WEST VIRGINIA DIVISION OF HIGHWAYS ADMINISTRATIVE OPERATING PROCEDURES SECTION II, CHAPTER 10

SECTION TITLE: ACCOUNTING

CHAPTER TITLE: CONSTRUCTION ENGINEERING COSTS

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I. INTRODUCTION

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The Division of Highways, with the approval of the Federal Highway Administration, charges Construction Engineering costs to various construction projects by actual costs and by utilization of a Construction Engineering Clearing Account. These Construction Engineering costs are incurred on all DOH construction projects in operation throughout the State. All DOH construction projects must be approved by a DOH Construction Authorization (Form BF-98) prior to any costs being incurred. This procedure outlines costs which will be charged as Construction Engineering by the Division of Highways.

II. <u>DEFINITION</u>

Construction engineering costs will be charged against activities in accordance with the Federal Aid Highway Program Manual (FHPM) 1-4-5; Paragraph 3-b of which sets forth the following definition:

"The supervision and inspection of construction activities; additional staking functions considered necessary for effective control of the construction operations; testing materials incorporated into construction; checking shop drawings; and measurements needed for the preparation of pay estimates."

III. DIVISION OF HIGHWAYS ELIGIBILITY CRITERIA

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Charges can be incurred when performing Construction Engineering services as outlined in FHPM 1-4-5 and can include salaries, travel expenses, equipment rental, project field and other office rental, utilities, and expendable engineering supplies when provided by the DOH for Construction Engineering.

Construction Engineering costs charged directly to specific construction projects or to the Construction Engineering Clearing Account will be done primarily by the following, only when meeting the FHPM criteria:

- All District Construction personnel including the District Lab but excluding the District Construction Engineer and his secretary.
- All Project Engineers/Supervisors, Inspectors and office personnel assigned to a project.
- Contract Administration Division, Materials Section personnel. □□Contract Administration Division, Final Review Section personnel.
- Traffic Engineering Division personnel.
- Engineering Division.

Others may be eligible for charging Construction Engineering costs to specific construction projects or to the Construction Engineering Clearing Account when their services meet the FHPM criteria. However, the District Construction Engineer, Division Directors and Division Supervisory and Administrative Personnel are generally excluded from charging against Construction Engineering; their duties and responsibilities are not considered to be project specific.

The following identifies the projects which are eligible for charging Construction Engineering costs.

- Federal Highway Administration (FHWA), Federal Emergency Management Agency (FEMA) and State funded construction projects let to contract.
- State Forces construction projects funded as in number 1 above.

IV. <u>ALLOWABLE ACTIVITY CODES AND DESCRIPTIONS FOR</u> CONSTRUCTION ENGINEERING COSTS

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The following list provides the only valid DOH Activity Code Numbers and their corresponding descriptions that can be utilized when performing Construction Engineering work:

Description
Consulting Engineers - Outside professional assistance in engineering by other than DOH personnel.
Engineering Stakeout - Original setting and staking of right-of-way and construction limits including placing of construction bench marks.
Contract Inspection at Project Site - Verification of survey work and/or stakeout performed by the contractor, field inspection of work performed verifying compliance with procedures and specifications, inspection to determine quantity verification by cross sections and measurements, and associated field office record keeping.
Engineering Review of Supervision - Review by District Construction for quantity and change order verification. Expenditures incurred in contract and/or project supervision.
Other Construction Engineering - Includes utilities, telephone, engineering supplies, janitorial and night watchman services.
Contract Review - Review by Contract Administration Division for quantities verification.
General Clerical and Secretarial Work - Performed in conjunction with Construction Engineering functions.
General Supervision of Engineering Activities Authorizations - Performed in conjunction with Construction Engineering functions.
Geological Field Studies - Expenditures for geological determinations.
Materials Investigation and Test Borings - Cost of locating construction materials relative to area of road or structure. Also, sampling and drilling of surface and subsurface materials
Materials Testing and Inspection - DOH expenditures in inspection, sampling and testing of materials.
Scientific Testing Equipment - Expenditures for development and repair of scientific testing equipment.
Flagging

V. CHARGING CONSTRUCTION ENGINEERING COSTS

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All construction engineering will be charged to the various projects directly or by the utilization of a clearing account. Whenever possible, Construction Engineering costs will be charged directly to individual construction projects. On many occasions, however, employees are required to work on several construction projects within one day, thereby making the charging to individual projects a time consuming task.

A. DIRECT CHARGES

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All Project Engineers/Supervisors and Inspectors assigned to a construction project must charge that project. All other Construction Engineering costs incurred while working four or more hours consecutively on one individual construction project will be charged directly to that construction project. When recording charges of this nature, indicate the Construction Authorization Number for each individual construction project in the "Authorization Field" of the Daily Work Report.

B. CONSTRUCTION ENGINEERING CLEARING ACCOUNT

Construction Engineering costs incurred while working less than four consecutive hours on one individual construction project can be charged either to the Authorization COTHACT - Construction Engineering Clearing Account or directly to the individual construction project. It is encouraged that, whenever possible, charges be made directly to the individual construction project.

<u>EXAMPLE</u>: An employee works three hours on one or more projects and the remaining five hours on only one project. The three hours can be charged to the Construction Engineering Clearing Account and the five hours will be charged directly to the project.

Construction Engineering costs charged to the Construction Engineering Clearing Account will be cleared on a monthly basis and are distributed to each active DOH construction project based upon the total amount of funds authorized on each project in relation to the total funds authorized on all construction projects. The authorized amount is the current Form BF-98 amount in the Authorization System made up of state, federal and/or other funds, whatever the combination.

In order to limit distribution to only projects under construction, and in the process of being finalized, the "Work Start Date" and "Work End Date" are used to control the beginning and end of monthly distribution. These dates are furnished to the Finance Division by Contract Administration Division.

C. CONTRACT ADMINISTRATION DIVISION CHARGES

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Due to the diversity of charges incurred by Contract Administration Division and District Labs in the performance of Construction Engineering related activities, their employees will charge their labor, travel expense and equipment rental as follows

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1. Organization:

All charges will be recorded under DOH Organization No. 0077 (Contract Administration Division). District Labs will use the appropriate District Construction Organization Number, i.e. 0179.

2. Labor and Expenses:

- Contract Administration administrative personnel must record their salary to an Overhead Account.
- b. Contract Administration mechanics must record their salary to an Equipment Overhead Account.
- c. Contract Administration employees performing drilling services in the field must charge their salary and expenses directly to a project.
- d. Contract Administration and District Lab employees working routinely in the field will record all their salary and expenses directly to a project when possible, and when salary and expenses are incurred while working four or more hours consecutively on one individual construction project. COTH<u>ACT</u> will be used only when salary and expenses cannot be attributed to a particular project(s).
- e. Contract Administration and District Lab employees working in the office and laboratory doing productive work on numerous projects in any given day will record their time to the Construction Engineering Clearing Account, Authorization COTHACT.

3. Drillings Supplies:

Drilling supplies will be charged to the Inventory Authorization IEXP002 when purchased, and then charged to the appropriate drill rig E.D. Number when issued.

VI.MISCELLANEOUS EXPENSES

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Miscellaneous expenses include such items as expendable laboratory supplies, freight charges, building rent, utilities, consulting engineering services and depreciation on nonexpendable laboratory equipment. When a portion of a total expense is chargeable to Construction Engineering COTHACT authorizations, it must be done in an equitable and documented manner. For example, if the District Lab is housed in the same building as other DOH offices, a portion of the rent (if applicable) and utilities should be charged to COTHACT. In most cases, the amount to be charged to COTHACT can be determined by using the percentage of lab floor space in relation to the total floor space of the building. Further consideration must be given to the amount of work the lab performs for construction projects in relation to their total workload.