CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE MAILING ADDRESS: 710 E STREET • SUITE 200 EUREKA, CA 95501-1865 VOICE (707) 445-7833 FACSIMILE (707) 445-7877

P. O. BOX 4908 EUREKA, CA 95502-4908



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Date Filed: September 7, 2007 Hearing Date: October 12, 2007 49th Day: October 26, 2007 180th Day: March 5, 2008 Staff Report: September 27, 2007

Staff: Melissa B. Kraemer

Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 1-07-033

APPLICANT: R.D.H.C., L.L.C.

AGENT: Security National Properties, Attn: Randy Gans

PROJECT LOCATION: 532 Hookton Road, Loleta, Humboldt Co. (APN

311-181-001)

Replacement of concrete and gravel driveways PROJECT DESCRIPTION:

> around the existing hay and equipment storage barns by removing the existing driveways, placement of approximately 200 cubic yards of gravel base and repaying the approximately 16,000

square-foot area with porous asphalt.

None Required LOCAL APPROVALS:

OTHER APPROVALS REQUIRED: **Humboldt County Grading Permit**

SUBSTANTIVE FILE DOCUMENTS: Humboldt County Local Coastal Program

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission approve with conditions the proposed development that involves removal of existing paved and gravel areas, raising the ground level approximately 1.5 feet by importing approximately 200 cubic yards of engineered gravel base, and installing pervious asphalt pavement across an approximately 16,000 square-foot area at 555 Hookton Road in Loleta, Humboldt County.

The subject agricultural property, formerly known as the Vance Dairy, is located approximately eight miles south of Eureka, west of State Highway 101, on the south side of Hookton Road and the west side of Eel River Drive, at 532 Hookton Road, in the unincorporated area of Loleta, Humboldt County. The property is located within the Salmon Creek watershed. The proposed project site is located adjacent to Salmon Creek to the west. Agricultural grasslands, which are classified as seasonal wetlands, border the buildings and driveways to the south and southeast. These grasslands are dominated mostly by nonnative species and are of relatively low value in terms of wildlife and wetland functionality.

The project area consists of approximately 16,000 square feet of paved or graveled driveways located between two hay and equipment storage structures. The existing cement and gravel areas consist of broken concrete, uneven gravel, and silt deposits caused by frequent winter flooding, erosion, and lack of maintenance. Due to the dilapidated condition of the driveways, the hay and equipment storage barns are often inaccessible during the rainy periods of the year. Additionally, due to the poor drainage of the existing paved areas during the frequent flood events of Salmon Creek, extensive erosion and sedimentation occurs on the driveways and adjacent county roadway (Hookton Road), which is a problem for the applicant, a public safety concern, and a serious maintenance and clean-up issue for the County roads maintenance department.

As proposed to be reconstructed, the majority (approximately 80 percent) of the site's stormwater and surface water runoff will be directed by sheet flow towards the agricultural fields on the applicant's property to the southeast of the driveway area. The remainder of runoff will be directed via an improved drainage swale along the south side of Hookton Road to an existing drainage inlet at the southwestern corner of the Eel River Drive and Hookton Road intersection. The drainage structure then diverts all stormwater runoff east under Eel River Drive into an 800-foot-long vegetated drainage swale located between the eastern side of Eel River Drive and the western edge of the south lanes of the State Highway 101. This vegetated swale currently drains all stormwater runoff from the applicant's property, from the Hookton Road/Eel River Drive intersection, and from the State Highway 101 on- and off-ramps south into Salmon Creek.

Staff is recommending two special conditions to protect water quality and environmentally sensitive habitat areas and to minimize flood hazards. These include Special Condition No. 1, which restricts the timing of work to the period when Salmon Creek is least likely to flood (April 15 to November 15), and Special Condition No. 2, which lists various construction and maintenance responsibilities of the applicant, including implementation of the proposed BMPs using porous asphalt, silt fences, and straw bale dams, and proper installation and maintenance of

the porous asphalt to maximize its permeability, thereby maximizing the amount of on-site infiltration of stormwater and surface water runoff and minimizing the potential for erosion and sedimentation impacts to coastal waters and wetlands.

Staff believes that the project, as conditioned, would (1) ensure the protection of water quality and the biological productivity of Salmon Creek and the surrounding wetlands as required by Coastal Act Section 30231, (2) not significantly degrade adjacent ESHA and would be compatible with the continuance of the habitat area as required by Coastal Act Section 30240, and (3) minimize risks to life and property, assure stability and structural integrity, and neither create nor contribute significantly to erosion consistent with Section 30253. As conditioned, staff believes that the proposed project is fully consistent with the Coastal Act.

The Motion to adopt the Staff Recommendation of Approval with Conditions is found on Page 3.

STAFF NOTES

1. Standard of Review

The proposed project is located within the Commission's area of retained permit jurisdiction. Humboldt County has a certified LCP, but the proposed project is within an area shown on the State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION, & RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 1-07-033 pursuant to the staff recommendation.

Staff Recommendation of Approval:

Staff recommends a YES vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of the majority of the Commissioners present.

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS: See Attachment A.

III. <u>SPECIAL CONDITIONS</u>:

1. <u>Timing of Work</u>

To avoid adverse impacts on water quality, construction shall be limited to the period between April 15 and November 15, when there is reduced potential for flooding in the area by Salmon Creek.

2. <u>Construction & Maintenance Best Management Practices (BMPs)</u>

The permittee shall adhere to the following construction and maintenance BMPs:

- A. The permittee shall undertake development in accordance with the approved grading and sediment control plan prepared by Ontiveros & Associates and dated September 21, 2007 (Exhibit No. 4), except as modified by Special Condition No. 1 above and by the amended project description received September 25, 2007 (Exhibit No. 4). All BMPs as specified in this approved plan shall be adhered to including installation of silt fences and straw bale dikes as shown on the plan. Erosion control devices shall be maintained until the site is stabilized, as sedimentation during construction can cause the failure of the porous pavement infiltration system. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
- B. Exposure of the subgrade for the porous pavement to heavy equipment use during construction shall be minimized to reduce compaction of the soil and the loss of soil permeability.
- C. Excavation of the subgrade soil shall be done using equipment with tracks or over-sized tires. Narrow rubber tires should be avoided since they compact the soil and reduce its infiltration capabilities.

- D. Porous pavement shall be designed, installed, and maintained in accordance with the standards and guidelines of the National Asphalt Pavement Association (www.hotmix.org).
- E. The porous pavement shall be protected during and after construction from sediment-laden water and construction debris that may clog the porous pavement.
- F. The porous pavement shall be flushed or jet washed at least twice annually to assist in the maintenance of the pavement surface porosity.

IV. FINDINGS & DECLARATIONS:

The Commission hereby finds and declares the following:

1. Site Description & Proposed Project

The subject agricultural property, formerly known as the Vance Dairy, is located approximately eight miles south of Eureka, west of State Highway 101, on the south side of Hookton Road and the west side of Eel River Drive, at 532 Hookton Road, in the unincorporated area of Loleta, Humboldt County (Exhibit Nos. 1, 2, and 3). The property is located within the Salmon Creek watershed, which drains into southern Humboldt Bay. The proposed project site is located on the northeastern end of the property and adjacent to Salmon Creek to the west. Agricultural grasslands, which are classified as seasonal wetlands, border the buildings and driveways to the south and southeast. These grasslands are dominated mostly by nonnative species and are of relatively low value in terms of wildlife and wetland functionality.

The project area consists of approximately 16,000 square feet of paved or graveled driveways surrounding two hay and equipment storage structures. The existing cement and gravel areas consist of broken concrete, uneven gravel, and silt deposits caused by frequent winter flooding, erosion, and lack of maintenance. Due to the dilapidated condition of the driveways, the hay and equipment storage barns are often inaccessible during the rainy periods of the year. Additionally, due to the poor drainage of the existing paved areas during the frequent flood events of Salmon Creek, extensive erosion and sedimentation occurs on the driveways and adjacent county roadway (Hookton Road), which is a problem for the applicant, a public safety concern, and a serious maintenance and clean-up issue for the County roads maintenance department.

The proposed project involves removal of existing paved and gravel areas, raising the ground level approximately 1.5 feet by importing approximately 200 cubic yards of engineered gravel base, and installing pervious asphalt pavement. The porous asphalt consists of a minimum of 12 inches of 1.5- to 2.5-inch clean washed rock over geotextile filter fabric, topped with 0.75-inch open grade asphalt. Under the proposed project, the majority (approximately 80 percent) of the site's stormwater and surface water runoff will be directed by sheet flow towards the agricultural fields to the southeast of the driveway area. The remainder of runoff will be directed via an

improved drainage swale along the south side of Hookton Road to an existing drainage inlet at the southwestern corner of the Eel River Drive and Hookton Road intersection. The drainage structure then diverts all stormwater runoff east under Eel River Drive into an 800-foot-long vegetated drainage swale located between the eastern side of Eel River Drive and the western edge of the south lanes of the State Highway 101. This vegetated swale currently drains all stormwater runoff from the applicant's property, from the Hookton Road/Eel River Drive intersection, and from the State Highway 101 on- and off-ramps south into Salmon Creek.

2. Protection of Water Quality & Environmentally Sensitive Habitat Areas (ESHA)

Coastal Act Policies:

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Coastal Act Section 30231 protects the quality of coastal waters, streams, and wetlands through, among other means, controlling runoff and maintaining natural vegetation. Coastal Act Section 30240 requires that environmentally sensitive habitat areas (ESHA) be protected against significant disruption of habitat values from adjacent development, and that only uses dependent on the resources of the ESHA be allowed within the ESHA.

Consistency Analysis

The proposed project would take place within previously disturbed areas between the existing buildings and along the south side of Hookton Road that currently are paved or graveled. No work would occur within ESHA. Proposed project activities would be conducted nearby, but

outside of, Salmon Creek and its associated riparian habitat, and adjacent to, but outside of, grazed seasonal wetlands. Salmon Creek supports populations of coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*O. tshawytscha*), and Steelhead (*O. mykiss*), which are listed as threatened species under the federal Endangered Species Act. Salmon Creek also supports a well-developed riparian corridor.

Nevertheless, the proposed project potentially could affect water quality and ESHA because (1) the project could increase the amount of surface runoff by paving areas that currently are graveled (e.g., adjacent to the equipment barn), which absorb more water than paved areas, and (2) some runoff from the project area will continue to flow to the County drainage inlet that connects with a vegetated swale, which connects with Salmon Creek. Both the creek and the swale, which is a functional wetland, are considered ESHA under the Coastal Act. The swale currently collects runoff from the applicant's property, from the Hookton Road/ Eel River Drive intersection, and from the State Highway 101 on- and off-ramps.

Runoff from the driveway will collect oil and grease drippings from farm equipment and vehicles, as well as other contaminants deposited on the driveway. In addition, runoff from the completed driveway and from the project site during construction will collect sediment. Grading, soil disturbance, and vegetation removal can result in the discharge of sediment into site runoff, which, upon entering coastal waters, increases turbidity and adversely affects fish and other sensitive aquatic species. Sediment is considered a pollutant that affects visibility through the water, and affects plant productivity, animal behavior (such as foraging) and reproduction, and the ability of animals to obtain adequate oxygen from the water. With respect to potential effects on fish and fish habitat, sediment is often a major pollutant of concern, because fine sediments have been well documented to fill pore spaces between larger gravel and cobble, eliminating the relatively coarse sediments required for egg and fry survival of many freshwaterspawning fish. Sediments may physically alter or reduce the amount of habitat available in a watercourse by replacing the pre-existing habitat structure with a stream-bottom habitat composed of substrate materials unsuitable for the pre-existing aquatic community. In addition, sediment is the medium by which many other pollutants are delivered to aquatic environments, as many pollutants are chemically or physically associated with the sediment particles.

The proposed project would, on the whole, improve water quality conditions in the area above existing conditions because the porous pavement of the reconstructed driveway area would provide for a greater infiltration of stormwater, and most of the surface water runoff from the site would be directed as surface water sheet flow into vegetated areas of the property for biofiltration. Due to the site's existing topography and impermeable pavement, the majority of surface water runoff currently is directed into the vegetated swale along Eel River Drive via the County drainage inlet. The proposed project will decrease the potential stormwater flow to the downstream drainage inlet from the site by approximately 80 percent.

The applicants submitted a grading and sediment control plan prepared by Ontiveros and Associates and dated September 21, 2007 (Exhibit No. 4). The plan proposes to use various Best Management Practices (BMPs) such as using porous asphalt across the majority of the site, recontouring the existing grade to direct sheet flow into the vegetated area southeast of the site

for biofiltration, and using silt fences and straw bale dams at strategic locations (such as adjacent to the Salmon Creek corridor) to minimize the potential for erosion and sedimentation of coastal waters and wetlands during project construction.

These proposed BMPs will help reduce water quality impacts, but additional mitigation is needed to protect water quality and ESHA. Despite the proposed project's inherent water quality benefits, significant adverse water quality impacts and impacts to ESHA could still occur. For example, the effectiveness of the porous asphalt could be diminished if, during construction, specific protocols are not followed to minimize compaction of the subgrade, which would reduce permeability. After the construction period and for the life of the project, water quality impacts could occur if the porous asphalt is not maintained properly and therefore fails to infiltrate as much of the stormwater and surface water runoff as originally calculated (*i.e.*, approximately 80 percent). Surface runoff from the site could pick up sediment and other pollutants such as oil and other vehicle fluids and carry these into the County drainage system, where they would enter the vegetated swale ESHA, which is connected to Salmon Creek. Furthermore, if work were to be conducted during a time when Salmon Creek was likely to flood (usually in the winter months), flood waters could wipe out erosion control devices, compromising the success of the project and causing significant erosion of the project area and sedimentation of adjoining coastal waters.

Therefore, the Commission attaches Special Condition Nos. 1 and 2. Special Condition No. 1 restricts the timing of work to the period of April 15 through November 15, when flooding is less likely, reducing the potential for erosion and sedimentation of coastal waters and wetlands. Special Condition No. 2 lists various construction and maintenance responsibilities, including implementation of the proposed BMPs including the use of porous asphalt, silt fences, and straw bale dams, and proper installation and maintenance of the porous asphalt to maximize its permeability, thereby maximizing the amount of on-site infiltration of stormwater and surface water runoff and minimizing the potential for erosion and sedimentation impacts to coastal waters and wetlands.

The Commission thus finds that as conditioned, the proposed development is consistent with Sections 30231 and 30240 of the Coastal Act because existing water quality and biological productivity will be protected and maintained from impairing waste discharges, and development adjacent to ESHA is sited and designed to protect the ESHA.

3. Flood Hazard

Coastal Act Policy:

Section 30253 of the Coastal Act states, in applicable part, the following:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The above-reference policy requires, among other things, that new development in areas of high flood hazard minimize risks to life and property, assure stability and structural integrity, and neither create nor contribute significantly to erosion.

Consistency Analysis

The subject property is located within the flood plain of Salmon Creek as shown on FIRM Panel 940. As discussed previously, Salmon Creek frequently floods. Due to the poor drainage of the existing paved areas during the frequent flood events of Salmon Creek, extensive erosion and sedimentation occurs on the driveways and adjacent county roadway (Hookton Road), which is a problem for the applicant, a public safety concern, and a serious maintenance and clean-up issue for the County roads maintenance department. However, as certified by the applicant's engineer (Ontiveros and Associates), the parcel is not within a designated floodway where federal and County regulations restrict the placement of fill and the construction of new buildings so as not to diminish the overall carrying capacity of the floodway (see Exhibit No. 5).

The proposed project involves removal of existing paved and gravel areas, raising the ground level approximately 1.5 feet by importing approximately 200 cubic yards of engineered gravel base, and the installation of pervious asphalt pavement. The porous asphalt consists of a minimum of 12 inches of 1.5- to 2.5-inch clean washed rock over geotextile filter fabric, topped with 0.75-inch open grade asphalt. Under the proposed project, the majority (approximately 80 percent) of the site's stormwater and surface water runoff will be directed by sheet flow towards the agricultural fields to the southeast of the driveway area. The remainder of runoff will be directed via an improved drainage swale along the south side of Hookton Road to an existing drainage inlet at the southwestern corner of the Eel River Drive and Hookton Road intersection. The drainage structure then diverts all stormwater runoff east under Eel River Drive into an 800-foot-long vegetated drainage swale located between the eastern side of Eel River Drive and the western edge of the south lanes of the State Highway 101. This vegetated swale currently drains all stormwater runoff from the applicant's property, from the Hookton Road/Eel River Drive intersection, and from the State Highway 101 on- and off-ramps south into Salmon Creek.

Recontouring the site to direct the majority of the sheet flow runoff toward the field south of the barns combined with the use of the porous asphalt on the site will greatly reduce the flow of stormwater runoff and potential floodwaters from Salmon Creek to Hookton Road. The applicant also proposes to widen and improve the drainage swale adjacent to Hookton Road to allow the remainder of the site's runoff to flow off of the road and into the County drainage inlet at the intersection of Hookton Road and Eel River Drive.

The Commission thus finds that as conditioned, the proposed development is consistent with Section 30253 of the Coastal Act because it will minimize flooding risks to life and property, assure stability and structural integrity, and neither create nor contribute significantly to erosion.

4. Alleged Violation

The applicant indicates that in 2006 the applicant demolished and removed a small dilapidated pump house between the proposed driveway replacement development and Salmon Creek. The demolition and removal of the pump house is a form of development as defined by Section 30106 of the Coastal Act and occurred without the benefit of a coastal development permit. The proposed driveway replacement development is not functionally dependent on the pump house removal, as the two developments do not occur within the same project boundaries, the design of the driveway replacement project is not affected by the presence or absence of the pump house, and the driveway replacement project would be needed whether the pump house remained on the site or not, as the driveway was subject to periodic flooding and erosion even before the pump house was removed.

Although certain development has taken place at the project site without the benefit of a coastal development permit (including demolition of the old pump house adjacent to Salmon Creek), consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of this permit does not constitute a waiver of any legal action with regard to the alleged violations nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

5. <u>California Environmental Quality Act</u>

Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is consistent with any applicable requirement of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to achieve consistency between the proposed project and the requirements of the applicable policies of the Coastal Act. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. Mitigation measures that will minimize or avoid all significant adverse environmental impact have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

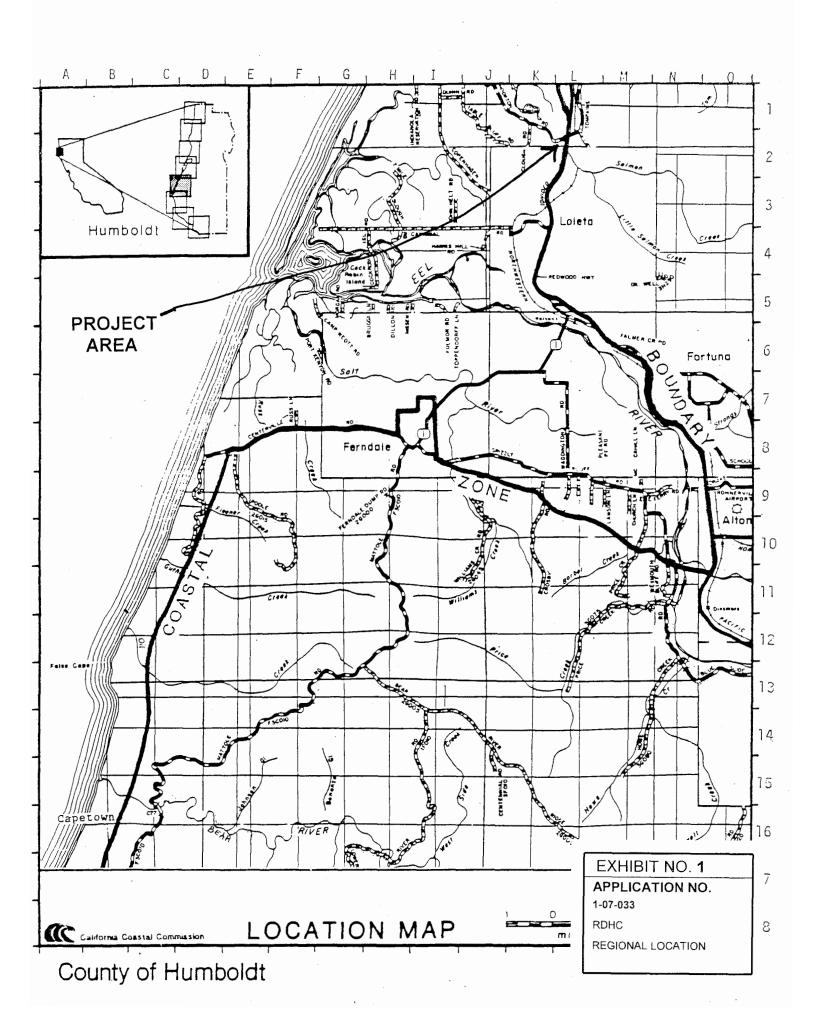
EXHIBITS:

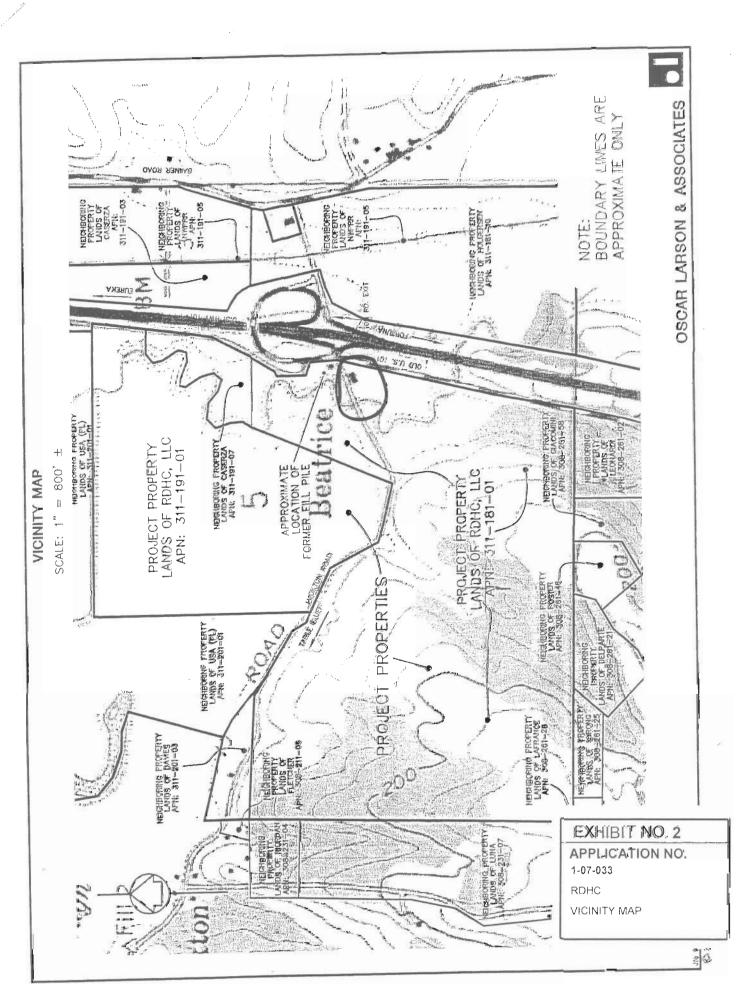
- 1. Regional Location
- 2.
- Vicinity Map
 Assessors Parcel Map 3.
- Project Description & Site Plan 4.
- 5. Letter and Calculations from Ontiveros and Associates

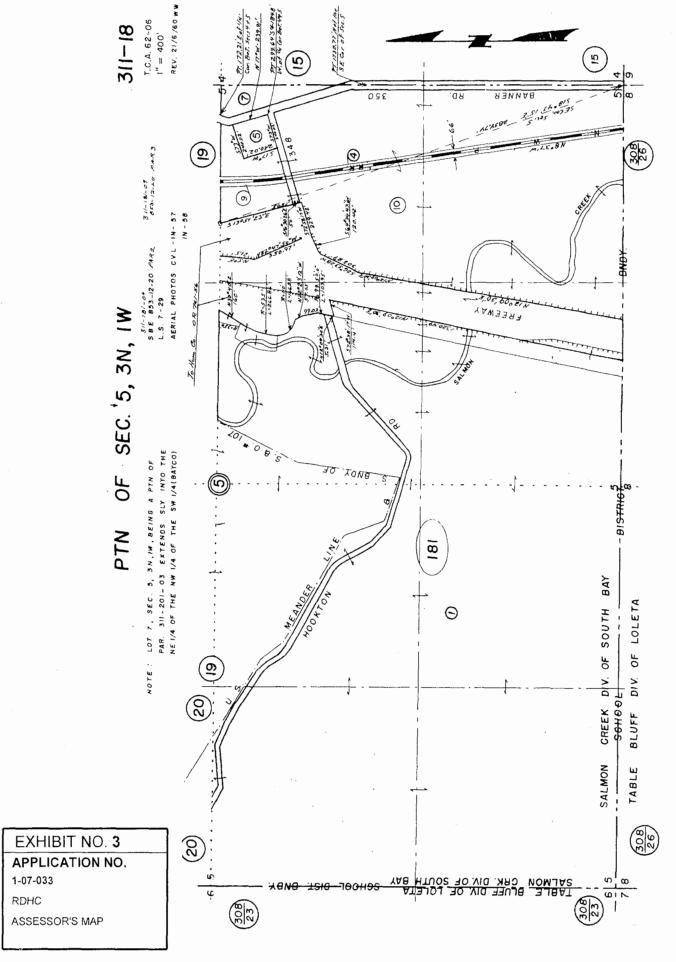
ATTACHMENT A

Standard Conditions:

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 3. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 4. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.







Amended Project Description Repair of Hay and Equipment Storage Barn Paved Areas – 532 Hookton Road, Loleta, CA

This application is for the repair of the existing cement and gravel driveways that have historically served the recently refurnished hay and equipment storage barns located on the south side of Hookton Road of the subject property. Attached to this application are engineered Erosion & Sediment Control Plans as well as a Grading Plan designed by Ontiveros and Associates which has also been submitted to the Humboldt County Building Department. These plans are designed to level, resurface, drain and reduce erosion and sedimentation problems on the approximately 16,000 sq. ft. of existing concrete and graveled areas surrounding the hay and equipment barns. The current condition of these paved or graveled areas consists of broken concrete, uneven gravel and silt deposits caused by frequent winter flooding, erosion, lack of maintenance and poor site planning by the property's previous owners. Due to the dilapidated condition of these driveways the hay and equipment storage barns are often inaccessible during the rainy periods of the year. Additionally poor drainage conditions of the existing paved areas during the frequent flood events of Salmon Creek cause extensive erosion and sedimentation of the driveways of the subject property and the adjacent Hookton Road and Eel River Drive which are County maintained roadways. This erosion and sedimentation build up on the driveways and county roadways not only are nuisance for the Applicant but also a source of constant maintenance and clean up issues for the Humboldt County road maintenance department. Through the implementation of the attached grading and repaying plan, the broken concrete and gravel areas will be removed and the existing ground level will be raised approximately 1.5 feet by importing approximately 200 yards of engineered gravel base and installing pervious asphalt pavement. The end result will improve drainage through the implementation of the engineered design and repairs to the driveways, existing drainage ditches and culverts. As shown on the attached Erosion and Sediment Control Plans the majority of storm and flood water flows that enter the paved areas of Applicants property are either absorbed through the previous pavement surface filtering into the gravel base rock of the paved areas or directed towards the properties agricultural fields to the south east of the improvements. The remaining amounts of storm and flood water flows are then directed northeasterly into an improved drainage swale that runs adjacent to the north side of the equipment storage barn and the south side of Hookton road that flows eastward to an existing drainage structure at the southwest corner of Eel River Drive and Hookton Road intersection. The drainage structure then diverts all storm water runoff east under Eel River Drive into an 800 ft. long vegetated drainage swale located between the eastern side of Eel River Drive and the western edge of the south lanes of the Highway 101 roadway. This 800 ft. vegetated swale currently drains all storm water runoff from Applicant's property, Hookton Road/Eel River Drive intersection and the Highway 101 off/on ramps south into the Salmon Creek waterway. Due to the low velocities of storm water runoff in the vegetated swale, the swale acts a natural barrier for sedimentation and low level road way contaminants from the County and State roadways from entering the Salmon Creek Waterway.

The implementation of the attached Erosion & Sediment Control Plans will redirect the majority of flood water flows from the applicant's property into its adjacent agricultural fields reducing flood water flows that currently overburden the existing drainage swales of the county roads. The proposed improvements will ultimately improve the current erosion, sedimentation and flooding problems that have historically plagued the Hookton Road and Eel River Drive intersections during heavy storm and flood events reducing the necessity of county road maintenance department's clean up, maintenance and road closures of the Hookton Road/Eel River Drive intersection and the adjacent Highway 101 off/on ramps.

EXHIBIT NO. 4

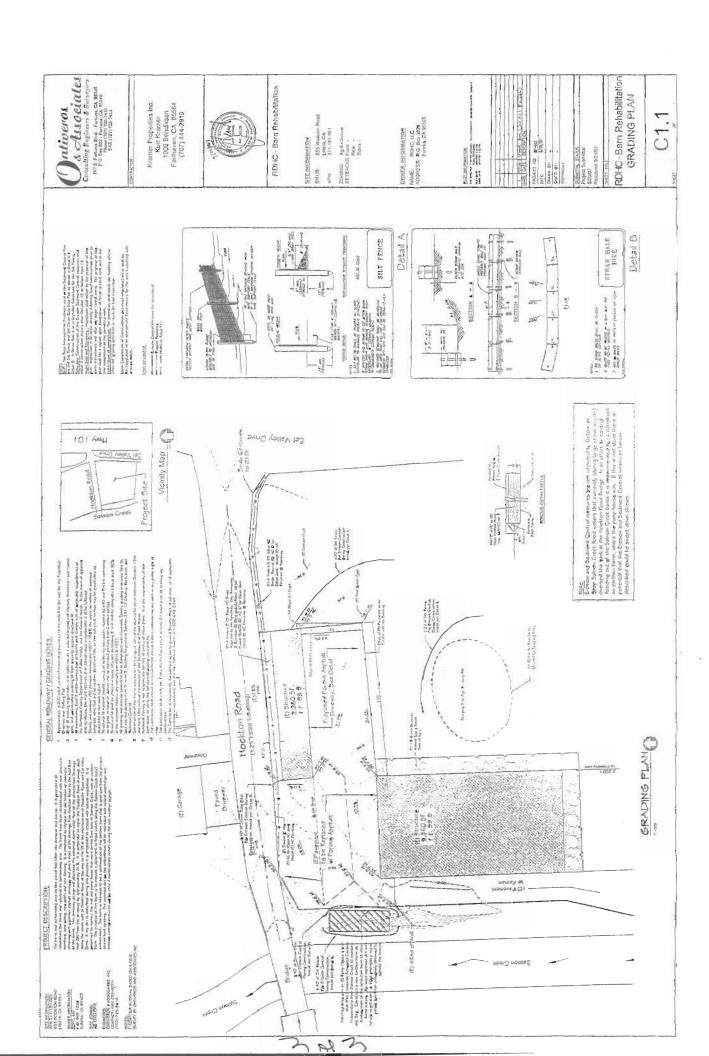
APPLICATION NO.

1-07-033

RDHC

PROJECT DESCRIPTION & SITE PLAN (1 of 3)

One a side note regarding the attached Erosion and Sediment Control plans that will need clarification is that applicant has chosen to not pursue the construction of the earthen bern on the eastern boundary of Salmon Creek. Please remove that component from the project in the pending staff report on this application.



Ontiveros Os Associates

Consulting Engineers & Surveyors

January 26, 2007

Todd Sobolik Humboldt County Building Division 3015 H Street Eureka, CA 95501

RE:

555 Hookton Road

Placement of Fill within a Special Flood Hazard Area

AP# 311-181-001

Dear Mr. Sobolik:

At the request of Kurt Kramer, Kramer Properties Inc., we have been asked to review the placement of fill within a special flood hazard area. Currently Mr. Kramer is in the process of rehabilitating two barns located on this site. One is a milking barn (2280 sf) and the other is a larger barn (9360 sf). The buildings are adjacent to Hookton Road. Both structures' finished floor elevations have been raised as part of this project.

Because this site is located in the Flood Plain as shown on FIRM Panel 940, a flood certificate was prepared by Spencer Engineering on September 7, 2006. Per the Flood Elevation Certificate, the Base Flood Elevation (BFE) at the barn sites is 20.15'. The proposed finished floor elevations of the two structures are approximately 18.6' and 20.3'.

It is proposed to fill the area between the barns to approximately the finish floor elevation of the two structures; approximately 2 feet average fill over the area. Placement of fill within a Special Flood Hazard Area requires the following considerations.

- 1) We have reviewed the Floodway panel 940 and certify that the parcel in question is not in the Floodway, see Exhibit 1.
- 2) The proposed site is not in the defined river channel and, therefore, will not alter or relocate the watercourse as a result of the proposed development.
- 3) A calculation was performed based on the proposed fill cross section and the Flood Plain width, see Exhibit 2. The potential added height to the BFE at this location is calculated to be less than 0.2'. Since the potential BFE increase from this proposal is less than 1.0', this will have little affect on the overall carrying capacity of the flood plain.

If there are any additional questions please don't hesitate to call.

Sincerely,

Brian K. Ontiverosex Civil Engine

Exhibit 1 - Floodway Panel 940

Exhibit 2 - FIRM Panel 940

EXHIBIT NO. 5

APPLICATION NO.

1-07-033

RDHC

LETTER & CALCULATIONS FROM ONTIVEROS & ASSOCIATES (1 of 2)

