# PUBLIC WORKS DEPARTMENT INTER-OFFICE MEMO



**DATE**: December 30<sup>th</sup>, 2008

**TO:** Conservation Development and Planning Department

FROM: Drew Lander, Assistant Engineer

**SUBJECT:** Headwaters Development – Napa Commerce Center, APN# 057-090-069,

File # P07-00412, P08-00131

The application will allow the subdivision of a 218ac lot into two parcels and the construction of a 645,000sqft wine storage warehouse with 632,100sqft of storage area and 12,900sqft of office space; construct a 370 space parking lot and 62 vehicle loading areas. Parcel is located South of S. Kelly Road. The South-East property line borders the proposed alignment of the future Devlin Road extension. This proposal includes an overpass crossing over the existing active Pacific Railroad rail line. The application proposes an alignment for a secondary access road and is referred to in this application as "Headwaters Road". The following conditions apply to a winery storage warehouse use; any proposed change in use will require further analysis regarding roadway access and traffic improvements.

### **EXISTING CONDITIONS:**

- 1. No improved access serves this parcel.
- 2. There are no existing road or drainage improvements on the proposed parcel.
- 3. The Eastern boundary is bordered by the Pacific Railroad rail line.
- 4. The Northern boundary is bordered by an un-named drainage facility which conveys basin drainage to the West.
- 5. Parking surface is currently nonexistent.

## **RECOMMENDED CONDITIONS:**

## **GROUNDWATER**

- 1. The applicant has submitted a will serve letter from the City of American Canyon for water service dated June 29<sup>th</sup>, 2008. No on site wells will be used to serve this parcel. No further analysis is necessary.
- 2. The Developer must comply with all associated requirements and exhibits relating to water conditions to be imposed on all parcels as described in Napa County Agreement No. 7070, between the County of Napa and the City of American Canyon. This agreement and all its parts shall be effective as of July 3<sup>rd</sup>, 2008. (See Attached Exhibits E,F,G,H)

### **NEW DRIVEWAY/ROADWAY:**

- 3. All roadway construction associated with this application shall conform to the current Road and Street Standards of Napa County at the time of permit submittal and accepted construction and inspection practices.
- 4. Prior to issuance of construction permits, improvement plans for the construction of Devlin Road, from South Kelly Road to the southerly boundary of the property, to the full width of the typical section recommended in the Airport Industrial Area Specific Plan shall be prepared, and shall be submitted to the Department of Public Works for approval. Plans shall comply with Napa County Road & Street Standards, and shall include the following:
  - a) Street plan and profile.
  - b) Drainage ditches, culverts, and other structures (if drainage calculations require).
  - c) Water plan (County Environmental Management and American Canyon).
  - d) Sewer plan (County Environmental Management and Napa Sanitation District).
  - e) Grading and erosion control plan for development related improvement locations.
  - f) Public utility plan, showing all existing utilities and installation of all utilities to serve the proposed development.
  - g) Design of a grade-separated crossing of the Union Pacific Railroad tracks.
  - h) Schematic design demonstrating the feasibility of the extension of Devlin Road from the property to Green Island Road.
  - i) The County will confer with the City of American Canyon to determine concurrence with the proposed design, prior to County approval of the plans.
- 5. Developer shall extend Devlin Road to access the proposed development. The extension of Devlin Road must conform to an acceptable alignment approved by Napa County with the intent to connect to Green Island Road. This Roadway shall be irrevocably offered and dedicated for public acceptance and shall conform to the Airport Industrial roadway standards of a three lane collector with the exception of the proposed grade-separated crossing the railroad. The roadway grade-separated crossing need only meet the standards for a Two Lane Industrial Collector with bike lanes (County Road and Street Standards pgC-9).
- 6. Prior to occupancy of any new structure, the Developer shall offer for dedication to the public, sufficient right-of-way to contain all the required public improvements.

- 7. Prior to issuance of building permits, the Developer shall document that an Order authorizing construction of a grade-separated crossing of Union Pacific Railroad tracks has been issued by the California Public Utilities Commission. A grading permit may be issued prior to final approval from the Public Utilities Commission (PUC) for the import of soils needed for the proposed grade-separated crossing provided that the Developer agrees that grading permit approval does not constitute approval of the PUC and provided the following conditions are met:
  - a) The Developer provides complete development plans indicating that the design intent is achievable and that sufficient land for right of way is available on both the East and West side of the railroad, and can be dedicated to the County to construct the crossing.
  - b) The Developer provides documentation that the Union Pacific Railroad and California Public Utilities Commission agree to a temporary crossing for construction.
  - c) The Developer agrees that in the event that the appropriate permissions can not be obtained to construct the grade-separated crossing all soils imported to the site shall be removed or relocated as approved by the County.
- 8. Developer shall provide a secondary access "through road" connecting Airport Road to the Devlin Road extension. The required roadway right of way shall be dedicated or irrevocably offered for dedication to Napa County for public acceptance and shall conform to the County road standard for an Industrial Minor roadway (County Road and Street Standards pgC-9), providing 56feet of right of way, two 18ft travel lanes and 10ft of shoulder on either side of the roadway. Developer shall install a gate at the connection with Airport Road to prevent access onto Airport Road until such time that the County adopts the secondary access road as a public street. Gate shall be keyed to allow emergency vehicle access only. When this road is accepted as a county road the Developer shall remove the gate from the roadway.
- 9. Appropriate standard road signing will be required at all roadway intersections and roadway terminations.
- 10. Prior to occupancy of any new structure, the Developer shall complete all public improvements, including the construction of Devlin Road from South Kelly Road to the southerly boundary of the property with a grade-separated crossing over the Union Pacific Railroad tracks.
- 11. A temporary construction easement for the construction of the proposed bridge abutments shall be obtained from Union Pacific Railroad prior to issuing a grading permit.
- 12. The following improvements were identified in the traffic impact analysis and shall be constructed prior to Final Occupancy of any structure. Prior to issuance of construction permits, the Developer shall enter into an Improvement Agreement with the County for all required public improvements that shall be dedicated to the County including but not limited to the following improvements:
  - a) Devlin Road extension
  - b) Headwaters Road

- c) Grade-separated railroad crossing for Devlin Road.
- d) Construction of a fourth lane on the eastbound leg of South Kelly Road at Highway 29.
- e) Construction of a second left turn lane on the westbound leg of South Kelly Road at Highway 29.
- f) Lengthen the left turn lane on northbound Highway 29 at South Kelly Road to minimum 450 feet.
- g) Construction of a right turn lane on northbound Highway 29 at Green Island Road/Newell Road.
- h) Lengthen the right turn lane on southbound Highway 29 at South Kelly Road to minimum 100 feet.
- 13. Access driveways shall be designed to meet the Airport Industrial Area standards. Structural section shall be a minimum section equivalent to support an H20 load designed by a licensed Civil or Geotechnical Engineer and shall not be less than two inches of asphalt concrete over five inches of Class II Aggregate or equivalent. (County Road and Street Standards, Page 9, Par. 12)

#### PARKING:

- 14. Any additional parking proposed by the Developer or required by the Planning Commission as a condition of this use permit must have a minimum structural section equivalent to support an H20 load designed by a licensed Civil or Geotechnical Engineer and shall not be less than two inches of asphalt concrete over five inches of Class II Aggregate. (County Road and Street Standards, Page 27, Section 19).
- 15. Parking lot details shall conform to the requirements of the latest edition of the Napa County Road and Street Standards.

## SITE IMPROVEMENTS:

- 16. Proposed drainage for the development shall be shown on the improvement plans and shall be accomplished to avoid the diversion or concentration of storm water runoff onto adjacent properties. Plan shall also indicate the path and changes in runoff.
- 17. Grading and drainage improvements shall be constructed according to the latest "Napa County Road and Street Standards" and the 2007 California Building Code Appendix J.
- 18. Developer must obtain all appropriate permitting from the Public Utilities Commission (PUC) prior to installing or connecting a railroad spur line to access this facility. All construction of the rail line must be done with the appropriate approvals from the PUC and in accordance with industry standards.
- 19. The Developer must obtain an encroachment permit for any work performed within the Napa County Right-of-Way.

#### PARCEL MAP CONDITIONS:

- 20. Prior to final occupancy of any structures the Developer is to submit a Final/Parcel Map to the Department of Public Works for review and approval by the County Surveyor. The Developer is to pay the map checking fee as established by resolution of the Napa County Board of Supervisors in effect at the time of submittal of the map.
- 21. Any improvements proposed after the Parcel map has been issued shall be constructed according to plans prepared by a registered civil engineer and shall be reviewed and approved by this office prior to construction. Improvement plans shall be submitted with the building permit. A plan check fee will apply.
- 22. Developer shall provide a 20' wide Public Utility Easement (PUE) from Headwaters Road to the proposed Pump Station.
- 23. Developer shall provide all easements/dedications on the Final Map to the satisfaction of the County of Napa Public Works Department and in agreement with the requirements of the Napa County Airport Industrial Area Specific Plan.
- 24. The proposed Headwaters Road shall be constructed and complete prior to occupancy of any structure and shall be privately maintained until such time as the County Board of Supervisors accepts the offer of dedication.
- 25. In addition to the required dedications for road right of way the Developer shall offer an additional 20' adjacent to the grade-separated crossing, over the entire length of all constructed toe of slopes, to the County of Napa, or assigned authority, for maintenance purposes. Within the 20' easement, the Developer shall provide a 12' all weather surface road meeting current County of Napa Road and Street Standards with vehicular turnarounds prior to the railroad right of way. The vehicular turnaround shall be designed for a standard vacuum pump truck. A safe and reliable entrance to the 20' maintenance easement shall be provided along Devlin Road. An exhibit shall be provided showing how a standard vacuum truck can maneuver from Devlin Road to the 20' maintenance easement.

#### **AIRPORT SPECIFIC CONDITIONS:**

- 26. Developer will pay all applicable Napa County Airport Road Improvement and Development Fees prior to receiving any building permits for this project. Upon approval of this use permit, the Developer should contact our office to obtain information regarding the determination of this fee.
- 27. All Public Works related improvements shall conform to the latest Napa County Road and Street Standards and the latest Napa County Airport Area Specific Plan.
- 28. As part of any tentative map, or final parcel map the Developer shall dedicate to Napa County the necessary width and alignment of the future Devlin Road extension and access roads serving the development parcel as described under the Parcel Map Conditions section of this memo. This dedication shall not be less than a minimum of a 56' wide and may be increased as required to incorporate all structures required to support the public roadway.

- 29. The Developer shall provide to this department complete construction drawings for the entire portion of Devlin Road and the Headwaters Road that serves this development and borders the development parcel prior to the approval of any Construction plans.
- 30. The Developer is to build the portion of Devlin Road to access the parcel including curb, gutter, sidewalk improvements and other storm drain infrastructure improvements called out in the Airport specific plan to support the full build-out of the drainage basin and all drainage improvements shall be sized accordingly.
- 31. All driveway access points must meet the minimum distance of 200 feet from an intersection. The Napa County Airport Area Specific Plan on page 120, "b. Direct Access Limitations" states that "Private driveways along collectors should be separated by a minimum distance of 200 feet and shall not be permitted within 200 feet of an intersection".

## POST-CONSTRUCTION RUNOFF MANAGEMENT REQUIREMENTS:

- 32. Project must conform and incorporate all appropriate site design Best Management Practices as required by the Napa County manual for *Post-Construction Runoff Management Requirements* which is available at the Public Works office.
- 33. Parking lots and other impervious areas shall be designed to drain through grassy swales, buffer strips, sand filters or other sediment control methods which will be approved by this Department. If any discharge of concentrated surface waters is proposed into any "Waters of the State," the permittee shall consult with and secure any necessary permits from the State Regional Water Quality Control Board prior to the issuance of applicable construction permits.
- 34. The application shall incorporate Site Design, Source Control and Treatment control Best Management Practices to comply with County and State water quality standards.
- 35. Prior to final occupancy the property owner must legally record an "implementation and maintenance agreement" approved by the Public Works department to ensure all post-construction structures on the property remain functional and operational for the indefinite duration of the project.
- 36. Each year the entity responsible for maintenance is required to complete an annual report that includes copies of completed inspection and maintenance checklists to document that maintenance activities were conducted during the previous year. The annual report shall be retained for a period of at least five years and made available upon request by the County.
- 37. Loading/unloading dock and processing areas must comply with Napa County stormwater management requirements at the time of permit approval.
- 38. Post-development runoff volume shall not exceed pre-development runoff volume for the 2-year, 24-hour storm event. Post-development runoff volume shall be determined by the same method used to determine pre-development conditions. If post-development runoff volume exceeds pre-development runoff volume after the site design BMPs are incorporated into the project's overall design, a structural BMP (e.g. bio-retention unit) may be used to capture and

- infiltrate the excess volume. Waivers from this requirement can only be granted by the Director of Public Works.
- 39. Provide concrete stamping, or equivalent, of all stormwater conveyance system inlets and catch basins within the project area with prohibitive language (e.g., "No Dumping Drains to Napa River"). Signage shall identify the receiving water the drain discharges to and include a message in Spanish.
- 40. Trash storage areas shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, and screened or walled to prevent off-site transport of trash. Trash storage areas must contain a roof or awning to minimize direct precipitation or contain attached lids on all trash containers that exclude rain.

# CONSTRUCTION STORMWATER MANAGEMENT REQUIREMENTS:

- 41. The site plans indicate that the construction activity will result in disturbance of greater than one acre of total land area. Therefore, the permittee will be required to obtain coverage in accordance with Napa County's General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ) issued by the Regional Water Quality Control Board (SRWQCB). To achieve this, the permittee shall file a Notice of Intent with the SRWQCB prior to any grading or construction activity. Construction activity subject to this permit includes but is not limited to clearing, grading and disturbances to the ground such as stockpiling, or excavation
- 42. All hazardous materials stored and used on-site that could cause water pollution (e.g. motor oil, cleaning chemicals, paints, concrete, etc.) shall be stored and used in a manner that will not cause pollution, with secondary containment provided. Such storage areas shall be regularly cleaned to remove litter and debris. Any spills shall be promptly cleaned up and appropriate authorities notified. Parking lots and other impervious areas shall be designed to drain through grassy swales, buffer strips, sand filters or other sediment control methods which will be approved by this Department. If any discharge of concentrated surface waters is proposed into any "Waters of the State," the permittee shall consult with and secure any necessary permits from the State Regional Water Quality Control Board. All trash enclosures must be covered and protected from rain, roof, and surface drainage.
- 43. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

#### OTHER RECOMMENDATIONS:

- 44. All improvements shall be constructed according to plans prepared by a registered civil engineer which will be reviewed and approved by this office. Improvement plans shall be submitted with the building permit. A plan check fee will apply.
- 45. Developer shall comply with Napa County Cooperative Agreement No. 7138, dated October 21<sup>st</sup>, 2008, as it applies to the Counties assistance in the permitting of the grade-separated crossing over the Pacific Railroad rail line.
- 46. As applicable to future development, the Developer must comply with all associated requirements and exhibits relating to development on all parcels described in Napa County Agreement No. 7070, between the County of Napa and the City of American Canyon. This agreement and all its parts effective as of July 3<sup>rd</sup>, 2008.
- 47. Prior to the issuance of any grading or building permit, or the signing of improvement plans, the permittee and County shall survey and document the condition of County roads before construction begins, and then reevaluate conditions at the end of construction. Prior to Occupancy of any buildings or commencement of any use, the permittee shall be responsible for repair of any pavement degraded due to its construction vehicles.
- 48. The 40' Public Utility Easement for future sanitary sewer as illustrated on sheet UP1 of the plan submittal may require significant redesign prior to final improvement plans since a Conceptual Sanitary Sewer System Improvement Plan has yet to be developed Therefore, prior to issuing of any building permits through the County of Napa, a Conceptual Sanitary Sewer System Improvement Plan shall be submitted to the County and shall be approved by the City of American Canyon prior to construction. Grading permits may be issued if proposed work does not affect sanitary sewer design.
- 49. Prior to issuing a Grading Permit by this department, the following items shall be provided:
  - a) A statement from the engineer stating all three alternatives for the future alignment of Devlin Road extension to terminate on Green Island Road can be designed to the most stringent Road and Street standard between the County of Napa and City of American Canyon.
  - b) Developer shall provide documentation provided by the Union Pacific Railroad authorizing a temporary construction crossing for the bridge dirt hauling operation.
  - c) Developer shall provide documentation indicating the owner of parcel #057-090-075 authorizes and agrees with the installation of the sanitary sewer main across the adjacent property prior to the issuance of a grading permit that includes this work.
  - d) A construction plan for the Sanitary Sewer pipe installation shall be provided showing the temporary excavation in relation to the Pannatoni property line and construction easement.
  - e) A construction plan for the abutment installation shall be provided showing temporary excavations in relation to the RR ROW and construction easement.
  - f) A geotechnical engineer shall evaluate the slope stability for the proposed location of the sanitary sewer line running along the toe of slope.

- g) Provide a design report stating the Standard used in designing bridge's horizontal and vertical curves. Show that the design will meet both Napa County and American Canyon roadway design standards.
- h) Provide an explanation regarding the traffic conditions assumed for the bridge construction.
- i) A statement from the project Landscape architect stating enough shoulder is being provided to install the trees shown on the UP landscape plans.
- 50. Developer shall provide a striping plan showing transitions from standard three lane collector to a two lane roadway over bridge.
- 51. For the grade-separated crossing the Developer shall install the 12" water main, 12" reclaimed water main, gas main, and joint trench utilities in accordance with the responsible agency standards.
- 52. The Public Improvement plans shall include a joint trench design for the proposed Devlin Road Extension.
- 53. Developer shall pothole existing utilities within the scope of the improvements prior to Building Permit or Public Improvement plan submittals. Potholing existing utilities will not be required for an onsite Rough grading permit.
- 54. Metal beam guard rails along the bridge shall be constructed per the latest Caltrans Standard Specifications.
- 55. Bridge Railing shall be designed to Caltrans FHWA Test Level standard of TL-4.
- 56. There shall be no retaining walls within the County of Napa Public ROW unless approved in writing by the Director of Public Works.
- 57. Sizing of energy dissipaters relating to roadway improvements shall be designed per Caltrans Standards.
- 58. Engineer shall provide manufacturer verification confirming that the proposed storm drain pipe can be bent as proposed.
- 59. Storm drain calculations within the Public Right of way shall be analyzed using the following design criteria:
  - a) 10 year storm is conveyed within the pipe
  - b) 100 year storm event is conveyed without overtopping the roadway
  - c) 100 year storm events can be carried within Curb and Gutter pan.
- 60. The span length of the bridge shall be increased in order to convey drainage from the "Pannatoni Development" (APN 057-090-075) in an open ditch and without the use of 2-24" RCP pipes under the bridge. Unless otherwise approved by the Director of Public Works in writing prior to construction.

- 61. The Developer shall consider the construction of an armored swale to convey the water from the South East bridge abutment of the proposed County ROW to the existing wetlands within an open ditch along the Rail Road. If the Developer can not design an open ditch they must provide a statement as to why it is not feasible.
- 62. Cover over the storm drain lines shall meet the County standard trenching requirements. Therefore, Engineer shall provide a design report confirming that the County standards can be met or equivalent.
- 63. Street lights shall be installed per the County of Napa standards or the City of American Canyon lighting requirements, which every is more stringent.
- 64. Culvert for proposed rail spur shall be constructed per the latest edition of the American Railway Engineering Association "Manual for Railway Engineering" for Cooper E80 live loading. This culvert shall be designed to pass the 100 year event with no backwater.
- 65. All cuts and fills shall be designed per the latest California Building Codes. Specifically, all cuts and fills slopes shall be setback to meet the latest CBC.

Any changes in use may necessitate additional conditions for approval.

If you have any questions regarding the above items please contact Erich Kroll or Drew Lander at 253-4351. For groundwater questions, please contact Anna Maria Martinez.