

State of Vermont

Water Resources Board

Appeal of Richard Davis)
In Re: Discharge Permit No. 1-0460)
Justgold Holding Corporation/Juster)
Development Company)

10 V.S.A. §1269

Introduction

Board granted party status in this proceeding to the following:

- a. Richard Davis, appellant
- b. **Justgold** Holding Corporation and Juster Development Company, 'permittee
- c. Vermont Agency of Natural Resources
- d. City of **Rutland**

The following exhibits were entered into the record of this proceeding:

- Exhibit #1: A drawing entitled "**Proposed** Addition to **Rutland** Mall" prepared by Meyer Mancino Architects dated **August 28, 1985.**
- Exhibit #2: A drawing entitled "Sewage, Drainage and Grading Plan, **Rutland** Mall" prepared by Wright Engineering dated March 26, 1974.
- Exhibit #3: A drawing entitled "Final Grading Plan" prepared by **Wright** Engineering most recently dated **March 14, 1986.**
- Exhibit #4: A drawing entitled "Final Sedimentation Basin X-Sections" prepared by Wright **Engineering** most recently dated April 18, 1986.
- Exhibit #5: A drawing entitled. "Erosion Control Plan" prepared by Wright Engineering most recently dated October 14, 1986.
- Exhibit #6: A drawing entitled "**Erosion Control** X-Sections" prepared by Wright Engineering most recently dated January 29; 1986.
- Exhibit #7: A drawing entitled "Erosion Control Details" prepared by Wright **Engineering** most recently dated **November 14, 1986.**

- Exhibit #8: A drawing identified as sheet no; 1 entitled "Rutland Mall Proposed Expansion Site Plan- Environmental" prepared by T.J. Boyle and Associates most recently dated October.2, 1986.
- Exhibit #9: A drawing identified as sheet no. 2 entitled "Relocated Stream" prepared by T.J. Boyle and Associates most recently dated August 26, 1986.
- Exhibit #10: A drawing identified as sheet #3 entitled "Relocated Stream" prepared by T.J. Boyle and Associates most recently dated August 26, 1986.
- Exhibit #11: A drawing identified as sheet #4 prepared by T.J. Boyle and Associates entitled "Pond Area - Stream Details" most recently dated August 26, 1986.
- Exhibit #12: An application for a Discharge Permit for the discharge of stormwater runoff from the existing Rutland Mall filed on behalf of Justgold Holding Corporation by Mr. John Dell'Anno dated February 4, 1986.
- Exhibit #13: An application for a Discharge Permit for stormwater runoff from the proposed Rutland Mall expansion filed on behalf of Juster Development Company by Mr. John Dell'Anno dated January 24, 1986.
- Exhibit #14: A copy of Discharge Permit #1-0460 issued to Justgold Holding Corporation and Juster Development Company dated February 6, 1987.
- Exhibit #15: A letter with enclosures dated March 25, 1986 addressed to Mr. Jeffrey Cueto, Vermont Agency of Environmental Conservation. from Mark Youngstrom enclosing various tables and computations related to stormwater runoff analysis..
- Exhibit #16: A copy of amended Temporary Pollution Permit #2-0867 issued to Juster Associates dated December 3, 1982.
- Exhibit #17: A letter dated September 2, 1986 addressed to Mr. Anthony Stout, District Coordinator, District Environmental Commission from Jon Readnour with, an enclosed one page document entitled "Approximate Winter Sand and Salt Usage at the Rutland Mall Winter 1981 - Spring 1986."
- Exhibit #18: A document entitled "Rutland Mall Public Responsiveness Summary" dated February 3, 1987.

Exhibit #19: A series of thirty-eight colored photographs taken by **Richard Davis** showing various aspects of the existing **Rutland** Mall stormwater collection system and environs.

Exhibit #20: A document entitled "Field Observation-Siltation Dunklev Pond" dated August 1, 1986 prepared by Mark Ybungstrom of Wright Engineering Ltd.

Findings of Fact

1. On January 24, 1986 Juster Development Company applied for a discharge permit for stormwater runoff from the proposed expansion of the **Rutland** Mall (proposed Mall expansion). Exhibit 13.
2. On February 4, 1986 Justgold Holding Corporation applied for a discharge permit for stormwater runoff from the existing **Rutland** Mall (existing Mall). Exhibit 12.
3. The Agency of Environmental Conservation (Agency) subsequently issued Discharge Permit No. 1-0460 (Discharge Permit) to Juster Development Company and **Justgold** Holding Corporation authorizing the discharge of stormwater runoff from both the existing Mall and the proposed Mall expansion to tributaries of Tenney Brook including the South Branch of Tenney Brook. Exhibits 14 and 18.
4. All parties stipulated, and the Board so finds, that the discharge authorized by **Discharge** Permit No. 1-0460 is a "major" stormwater discharge for purposes of Section 2-05 of the Vermont Water Quality Standards.
5. The **existing** Mall, completed in 1975, covers an area of approximately 600,000 square feet with impervious surfaces, consisting of approximately 200,000 square feet of roof surface and 400,000 square feet of paved surface used for parking and traffic circulation. The existing Mall is located on Route 4, **Woodstock** Avenue, in the Town of **Rutland**. Tr. 07/16/87 at 17; Exhibits 1 and 2.
6. The stormwater treatment system for the existing Mall collects stormwater runoff from most of the paved surfaces and treats it by means of a series of catch basins and grit chambers which separate sand and grit and any floatable materials such as litter and oil from the stormwater. Treated stormwater is then piped to the stormwater retention basin (retention basin). Tr. 07/16/87 at 19; Exhibit 2.
7. The retention basin receives the runoff from all of the existing Mall's paved surface with the exception of a relatively small area immediately north of the existing Montgomery Ward store.

- . The retention basin's primary function is to control the rate at which treated stormwater is discharged during major runoff events in order to moderate the its effect on the peak flow of the receiving waters. The retention basin was originally designed to comply with the then applicable requirement that during a 100 year return storm, its discharge not increase the peak flow of the receiving waters by more than ten percent. Tr. 07/16/87 at 19-20; Exhibit 2.
9. The retention basin discharges into a 72-inch **diameter** culvert that passes under the existing Mall. In addition to the discharge from the **retention** basin, the 72-inch culvert also conveys tributaries of Tenney Brook from the south side of Route 4 (Woodstock, Avenue) under the existing Mall to an outfall at the rear of Martin's Supermarket. Tr. 07/16/87 at 20; Exhibit 2.
10. The proposed Mall expansion is contiguous with the existing Mall and will cover an area of approximately 600,000 square feet with impervious surfaces including approximately **200,000 square feet of roof surface** and 400,000 square feet of **paved** surface used for parking and traffic circulation.
11. The design of the **stormwater treatment system** for the proposed Mall **expansion** is shown on Exhibits 3 and 4. Stormwater **from the** majority of the new paved surface **will** be treated initially by directing runoff to a series of drainage swales. These swales will be graded to direct stormwater runoff **to sedimentation basins**. Stormwater from the **remaining portion** of the new paved surface will be collected in catch basins and then piped to a drainage swale and sedimentation basin structure to the rear of the proposed Mall expansion. Tr. 07/16/87 at 21-26; Exhibits 3 and 4.
12. The vegetation in the swales will filter out some stormwater-borne contaminants. Some of the organic contaminants in the runoff will be absorbed into the soil. Tr. 07/16/87 at 25.
13. Silt **and** other solids not removed by the swales will settle out in the sedimentation basins. The basins will drain by means of drop spillway standpipes, containing small drain holes. The standpipes will be wrapped **with** a filter fabric to minimize the amount of sedimentation that will escape. Tr. 07/16/87 at 25-26.
14. The drainage swales and the sedimentation basins are unlined and **thus** during much of the year will permit infiltration into the soil. The drop spillway standpipes will drain into the meadowland north of the mall where additional infiltration may take place.

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15. Stormwater which collects on roof **surfaces**, and therefore does not contain sand **and other** contaminants found in parking lot runoff, will be conveyed by pipes beyond the drainage swales into the meadowland north of the Mall where it will flow overland to the receiving waters.
16. In conjunction with the proposed Mall expansion, the 72-inch culvert will be extended as shown on Exhibit #3. Additionally, two modifications to the existing mall stormwater treatment system are required by Discharge Permit 1-0460. First, the outlet for the stormwater retention basin **will** be reduced so that **it will** retain stormwater runoff from a 10 year return storm rather than a 100 year return storm as originally designed. Secondly the roof drainage from the existing Mall will be incorporated with **the roof** drainage from the proposed expansion and 'will be treated as described **in** finding 15 above. Tr. 07/16/87 at 23 and 79-80; Exhibit 3.
17. Each discharge point **from the** sedimentation basins and the discharge **points from the roof drains will be riprapped to** dissipate **energy** and control erosion, in accordance with accepted practice. At the end of the extended 72-inch culvert, a riprapped channel 15 feet wide and 30 feet long will be constructed to dissipate energy from the flow of the pipe and control soil erosion. Tr. 07/16/87 at 82-83; Tr. 09/29/87 at 59.'
18. The 'stormwater runoff from the entire Mall after the proposed expansion will contribute between one-quarter of one percent and three-quarters of one percent to the **peak** flow of the receiving **waters** during a major runoff event. **Such an** increase in peak stormwater flow is hydrologically insignificant and would not cause. An undue adverse effect. on the quality of the receiving waters', increased erosion, sedimentation or channel enlargement. Tr. 07/16/87 at 83-87; Tr. 09/29/87 at 59-60; Exhibit 15.
19. The primary existing use of the **south** branch of Tenney Brook is as a receiving water for stormwater runoff from existing development within its watershed in the Towns of **Mendon** and **Rutland** and the City of **Rutland**.
20. There are several artificially created ponds on Tenney, Brook downstream of the Mall including Dunkley Pond and Fenton's Pond. **In** the late 1940's and early 1950's Dunkley Pond was approximately five feet deep, Tr. 9/29/87 at 154-155.
21. At present these ponds are largely filled with siltation from upstream sources. Based on the causal observations of **property owners**, the rate of siltation **in these ponds may** have increased in recent years.

22. A major source of **the** siltation occurring in Dunkley Pond and Fenton **Pond** reaches Tenney Brook via the 72-inch culvert located at the existing mall. As indicated previously, this culvert conveys tributaries of the south branch of Tenney Brook under the existing Mall and **enroute** receives the discharge of **treated stormwater from the** retention basin.
23. The sources of siltation in the waters exiting the **72-inch** culvert are, located, upstream of the existing Mall as shown by field **evaluations** conducted by individuals with **expertise** in hydrology, engineering and water quality monitoring and by photographs. Photograph **numbers 8 and 9** (Exhibit **19**) show the runoff from Sensible Shoe and the so-called Arby's site as a **significant source** of sedimentation entering the '72-inch culvert upstream of the discharge from the retention basin. Photograph **12** (Exhibit **19**) shows the runoff from the roof drains at the Mall to be clear of turbidity. Photographs 17 and 18 (Exhibit 19) show that at high water conditionsthe water exiting the 72-inch culvert is very turbid. All of these photographs as well as **field eval- uations** indicate that the sources of siltation in Tenney Brook occur upstream **of the** Mall and are not attributable to stormwater runoff from the Mall itself. Tr. **09/29/87** at **194-196; Exhibits 19 and 20.**
24. That portion of the south branch of Tenney Brook immediately adjacent to the Mall will be **relocated as** part of the proposed Mall expansion to simulate a meadowland habitat designed, to enhance **brook trout** habitat. **The relocated** stream will flow into a newly created **mitigation** pond which is designed to provide enhanced wildlife habitat and bird nesting areas.. The relocation of the south branch Tenney **Brook has** been approved by the U.S., Army Corps of Engineers and by the Agency of Natural Resources. Tr. **07/16/87** at 94; Exhibits 8-11.
25. There is a limited fishery in Tenney Brook behind the existing mall. **The brook** flows into a wetland area which provides some wildlife habitat. Tr. **07/16/87** at 94.
26. In the late 1940's and early 1950's Dunkley Pond was used for swimming, boating and fishing. **However,** there is no evidence to show whether **or not** such uses **are currently** "existing uses" as defined in **§1-01(B) (12)** of the Vermont Water **Quality Standards.**
27. There has **been** an extensive amount of technical research done at both the federal and state level to evaluate the impact **of stormwater** runoff on aquatic biota, fish and wildlife. These studies have included an extensive **analysis** of the biological and chemical impacts related to stormwater **discharge and have evaluated** a variety of stormwater discharge sources, including malls similar to the existing Mall and proposed Mall expansion.

28. It was the un rebutted testimony of **all witnesses with expertise in** accessing the water quality impacts of stormwater discharge, and the Board so finds, that the **discharge authorized** by Discharge Permit 1-0460 would not have an **undue adverse** effect on the aquatic biota, fish or **wildlife** based' upon:
- (a) The applicability of the results of the technical research and studies referred to in finding 27 above to the discharge of **stormwater runoff** from the existing Mall and proposed Mall expansion;
 - (b) Direct observations regarding the actual performance of the existing Mall's **stormwater** treatment system; and
 - (c) An evaluation of the anticipated performance of **the** proposed modification to the existing Mall's stormwater treatment system as well as treatment system proposed in conjunction with the Mall expansion.
29. The reliability of **the** stormwater treatment system for the existing **Mall requires** maintaining all treatment devices and facilities in good operating order and the periodic **cleaning** of the grit chambers and the retention basin. The reliability of the stormwater treatment system for the proposed Mall expansion requires the maintenance of all treatment **devices and** facilities in good operating order and the periodic cleanup of the catch basins and the sedimentation basins and mowing the grass on the swales.
30. To the extent that litter and debris have been allowed to accumulate in **areas in** which they can be borne by **stormwater** runoff into **the** treatment devices or facilities or into the receiving waters, as shown by several photographs in exhibit 19, the past maintenance of the existing Mall's stormwater treatment system. has been inadequate.
31. To the extent that they are not incorporated in the foregoing, all proposed findings of fact submitted by the parties to this proceeding are denied.

Conclusions of Law

- 1 In order to obtain a **discharge permit**, an applicant has the burden of demonstrating that the discharge for which **approval is** sought "will not reduce the quality of the receiving waters below the classification established **for them** and will **not violate** any applicable **provisions of** state or federal laws or **regulations**" 10 V.S.A. § 1263(c).
 2. The Board **takes** judicial notice of **its February 17, 1961** Classification Order which classified the receiving waters as Class B.
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- 3 The Vermont Water Quality Standards adopted pursuant to applicable state law by this Board effective January 7, 1985 are **the state** regulations applicable to **the discharge** permit applications filed by **Justgold** Holding Corporation and Juster Development Company.
4. The Vermont Water Quality Standards, dated January 7, 1985, have been 'adopted by the U.S. Environmental Protection Agency as federal' requirements applying to the waters of the State of Vermont.
5. The provisions of the Vermont Water Quality Standards applicable to the discharge of stormwater **into Class B** waters are set forth **in § 2-05** which requires compliance with the **following** requirements:
 - a. Use, **to the** extent feasible, infiltration into soil to dispose of stormwater runoff flows.
 - b . Use accepted practices to control soil erosion.
 - c. Control peak' stormwater flows, where necessary, to **prevent** any undue adverse effect on the quality of the receiving waters including, but not **limited** to, causing increased erosion, sedimentation or channel enlargement.
 - d. The discharge shall not have an undue, adverse effect on any existing use of the receiving waters.
 - e. The discharge shall not have an undue adverse effect on aquatic biota, fish or wildlife.
 - f. The design, operation, **and** maintenance of any facilities used in the treatment or control of stormwater runoff shall be sufficiently reliable to insure compliance with **all the** requirements in section **2-05 (C)**.
6. On the basis of the facts found above, the Board concludes that the **proposed discharge** of stormwater runoff from the existing Mall and the proposed Mall expansion as authorized by Discharge Permit 1-0460 complies with the applicable provisions of **§ 2-05** of the Vermont Water Quality Standards provided **that the permit is** amended to address past practices of inadequate maintenance (i.e. the **control** of litter and **debris**) related to the reliable operation of facilities used **for** the treatment or control of stormwater runoff.

Order

1. The appeal of Richard Davis from the issuance of Discharge Permit #1-0460 is hereby denied.
2. Condition, #10 of Discharge Permit 1-0460 as issued on February 6, 1987 is hereby modified to read as follows:
 10. Maintenance and Maintenance Reporting Requirements: All catch basins, grit chambers, settling basins, retention basins-or other treatment devices or facilities shall be maintained in good operating order at all times and shall be cleaned quarterly and at such other times as are necessary to both maintain them in an essentially litter-free condition and maintain design treatment levels. NO LATER THAN JANUARY 31 OF EACH YEAR A WRITTEN REPORT SHALL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, PERMITS AND COMPLAINT AND PROTECTION DIVISION, 103 SOUTH MAIN STREET, WATERBURY, VERMONT 05676, PROVIDING THE DATES AND NATURE OF CLEANING OPERATIONS CARRIED OUT IN THE PRECEDING YEAR.

Paved parking lots and roads shall be maintained in an essentially litter free condition and shall be swept on a regular basis when seasonally practicable to minimize contaminants carried to the treatment device by runoff.
3. All other terms and conditions of Discharge Permit 1-0460 as issued on February 6, 1987 are hereby affirmed.

Dated at Burlington, Vermont this 18th day of December, 1987.

For the Water Resources Board


Catharine B. Rachlin, Chairman