in the profile or a Variance to the Subdivision Regulations must be obtained.

Nemo Road: Nemo Road is located along the east lot line of the subject property and is classified as a principle arterial street on the City's Major Street Plan requiring that the street be located in a minimum 100 foot wide right-of-way and constructed with a minimum 36 foot wide paved surface, curb, gutter, street light conduit, sidewalk, water and sewer. Currently, Nemo Road is located in a 120 foot wide right-of-way with an approximate 36 foot wide paved surface. Staff is recommending that prior to Preliminary Plat approval by the City Council, construction plans for Nemo Road providing curb, gutter, sidewalk, street light conduit, water and sewer be submitted for review and approval or a Variance to the Subdivision Regulations must be obtained.

Sub-collector Streets: The Layout Plat identifies Spur 1-A, Spur 2-F and Mainline 1 as sub-collector streets requiring that they be located in a minimum 52 foot wide right-of-way and constructed with a minimum 27 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer. The applicant has indicated that Spur 2-F will be located in a variable right-of-way width of 100 feet as it intersects with Nemo Road, tapering to 66 feet. In addition, the street will be constructed with two – 15 foot wide paved lanes tapering to a 24 foot wide paved surface and street light conduit. In addition, the applicant has indicated that Spur 1-A and Mainline 1 will be located in a 66 foot wide right-of-way and constructed with a 24 foot wide paved surface and street light conduit. As such, staff is recommending that upon submittal of a Preliminary Plat application, road construction plans be submitted for review and approval as identified or a Variance to the Subdivision Regulations must be obtained.

Lane-Place Streets: The Layout Plat identifies Spur 1-G as a lane place street requiring that it be located in a minimum 49 foot wide right-of-way and constructed with a minimum 24 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer. The applicant has indicated that the streets will be located in a 66 foot wide right-of-way and constructed with a 24 foot wide surface and street light conduit. As such, staff is recommending that upon submittal of a Preliminary Plat application, road construction plans be submitted for review and approval as identified or a Variance to the Subdivision Regulations shall be obtained.

Cul-de-sac Streets: The Layout Plat identifies seven cul-de-sac streets serving as access throughout the development. As such, staff is recommending that upon submittal of a

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

---

Preliminary Plat application, road construction plans for the cul-de-sac streets must be submitted for review and approval. In particular, the cul-de-sac streets must be located in a minimum 49 foot right-of-way and constructed with a minimum 24 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer or a Variance to the Subdivision Regulations must be obtained. In addition, the construction plans must identify the construction of a permanent turnaround at the end of the cul-de-sacs and an intermediate turnaround every 600 feet, where applicable, with a minimum 110 foot diameter right-of-way and a minimum 92 foot diameter paved surface or a Variance to the Subdivision Regulations must be obtained.

Section Line Highway: A north-south section line highway and an east-west section line highway extend through the subject property. The section line highways are classified as sub-collector streets requiring that they be constructed with a minimum 27 foot wide paved surface, curb, gutter, sidewalk, street light conduit, water and sewer. In addition, the 66 foot wide section line highway must be dedicated as right-of-way. To date, the section line highways are unimproved. Staff is recommending that upon submittal of a Preliminary Plat application, road construction plans must be submitted for review and approval showing the section line highway(s) constructed as identified and the 66 foot wide section line highway dedicated as right-of-way or a Variance to the Subdivision Regulations must be obtained or the section line highway(s) must be vacated. A portion of the section line highways is located on an adjacent property under different ownership from the subject property. The Subdivision Regulations states that "...where there exists a dedicated or platted half-street adjacent to the tract to be subdivide, the other half shall be platted. No new half-streets shall be permitted". Vacating only that portion of the section line highway located on the subject property will create a half-street. As such, the entire section line highway must be vacated or a Variance to the Subdivision Regulations must be obtained. If the applicant seeks to vacate a portion of the section line highway(s), the adjacent property owner will need to concur in the request. Prior to City Council approval of the Preliminary Plat, the section line highway issue must be addressed as identified or construction plans for the streets must be submitted for review and approval.

Street Grades: The Street Design Criteria Manual states that street grades shall not exceed 12% gradient. In addition, the International Fire Code states that street grades shall not exceed 10% gradient. However, the Layout Plat identifies that Spur 1-K and portions of Mainline 1 have an approximate 15% grade. As such, the applicant has submitted an Exception request to allow the 15% gradient in lieu of the 12% gradient and the 10% gradient as per the Street Design Criteria Manual and the International Fire Code, respectively.

The County Highway Department staff has indicated that the County street design standards allow a 15% street gradient. In addition, staff has noted that approximately half of the property is located in the County's platting jurisdiction. Limiting the street grades to 12% and/or 10% for that portion of the streets located in the City's platting jurisdiction will create design constraints between the two jurisdictional platting boundaries. As such, staff is recommending that the Exception to allow a 15% gradient in lieu of a maximum 12% gradient as per the Street Design Criteria Manual and a maximum 10% gradient as per the International Fire Code be granted with the stipulation that the minimum required pavement widths be provided to improve vehicular and pedestrian access and safety along the

STAFF REPORT  
January 5, 2006

---

**No. 05PL242 - Layout Plat**

**ITEM 50**

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street(s). This is consistent with previous actions of the Rapid City Planning Commission and City Council when properties are partially located in the City's platting jurisdiction.

Visitor Parking: The Street Design Criteria Manual states that visitor parking must be provided at a ratio of one parking space per dwelling located within 300 feet of the residence. The applicant has submitted an Exception request to waive the requirement to provide visitor parking along Spur 1-A, Spur 2-F, Mainline 1, Spur 1-L and Spur 1-G. However, the Fire Department has indicated that the property is located in a high wild fire hazard area. In addition, the applicant has requested an Exception to allow a 15% gradient along Mainline 1. In order to insure safe vehicular and/or fire apparatus access along the streets, staff is recommending that the Exception to waive the requirement to provide visitor parking be denied.

Fire Protection: The Fire Department staff has indicated that fire hydrants must be installed and operational prior to the issuance of a building permit and/or any construction on the site using combustible material(s) or a Variance to the Subdivision Regulations must be obtained waiving the requirement to install a central water system. In addition, all proposed streets must be constructed to meet the minimum standards of the Street Design Criteria Manual to insure fire apparatus access. Staff is recommending that construction plans be submitted for review and approval as identified upon Preliminary Plat submittal.

The Fire Department has also indicated that property is located in a high wild fire hazard area. As such, prior to submittal of a Final Plat application, a Wild Fire Mitigation Plan must be submitted for review and approval and the plan must be implemented.

Emergency Services Communication Center: The plat document does not identify the proposed street names. Prior to submittal of a Final Plat, the applicant must submit proposed street names to the Emergency Services Communication Center for review and approval. In addition, the plat document must be revised to show the approved street names.

Staff believes that this proposed plat generally complies with all applicable Zoning and Subdivision Regulations assuming compliance with the stated stipulations.