## **Maintenance Eligibility Notes**

Bv

### David Mallory, P.E., Project Engineer, Floodplain Management Program

#### **Robust development pace continues**

Everyone involved with land development design, construction and oversight is well aware that the 2001 recession has missed, or at worst, scored an indirect hit on metropolitan Denver's housing industry. We have seen some slowing in long range planning and a modest slow down in construction plan submittals. None-the-less, we processed 220 construction plan submittals in 2001, a 25% reduction from the 300 submittals reviewed last year.

Some of the reduction in plan submittals can be attributed to fewer review cycles necessary to achieve plan approval. One of our goals with the maintenance eligibility program is to reduce and streamline the process of approving construction projects. We issued 60 design approval letters for 220 submittals during the last 12 months, meaning each approved design took an average of 3.5 review cycles. Three cycles or less seems a reasonable target. Based on past experience we can offer the following strategies for shortening design review times:

Review the basin master plan. The District has prepared nearly 100 master plans for the metropolitan area. Some master plans are outdated, but they all provide a solid starting point.

Review District design criteria. Our criteria manual has been recently updated. Several new items have been added (storm sewer outlet treatments for example) and some old standbys have been altered or deleted. Make sure the area set aside for regional drainage facilities will accommodate approvable channel sections.

Check the web site for updated construction details and software downloads. We are continually developing design aids in order to streamline the approval process.

*Review flood hazard data.* Check for FEMA <u>and</u> District floodplain mapping.

Read the Guidelines for Maintenance Eligibility. The latest guidelines were issued in September 2000, and contain lots of helpful information.

Meet with us. After completing the research and conceptual planning, ask for a pre-submittal meeting. A number of consultants are taking advantage of this service to the benefit of their projects. The sooner we are involved in project reviews, the less time will be spent in reworking ill-fated concepts.

Use standard designs. The criteria manual has a full array of pre-designed hydraulic elements. Unique designs must have complete engineering backup. Thus, a unique design takes more time and effort to review and will likely result in added review time.

Meet with us again. During the design phase a lot of unexpected issues come up from scheduling to aesthetics, permitting and local issues. The District is also in an excellent position to offer advice relative to the preparation of FEMA submittals.

We are also available by e-mail, fax or telephone to answer questions on design criteria or the maintenance eligibility program. A new feature for 2002 will be online access to the District's maintenance eligibility database, updated monthly.

#### In the field

An integral part the maintenance eligibility process is construction oversight. If anything, construction activity has increased this year over past years. We typically have 100 to 130 projects approved for construction at any given moment. During 2001, we completed 120 construction observation site visits. Over 50 current projects were completed and recommended for construction acceptance. Another 16 previously approved projects were reinspected for vegetative cover and given final approval.

Boyle Engineering, Inc. has provided some added horsepower to the field program. We brought them onboard during the last quarter of 2001 to help with the elevated construction observation requests.

#### The FEMA connection

On July 1, 2001, we began a new relationship with FEMA. We are now providing technical review of FEMA floodplain submittals (see Bill's article). Besides the several advantages of reviewing these documents locally, there is also a connection to the District's maintenance eligibility program. When a request is made to change a community's floodplain map, FEMA requires that community to assure the maintenance of the facility responsible for the map change. Having District maintenance assistance for flood control facilities helps local governments fulfill federal responsibilities and eases the approval process for developers.

Projects that are eligible for District maintenance assistance have been receiving speedy reviews in the LOMR process. We become familiar with project details through design review and construction observation. We know a floodplain map revision will eventually be necessary and help the consultant plan for that phase. The result is a streamlined map revision process.

Consider, for example, The Haven at York Street subdivision in the City of Thornton. The major drainageway involved is Wadley South from the UP Railroad to its confluence with Big Dry Creek. Improvements included an engineered channel, drop structures and a roadway crossing. A downstream developer also cooperated with right-ofway and project funding. Benik Consulting Services provided design and construction observation for the project. We approved the construction plans on July 31, 2000, and construction commenced in the spring of 2001. The final punch list was prepared the end of July and we accepted construction the end of August. The LOMR request was submitted on the 8<sup>th</sup> of August. We acknowledged receipt of all materials necessary for review on August 29, 2001 (coinciding with construction





Two views of the Wadley South Channel at The Haven at York

acceptance). FEMA issued the LOMR on September 25, 2001. We think that's remarkable considering the national disaster and attendant upheaval that occurred during the review period.

In summary, projects that follow the strategies outlined above, receive District plan approval and are built according to the approved plans can

expect a swift and relatively painless floodplain map revision.

## District news briefs

## Governor Owens Appoints Ben Urbonas to the CCBWQA Board

Governor Bill Owens appointed Ben Urbonas to the Board of Directors of the Cherry Creek Basin Water Quality Authority. Last year the State legislature redefined the Board's structure to have members from each of the five tributary municipalities, one special district representative and six citizens appointed by the Governor. The Board has to have two members with water quality expertise, two to represent recreational interests and two to represent environmental interests. Ben was appointed to a two-year term to represent water quality expertise.

# District Licenses CUHP to XP Software

The District has entered into an agreement with XP Software, the developers of XP-SWMM<sup>TM</sup>. This agreement grants XP Software a nonexclusive right to incorporate the CUHP software into the XP-SWMM<sup>TM</sup> software. This was done in response to requests from several consultants and municipalities. The District does not

support or endorse this or any other commercial product. We are pleased, however, that this arrangement will permit the municipalities and consultants using this package to now use the CUHP runoff model option to generate the stormwater runoff hydrographs for tributary catchments.

## Paul Hindman wins APWA Award

Paul Hindman was the 2001 winner of the APWA Colorado Chapter's William E. Korbitz Award. Paul has served the Colorado Chapter in many ways. He served as the Chapter treasurer. He was the Chapter President in 2000 and led the Chapter's Strategic Planning effort, which provides a roadmap for the 21st Century.

Paul implemented the Horizon's Scholarship Program providing funding for deserving high school students. He also created a pool tournament to fund the scholarships. Paul also worked tirelessly as volunteer coordinator for the 1999 National Congress when it was in Denver, devoting countless hours to the task.

Paul is the second District employee to receive this award. Scott Tucker was the 1999 recipient.

# Intern wins scholarship

Jennifer Lien, student intern in the Maintenance Program, won an APWA Jim Murray Scholarship this year. Jennifer is a senior Civil Engineering student at Colorado School of Mines.

# District Wins Accounting Award

For the thirteenth year in a row the District has received a "Certificate of Achievement for Excellence in Financial Reporting" from the Government Finance Officers Association of the United States and Canada. The certificate is presented to government units whose comprehensive annual financial reports achieve the highest standards in government accounting and financial reporting. Congratulations to Frank Dobbins, Chief of Finance and Accounting, for continuing this string of awards.