



Department of Energy

Fermi Site Office
Post Office Box 2000
Batavia, Illinois 60510

JUL 12 2010

Dr. Bruce Chrisman
Chief Operating Officer
Fermilab
P.O. Box 500
Batavia, IL 60510

Dear Dr. Chrisman:

SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) DETERMINATION AT FERMILAB NATIONAL ACCELERATOR LABORATORY (FERMILAB) – A1 TO CDF PAVING PROJECT

Reference: Letter, B. Chrisman to M. Bollinger, dated July 7, 2010, Subject: National Environmental Policy Act (NEPA) Environmental Evaluation Notification Form (EENF) for the A1 to CDF Paving Project

I have reviewed the Fermilab EENF for the A1 to CDF Paving Project. Based on the information provided in the EENF, I have approved the following categorical exclusion (CX):

<u>Project Name</u>	<u>Approved</u>	<u>CX</u>
A1 to CDF Paving Project	7/09/2010	B1.3

I am returning a signed copy of the EENF for your records. No further NEPA review is required. This project falls under a categorical exclusion provided in 10 CFR 1021, as amended in November 1997.

Sincerely,

Mark E. Bollinger
Acting Site Manager

Enclosure:
As Stated

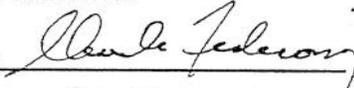
cc: P. Oddone, w/o encl.
Y.-K. Kim, w/o encl.
N. Grossman, w/encl.
T. Dykhuis, w/encl.

FERMILAB ENVIRONMENTAL EVALUATION NOTIFICATION FORM

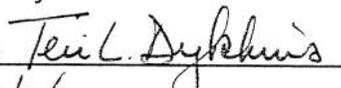
Project/Activity Title: A1 to CDF Paving Project
ES&H Tracking Number: 01087
Funding Source: General Plant Project Funds
Fermilab Environmental Officer (submitted PIF): Rod Walton (X2565)
Fermilab Project Lead: Charles Federowicz (X3182)

I hereby certify via my signature that every effort would be made throughout this project to comply with the commitments made in this document and to pursue cost-effective pollution prevention opportunities. Pollution prevention (source reduction and other practices that eliminate or reduce the creation of pollutants) is recognized as a good business practice which would enhance site operations thereby enabling Fermilab to accomplish its mission, achieve environmental compliance, reduce risks to health and the environment, and prevent or minimize future DOE legacy wastes.

Fermilab Project Lead: Charles Federowicz

Signature 
Date 7/6/10

Fermilab NEPA Reviewer: Teri L. Dykhuis

Signature 
Date 7/6/2010

I. Description of the Proposed Action and Need

Purpose and Need:

Existing Road D pavement from Road A1 east to CDF has degraded to the extent that spot repairs and pavement patching are no longer cost effective options. Pavement through this area can no longer withstand the affects of increased pavement cracking and hazardous pot-holes created by freeze/thaw temperatures and snowplowing through winter months without continuous maintenance and pavement patching. Insufficient roadside drainage has also contributed to the degradation of pavement with areas that pond water on the pavement after rainstorms and also require additional attention during winter months to prevent icing conditions. Additionally, current alignment of the Road A1/A2 and Road D/Pine Street intersection does not provide any dedicated path to safely allow east/west pedestrian or bicycle traffic to connect inbound Pine Street to the existing bike path along Road D at the east reflecting pond. Also, configuration of the Road A1/A2 and Road D intersection has created numerous maintenance issues surrounding the existing curbed islands. Furthermore, since expansion of Laboratory activities to the south of Wilson Hall, the intersection continues to experience larger vehicles requiring wider turning radii to safely clear the islands. Current island configuration forces larger vehicles to drive up and over curbs on to grassed areas adding to maintenance and repair costs.

It is proposed that Fermilab utilize conventional road construction and paving measures to conduct work described below for the purpose of addressing the need identified above. The need is site-specific, so no alternative location is possible. Therefore, the only feasible alternative would be no action, which would not fulfill the purpose/need for the project.

Proposed Action:

This proposed project is a modification of a previous project, titled 'West Road D Paving - CDF to A' which was reviewed on 5-19-06, and would result in repaving Road D from Pine Street east to CDF and

realignment of the Road D/Road A1/A2 and Pine Street intersection (See Figure 1). The proposed intersection would require removing the current curbed and grassed islands and replacing the islands with pavement striping and a new bike path through the intersection to connect the Pine Street inbound path with the Road D path (see Figure 2). This project would also include the installation of a new storm sewer with inlets and catch basins and grading of new drainage swales along the south side of Road D from the Switchyard area to Road B (see Figure 2 and 3). Maintenance work to clear the FCC ditch and re-establish the original ditch profile along the south and west sides of FCC would also be included in this project (see Figure 3).

II. Description of the Affected Environment

The total area of the project would be approximately 6 acres. Approximately 9200 square yards of pavement would be milled and recycled. Approximately 250 cubic yards of cleared and grubbed material would be removed to landfills and 800 cubic yards of soil would be excavated and stockpiled for re-use in roadway realignment. Construction debris, concrete, and piping would be removed from the site to a recycling vendor, and milled asphalt pavement would be recycled by the paving subcontractor. Unsuitable soils would be removed and disposed of offsite.

III. Potential Environmental Effects (Provide comments for each checked item and where clarification is necessary.)

A. Sensitive Resources: Would the proposed action result in changes and/or disturbances to any of the following resources?

- Threatened or endangered species
- Other protected species
- Wetland/Floodplains
- Archaeological or historical resources
- Non-attainment areas

B. Regulated Substances/Activities: Would the proposed action involve any of the following regulated substances or activities?

- Clearing or Excavation
- Demolition or decommissioning
- Asbestos removal
- PCBs
- Chemical use or storage
- Pesticides
- Air emissions
- Liquid effluents
- Underground storage tanks
- Hazardous or other regulated waste (including radioactive or mixed)
- Radioactive exposures or radioactive emissions
- Radioactivation of soil or groundwater

C. Other relevant Disclosures

- Threatened violation of ES&H permit requirements
- Siting/construction/major modification of waste recovery or TSD facilities
- Disturbance of pre-existing contamination
- New or modified permits
- Public controversy
- Action/involvement of another federal agency
- Public utilities/services

Depletion of a non-renewable resource

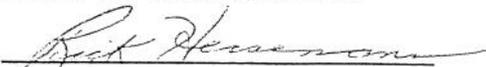
IV. NEPA Recommendation

Fermilab staff have reviewed this proposed action and concluded that the appropriate level of NEPA determination is a Categorical Exclusion. The conclusion is based on the proposed action meeting the applicable requirements in DOE's NEPA Implementation Procedures, 10 CFR 1021, Subpart D, Appendix B1.3 which states: "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (e.g., pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed. Custodial services are activities to preserve facility appearance, working conditions, and sanitation, such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal. Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Routine maintenance may result in replacement to the extent that replacement is in kind and is not a substantial upgrade or improvement. In kind replacement includes installation of new components to replace outmoded components if the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to: (a) Repair of facility equipment, such as lathes, mills, pumps, and presses; (b) Door and window repair or replacement; (c) Wall, ceiling, or floor repair; (d) Reroofing; (e) Plumbing, electrical utility, and telephone service repair; (f) Routine replacement of high-efficiency particulate air filters; (g) Inspection and/or treatment of currently installed utility poles; (h) Repair of road embankments; (i) Repair or replacement of fire protection sprinkler systems; (j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing; (k) Erosion control and soil stabilization measures (such as reseeding and revegetation); (l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 5820.2, "Radioactive Waste Management"; (m) Repair and maintenance of transmission facilities, including replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed transmission lines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions); (n) Routine testing and calibration of facility components, subsystems, or portable equipment (including but not limited to, control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes); and (o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), including removal of contaminated intact 20 equipment and other materials (other than spent nuclear fuel or special nuclear material in nuclear reactors)."

V. DOE/CH-FAO NEPA Coordinator Review

Concurrence with the recommendation for determination:

NEPA Coordinator Reviewer, U.S. DOE FSO: Rick Hersemann

Signature 
Date 7/8/10

Acting Fermi Site Office Manager: Mark Bollinger

Signature 
Date 7/12/2010

VI. Comments on checked items in section III

Clearing or Excavation

As detailed above, some clearing and grubbing would be necessary to prepare the area and to maintain the original profile of the drainage ditch. Normal amounts of excavation would be necessary to install the new storm sewer. Erosion controls would be included within the Storm water pollution prevention plan (SWPPP) along with the national pollutant discharge elimination service (NPDES) Permit (see below).

Air Emissions

Volatile Organic Material (VOM) emissions from the paving operation would be negligible because the contractor would use emulsion-based (water soluble) asphalt mix, rather than cutback asphalt.

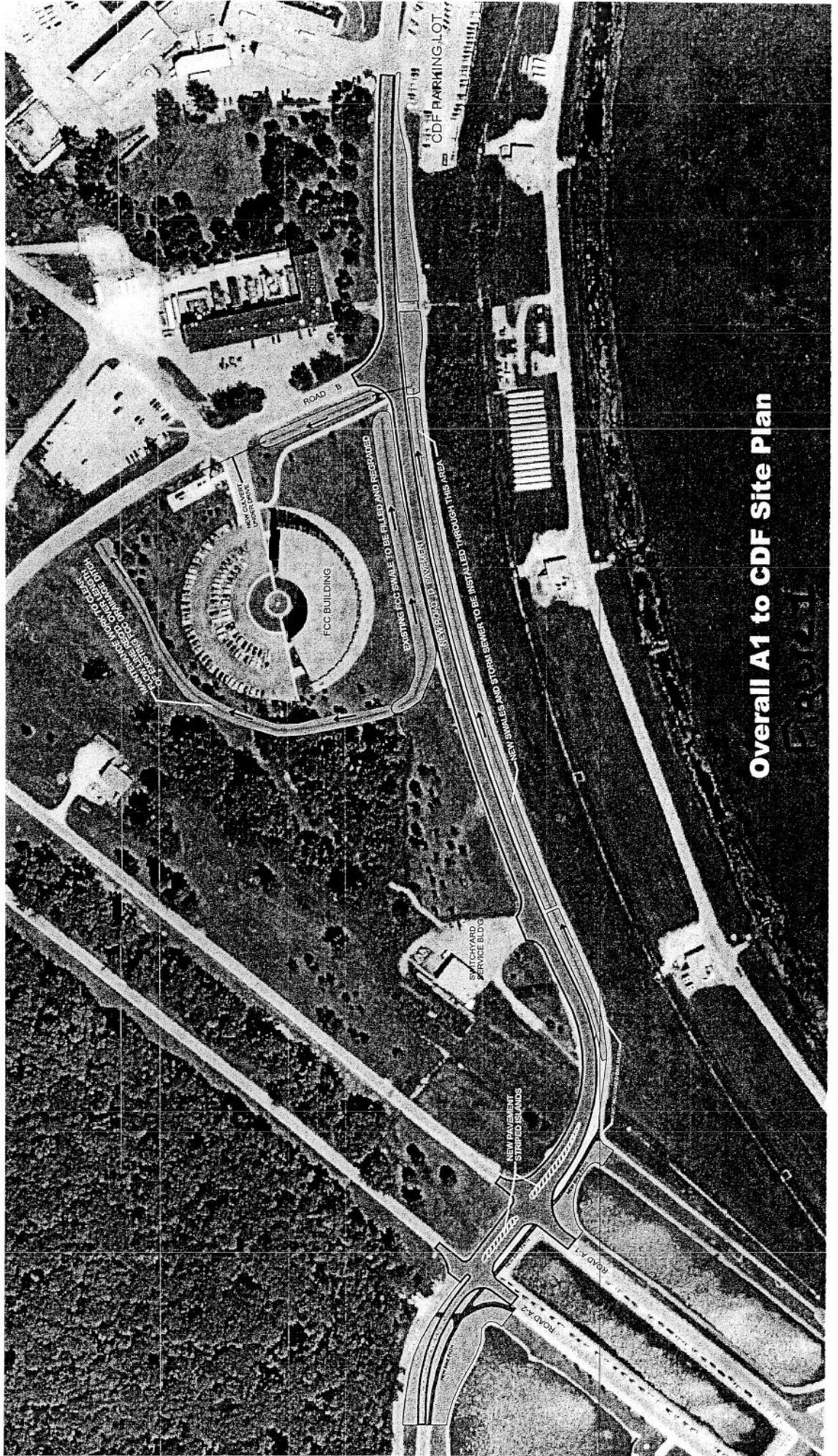
Liquid Effluent

During construction, surface water would drain ultimately to Bulrush Pond and water quality would be protected by structures and practices specified in the SWPPP that is required by the NPDES permit (see below).

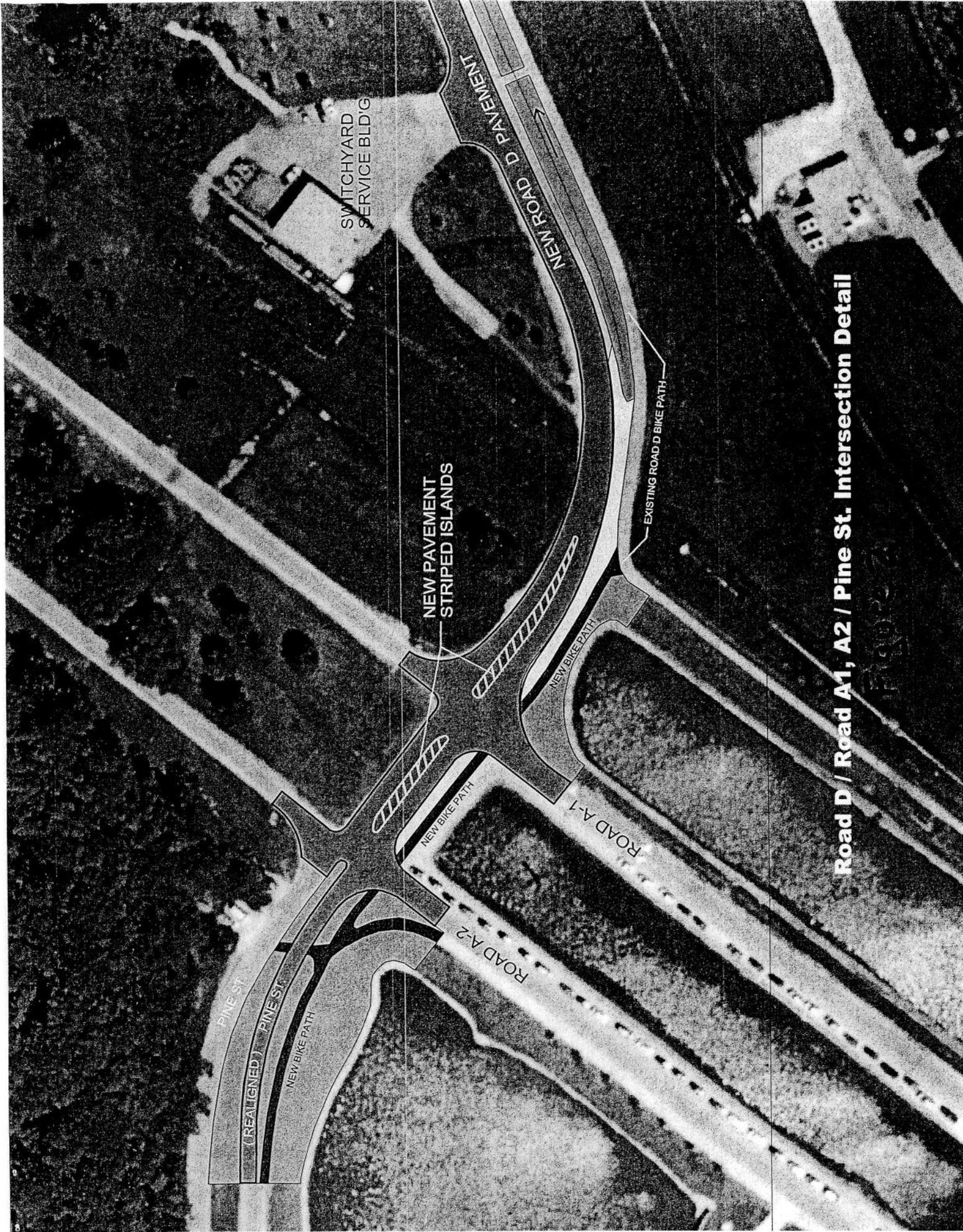
New or Modified Permit

Construction projects involving more than one acre must have an NPDES permit. For this project, coverage under the Illinois 'General Storm water Permit for Construction Activities' would be requested from the Illinois Environmental Protection Agency. As part of the permitting process, a SWPPP would be prepared.

Figure 1



Overall A1 to CDF Site Plan



SWITCHYARD
SERVICE BLD'G

NEW ROAD D PAVEMENT

NEW PAVEMENT
STRIPED ISLANDS

EXISTING ROAD D BIKE PATH

NEW BIKE PATH

NEW BIKE PATH

ROAD A-1

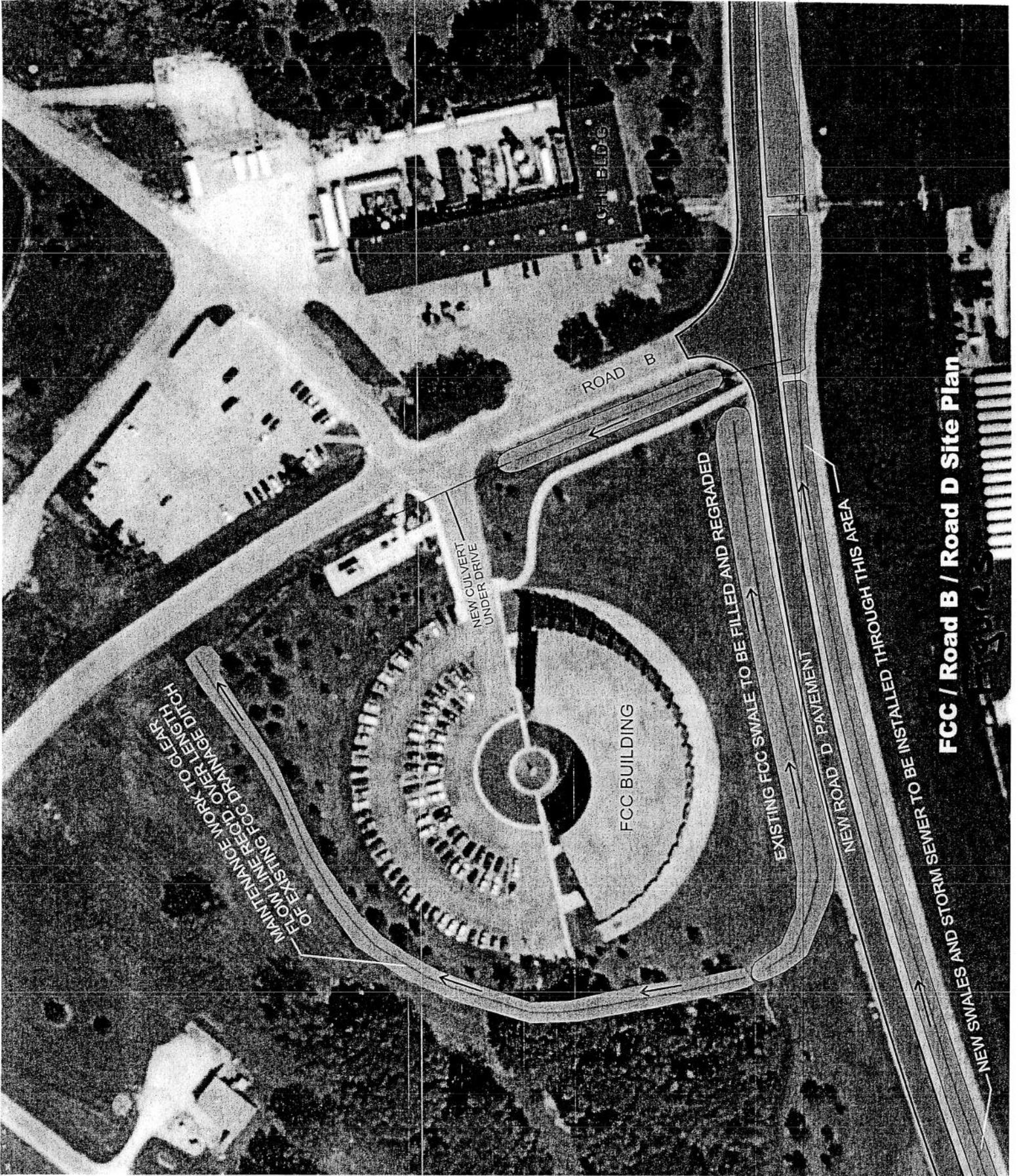
ROAD A-2

PINE ST

(REALIGNED) PINE ST

NEW BIKE PATH

Road D / Road A1, A2 / Pine St. Intersection Detail



MAINTENANCE WORK TO CLEAR FLOW LINE REAR OVER LENGTH OF EXISTING FCC DRAINAGE DITCH

NEW CULVERT UNDER DRIVE

ROAD B

EXISTING FCC SWALE TO BE FILLED AND REGRADED

NEW ROAD D PAVEMENT

NEW SWALES AND STORM SEWER TO BE INSTALLED THROUGH THIS AREA

FCC BUILDING

FCC / Road B / Road D Site Plan