AR 340-15; the proponent agency is The Adjutant General's Office

REFERENCE OR OFFICE SYMBOL

SUBJECT

NPSEN-DB

Skagit River, Washington - Levee and Channel Improvements

XOX THRUDCh.

23 Feb 77

thew on AP II (See notes) Cook/rs/3455

1. On 15, 16, and 17 February 1977, meetings were held on Skagit River, Washington, Levee and Channel Improvements.

- 2. The meeting on the morning of 15 February was among representatives of Water Control. Basin Planning, and Flood Plain Management & Urban Studies Sections to review the hydrology and hydraulics information available and the needs of flood plain and flood control studies. Purpose of this meeting was to avoid duplication of study effort and assure the needs of the two studies were meshed. During the discussion of needs and purposes of the studies, three things became clear:
 - a. Existing data is not sufficient.
- b. Data needed for the flood plain study is different data than needed for the flood control study.
 - c. Difference of opinions exist regarding the needs for the flood control study.

The difference in opinions centered on the type and extent of hydrology and hydraulic data needed for the General Design Memorandum study.

- 3. One opinion was that in order to satisfy local requests for increased flood protection for the Mount Vernon - Burlington urban and suburban communities and the internal Corps policy of attempting to provide 100-year or more protection for urban communities, the study would have to include the hydrology and hydraulic data (along with F&M and other design data) on which to evaluate the feasibility of 100-year or more protection. A second opinion was that the authorizing document (House Document No. 483, dated August 30, 1966) recommends construction of levee and channel improvements that would permit passing 120,000 c.f.s. and studies (hydrology-hydraulics and other) should be limited to those required to reaffirm the feasibility of the recommended project. There are significant differences in time and costs for the hydrology and hydraulics (and other disciplines) aspects of the study, depending upon which approach is taken.
- 4. On 16 February, discussions were held among Messr. MacDonald, Skrinde, you and Mr. Cook on the impacts of hydrology and hydraulics effort to support a GDM study effort involving consideration of 100-year or above flood protection for the urban areas. Tentative conclusions reached at this meeting were that hydrology support for the GDM study (including data on which to consider 100-year protection for urban areas) was not available until after August 1977 unless studies on power (Libby Reregulating Dam, units beyond 27, etc.) were delayed. The various alternatives open for consideration were discussed briefly:

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- a. Seek changes in priorities through Chief, Engineering Division, DE, etc.
- b. A-E some work in Water Control Section to make more hydrologist capability.
- c. Delay study. don't like
- d. Limit scope of study to have little (or no significant) hydrology input. doi'd like

Prior to a decision being made on which course of action would be followed and/or discussed (or recommended) with Chief, Engineering Division, the question of who had responsibility for management of the study was raised by Chief, Basin Planning Section.

- 5. During a 17 February meeting between you and Mr. Cook, both the responsibility for management of the project studies question was discussed, along with what should be included in the plan of study for the GDM. At the conclusion of the meeting you and Mr. Cook were in agreement that Design Branch had the management responsibility for the project studies. This agreement was based on previous guidance from Chief, Engineering Division. You requested that a DF be sent to Planning Branch that would clarify both the level of management that could be expected for these studies and definitive guidance on what should be provided for in the plan of study.
- 6. The level of management that is currently being exerted on Skagit River and anticipated on other similar projects is described on Inclosure 1. The demands on Project Managers time by other activities and the type of study would be factors that could introduce variables.
- 7. The plan of study should assure that the GDM studies (along with other requirements) supply enough data so the GDM will accomplish the following:
- a. GDM should recommend a project that is feasible and provides the highest level of flood protection to the agricultural and urban communities that is consistent with local desires, Corps of Engineers policy, and authority. Recommended project would consider the effect of other authorized or other potential flood control measures and assess probabilities of their contributing to flood control.
- b. In the event the project being recommended by GDM exceeds the scope of the authorizing document, a Post-Authorization change (PAC) or Significant Post-Authorization change (SPAC) will be included in the GDM recommendation. If the need for a PAC or SPAC is evident early in the GDM study, the plan of study for the GDM should provide for this case eventuality and higher authority should be advised.

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c. GDM should have a basis of design and cost estimate sufficient to proceed directly to plans and specifications without preparing a feature design memorandum.

- d. The plan recommended in the GDM should consider the changes in development and land use, along with future changes in land use.
- 8. The guidance provided in the initial directive, dated 6 October, to proceed with preparation of the plan of study and other items of necessary planning is still applicable. The policy established in the Decision Point #1 Study Initiation (SOP #1) meeting on 15 October to consider 100-year protection for urban areas is still applicable. The CMT 1, dated 8 December 1976, from Ch, Water Control to Ch, Basin Planning provided an estimate for a frequency curve for 100 years at Mount Vernon. There has been consistent guidance regarding the need for considering 100-plus-year protection for the urban areas.
- 9. We are reluctant to limit the scope of a study due to lack of capability of a particular in-house drcipline. We would prefer any of the three other alternatives outlined in paragraph 4 above to this arbitrary approach to flood control planning. If use of an A-E or reordering priorities is not feasible, then the completion date of the study should be delayed. Steps required to delay the study must be taken promptly, as both Fiscal Year 1977 and 1978 budgets could be affected. We will be available to discuss reordering priorities to permit proceeding with the scheduled Skagit River study or determining how much of a study delay will be required to accommodate the lack of hydrology support for the study.
- 10. The plan of study should be completed promptly, including provisions for considering 100-year plus protection for urban communities. Surveys and mapping should proceed to assure data is available for other studies. Request your early attention to solving the problems of hydrology work and completing the plan of study, as over four of the 24 months scheduled for the GDM study has passed and hydrology and hydraulics work and other technical work has not been initiated. Further, local sponsor has requested a March or early April briefing on progress of study and outline of what we project study will shoompass.

Howers, Pos Must consider an early CKPT. I if were dealing wife dog.

11. In summary, we believe Design Branch is responsible for project management of Skagit River study. 100-year plus protection for urban and suburban communities of Mount Vernon and Burlington should be considered. Lack of capability to perform timely hydrology studies should not place limits on extent of flood protection considered and study schedule should be established to agree with District priorities and capabilities. An early meeting should be scheduled with Chief, Engineering Division to consider any needed reordering of priorities or delays of study.

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cc: Cook 3

DESIGN BRANCH LEVEL OF MANAGEMENT

ADVANCE ENGINEERING AND DESIGN

SKAGIT RIVER, WASHINGTON - LEVEE AND CHANNEL IMPROVEMENTS

All activities mentioned below are accomplished utilizing full coordination with other staff elements and under general policy direction of District Engineer and Chief, Engineering Division.

- 1. Prepare budgetary documents. Yes
- 2. Establish project schedule. /e 5
- 3. Establish project budget. Yes
- 4. Prepare response to Congressional inquiries. Ophonal
- 5. Prepare response to local sponsor's inquiries. ophonal
- 6. Lead participation in all contacts with elected officials and local sponsors. Optional
- 7. Participate in all public meetings. Jes
- 8. Provide general guidance and participate in decisions on general and \sqrt{c} specific policy.
- 9. Establish authority of studies and determine desirability or need to alter yes authority to satisfy changed conditions.
- 10. Lead briefings for District Engineer and provide support for other brief- ophous ings as required.