REVIEW OF ROAD PLANS

The District Road plans will be routed through the Office of Structure Design by means of the attached "Routing Sheet for Transmittal of Road Plans".

The section responsible for the bridges in the project will make a careful review of the road plans. This review gives the bridge project engineer an opportunity to see that his structures fit into the project as a whole. He should verify that the plans for bridge and roadwork are compatible and complete. Use the checklist form in Memo to Designers 1-38. Some specific areas to be reviewed are:

1. Geometrics that affect plans prepared by the Office of Structure Design – Check vertical and horizontal alignment, roadway widths, and bridge locations. Check clearance for falsework between the soffit of bridge and the top of slope paving or rock slope protection.

2. Traffic Problems – Review order of work, stage construction, and falsework openings for consistency with structure type and depth.

3. Railings – Correlate bridge approach rails with metal beam rails and median barrier on and off the bridge.

4. Utilities – Check for utilities that must be carried on structures and utilities that conflict with bridge foundations. Review the District Utility sheets (for existing as well as new utilities) for conflicts with construction operations. During this review, be certain that the structure limits are shown *accurately* on all new facilities. For *hazardous underground utilities*, verify that vertical and horizontal locations shown on Road and Structure Plans are in agreement.

5. District Designed Components – Review retaining walls and the connections to structures, sound barriers and walls designed by the District.

6. Grading plans – Verify that District grading plans are consistent with bridge lengths, retaining wall details and slope paving details.

7. Electrical Details – Lighting and sign location sheets should be reviewed for structural problems. Verify that details for structure mounted signs or special foundation details for signs, signal pole or lighting standards have been provided if necessary. Avoid exposed electrical conduits. Verify that conduit expansion joints are shown where necessary. If signs are indicated and no details have been prepared, then they must be designed.

8. Drainage – Verify that provisions have been made to pick up bridge deck drainage and abutment and wingwall drainage (see structure approach details) if this is necessary. Look for conflicts between pipes and bridge foundations.

Supersedes Memo to Designers 2-25 dated February 1981

9. Right of Way – Check for battered pile tips or footings that extend beyond the right of way or areas where excavation limits will require a construction easement.

10. Approach Slabs – If approach slabs are required, check to see if the limits of the approach slabs are shown. Review staging requirements for rehabilitation of existing slabs or for adding slabs at existing locations.

11. Rock Slope Protection – Review to determine compatibility with structure design. Check that waterway opening has not been reduced beyond that specified in preliminary report. If there is a question, involve the structures hydraulics unit.

Errors, omissions or inconsistencies should be marked in red on the road plans. The Design Engineer shall forward the plans to the Specifications Section for review. Corrections will then be transmitted to the District Office Engineer. Revisions required in the road plans, except those of very minor nature, should be discussed with the district project engineer and our specifications engineer to be sure that there is agreement and understanding by all parties.

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GDM:jgf
Attachment