# **SECTION 5**

# MAIN EXTENSION PROCEDURES AND GENERAL REQUIREMENTS FOR PLAN REVIEW, CONSTRUCTION AND ACCEPTANCE

#### **ARTICLE I**

#### PLAN SUBMITTAL AND REVIEW

- 5.101 It shall be a violation of District policy for any person to construct a water and/or sanitary sewer main within the jurisdiction of the Board without first having written approval of the Board of Directors of the District.
- 5.102 All plans shall be in compliance with the Engineering Standards and Specifications of the Southwest Suburban Denver Water and Sanitation District.
- 5.103 The owner/developer is responsible for payment to the District of all fees and charges associated with the plan review process, including the charges of the District Engineer, District Manager and District Attorney.
- 5.104 No construction may take place until the plans have been reviewed and preconstruction meeting has been held.
- 5.105 Plans and specifications are approved for a six-month period only. If construction has not begun within this six-month period, or if it has been halted and not restarted prior to expiration of the approval period, the plans must be resubmitted for review and approval
- 5.106 The owner, developer or design engineer may request a pre-design conference by contacting the District Manager. This conference is not required but will be held upon the request of the owner, developer or design engineer.
- 5.107 Preliminary sewer plans shall be submitted in three copies to the District Engineer. The plans will be reviewed by the District Engineer for compliance with the District's Standards and Specifications, as well as for compliance with the District's integrated sewer system. The approval of plans will also be subject to the ability of the District to operate and maintain the proposed facilities in an efficient, economical manner. Plans to be reviewed must be accompanied by three (3) sets of recorded plats. One copy shall be retained by the District Manager, one copy delivered to the District Engineer and one copy delivered to the District's Attorney.
- 5.108 Two (2) original sets of the District's Application and Agreement for Extension of Sewer Mains shall be submitted to the District Manager prior to plan review approval

- 5.109 If any sewer main is to be constructed outside of a public right-of-way, the construction plans must be accompanied by a request for acceptance for a sewer easement. All easement information, in accordance with these specifications, shall be submitted to the District Engineer prior to plan review.
- 5.110 Upon completion of the District's review of preliminary plans, one copy of the plans will be returned to the design engineer for required revisions. A conference may be scheduled by the District Engineer to discuss the needed revisions if it is deemed necessary or if it is requested by the design engineer.
- 5.111 When all revisions have been completed, three copies of the revised plans shall be submitted to the District Engineer who will coordinate the review with the District Manager and other review agencies.
- 5.112 If no further revisions are required by the District, four (4) copies of the plans shall be submitted to the District Engineer for approval.
- 5.113 Upon final acceptance of construction plans, the approved drawings shall be held by the District Engineer and released at the preconstruction meeting. NO construction may take place until a preconstruction meeting has been held.
- 5.114 All water and sewer main extension shall be constructed according to the District's specifications, and those of Denver. <u>WARNING</u>: In many instances, the District imposes stricter requirements than those established by Denver Water Board or Metro Wastewater Reclamation District. In any instances of conflict the District's requirements shall be followed. Any questions should be referred to the District's Engineer.
- 5.115 Locations of Water and Sewer Main Extensions and Additions: Water and sewer mains shall be installed in roads or streets which the County, State Highway Department or other public agency has accepted for maintenance as a public right-of-way, as well as in easements granted to the District.

# **ARTICLE II**

### EASEMENT REQUIREMENTS

- 5.201 Each landowner, subdivider or developer who desires water and/or sewer service will, in consultation with and approval of the District, plat and grant to the District appropriate easements and right-of-way. The District may require appropriate easements and rights-of-way for its own use, or where facilities to be constructed are required to cross land not being subdivided or under the landowner, subdivider or developer's control.
- 5.202 Easements are required wherever a sewer main is not in a public right-of-way. All easements shall be prepared according to the following specifications.

In areas where sewer mains are installed in easements, the sewer mains shall be located within the easements as shown on the construction plans. All sewer main easements must be a minimum of

thirty feet (30') in width. No sewer main shall be located less than five feet (5') from the edge of an easement.

All easements granted to the Southwest Suburban Denver Water and Sanitation District shall be prepared by the easement grantor or his designated representative according to procedures set forth.

#### 5.203 Procedures

- a. These procedures have been developed to unify the submittal of information required for the preparation of sewer easements. The following information shall be submitted to the District Engineer in four copies:
  - i. A separate legal description of each easement is required for each separate ownership.
  - ii. A drawing of each easement on an 8-1/2" x 14" sheet showing distances, north arrow and ties to recognize land corners. The drawing shall be prepared on a scale of one inch equals fifty feet. A separate drawing is required for each legal description.
  - iii. A general location map of the development area and easements on an 8-1/2" x 14" sheet.
  - iv. A title commitment or title policy on the entire tract of land to be developed.
  - v. A boundary survey of the tract of land to be developed showing the location of the proposed easement(s), as well as the location of all structures, ditches, existing easements and other encumbrances explained in the title commitment
  - vi. A title commitment for each separate ownership on land traversed by all offsite easements specific to the easement legal description.

#### 5.204 Construction Within Easements

- a. Plans for sewer main construction within easements shall not be reviewed nor shall construction be authorized prior to the acceptance of the easement by Southwest Suburban Denver Water and Sanitation District.
- b. Prior to the acceptance of sewer mains within easements, the District shall be provided with a drawing indicating the "as constructed" location of the sewer main within the recorded easement. This drawing must be certified by a registered land surveyor.

#### 5.205 License to Cross Southwest Suburban Denver Water and Sanitation District Easement

a. In the event that it is necessary for another utility to cross the existing easement dedicated to the Southwest Suburban Denver Water and Sanitation District, it will be necessary to obtain a license agreement (See Exhibit G). The procedure for crossing an existing easement is pre-

sented below.

Prepare a legal description of the precise location of the crossing, consisting of a map and printed legal description. The legal description should tie to a land corner or other recognizable point in a platted subdivision.

5.206 In the event the landowner, subdivider or developer employs the engineering services of an engineer or engineering firm that is retained by this District as its District Engineer, then the Board reserves the right to have the engineering services, design, etc., reviewed by an independent engineer. Expense of such review shall be borne by the landowner, subdivider or developer.

### **ARTICLE III**

#### SERVICE LINE STUB-INS

- 5.301 Service line stub-ins may be permitted from the main past the curb for sewer, provided the ownerdeveloper or contractor either applies for the stub-ins with the Application and Agreement for Extension of Mains or makes a separate application for stub-ins prior to the time of building and connecting to an existing sewer main.
- 5.302 If service line stub-ins are connected to a sewer main at the time the main is constructed, additional inspection fees will not be charged. The owner-developer will be charged fees as required by the Application and Agreement for Extension of Mains and a permit fee for each stub-in. If a request is made for a service line stub-in to an existing sewer main, the owner-developer must complete the District's Agreement for Sanitary Sewer Stub-In Permit Application (See Exhibit E) and pay the District's current stub-in permit and inspection fee.
- 5.303 The District will allow stub-ins to be extended from the main as follows, depending on the type of use:
  - A. **Single Family Residential Units** (Detached/Attached/Patio Homes) Stub-ins will be allowed to extend to any point inside the property line, within five feet of the outside wall of the building foundation. Service lines may not be extended from the stub-in to inside the building foundation unless an Application for Sewer Tap Permit has been submitted along with payment of all applicable fees.
  - B. **Multi-Family Housing** (Apartments/Condos/Townhouses) Stub-ins will be allowed to extend to any point inside the property line, including inside the building foundation. Service lines may not be extended from the stub-in to inside the building foundation, nor may inside plumbing and fixtures be connected to the stub-in, unless an Application for Sewer Tap Permit has been submitted along with payment of all applicable fees.
  - D. **Commercial Buildings** (Single Tenant and Multi-Tenant Buildings) Stub-ins will be allowed to extend to any point inside the property line, including inside the building foundation. Service lines may not be extended from the stub-in to inside the building

foundation and/or connection of inside plumbing and fixtures may not be made unless an Application for Sewer Tap Permit has been submitted along with payment of all applicable fees.

Upon completion of the stub-in permit application and payment of the fees by the owner-developer, the District Manager will approve and issue the permit for stub-in purposes only.

- 5.304 Upon request for tap connection of the building service line to the stub-in or connection of building plumbing and fixtures to the stub-in, the owner-developer or contractor must make an application for a sewer tap permit and pay the District's then existing system development and inspection fees and all fees payable to the other entities as provided in Article 3 of this Section.
- 5.305 Use of a stub-in service line or connection of building plumbing and fixtures to a stub-in is **prohibited**. The District may impose fines of up to \$500 per day from the time the violation is discovered until such time as the stub-in is converted to a tap by submitting the necessary tap application and fees.

## **ARTICLE IV**

### CONSTRUCTION PROCEDURES AND GENERAL REQUIREMENTS

- 5.401 The contractor shall be responsible for arranging a preconstruction meeting prior to the start of any construction. The District Engineer, District Manager, contractor and owner or owner's engineer must be represented at this meeting. Other representatives should include the soils engineer and surveyor.
- 5.402 The contractor shall be responsible for notifying the District Engineer and District Manager at least 48 hours prior to start of any construction. If work is suspended for any period of time after initial start up, the contractor must notify the District at least 24 hours prior to restart.
- 5.403 A Performance and Maintenance Bond equal to 100% of the contract (or construction cost) shall be furnished by the contractor to the District on all sewer main construction in the District.
- 5.404 Prior to the start of any work where sewer mains are to be installed into existing District sewer system the nearest manhole to the point of tie-in shall be plugged with a plumbers plug on the outlet side by the: contractor. This plug shall remain in place until acceptance of construction by the District. Its purpose is to prevent any mud, water or other materials from entering the existing line during construction. The contractor shall be responsible for pumping and cleaning manholes and removing the plug.
- 5.405 At the request of the District, <u>no</u> pipe or appurtenance shall be backfilled, nor covered with bedding material, above the spring line of the pipe prior to the field observation by the District. Arrangements shall be made by the contractor to assure that all construction is reviewed by the District prior to backfilling. Any pipe covered prior to acceptance shall be excavated by the contractor to allow for review. This shall be done at no expense to the District.

- 5.406 Approved plans and a copy of the specifications must be kept on the job site by the contractor at all times. The contractor shall maintain a marked up set of plans showing any variations of the contract drawings. The contractor is responsible for maintaining record drawings to include all distances between manholes and locations of wyes and service tees. Record drawings (including two copies of blue line prints and one electronic copy) must be reviewed by the District before probationary acceptance and lamping of the line. The final record drawings should be a minimum of 12" x 18" and provided in electronic format as required by the District's Engineer.
- 5.407 All construction, including labor, materials and settlement of backfill, shall be guaranteed by the owner/ developer for a period of one (1) year from the date of acceptance of construction by the District Manager and District Engineer. During the guarantee period, the expense of any repairs or maintenance to the lines, appurtenances and facilities shall be the responsibility of the owner/developer. The District reserves the right to ensure proper operation of its system and to perform any cleaning, repairs or other maintenance during the warranty period at the expense of the owner/developer.
- 5.408 The date of final acceptance will be as indicated in the conditions of the application for sewer main extensions.

### **ARTICLE V**

### **REIMBURSABLE COSTS**

- 5.501 The owner/developer will be charged for all reasonable costs incurred by the District in connection with a main extension project for services performed by the District's Engineer, Attorney, Manager and other agents in accordance with such persons' then current fee schedules. The services will include but not be limited to the following items of work when applicable:
  - A. Review of plans and specifications in accordance with the district plan approval procedures provided herein.
  - B. General and resident supervision and field observation of work of the contractors, all line and grade surveys as construction progresses. The field observation is not to be continuous, but daily will include: (1) measurement for payment, (2) assistance in interpretation of plans and specifications, (3) accurate daily field records of work performed, difficulties encountered, etc., and (4) protection of the District's interests, but not actual field checking of alignment, joints, etc., except where not performed by the County's inspectors.
  - C. All daily inspection fees of water or sewer mains, including but not limited to those required by Metro Wastewater Reclamation District, Jefferson County, the Denver Water Board or the State Highway Department shall be paid for by the plumber contractor or others requesting main extensions in the District.

- D. General administration of the project including, but not limited to, all necessary record keeping, correspondence, and reports, and attendance at all necessary meetings pertaining to each construction project.
- E. Review of contracts, proposals, easements, right-of-way descriptions, title commitments, and other legal documents involving the owner-developer's project and the District.
- F. Preparation of required rights-of-way descriptions and drawings for the District, performing necessary surveys for these rights-of-way, but not procurement of same from the owners.
- G. All necessary meetings with the Board pertaining to the particular contracts.
- H. Revision of permanent District maps.
- I. Removal of debris and jet cleaning of all sewer mains for conditional and final acceptance.
- J. TV'ing and a video tape made of the TV inspection for the District's records.
- 5.502 All costs will be assessed monthly, with the final costs being assessed after all construction inspections have been completed and the main(s) have been conditionally accepted by the District Engineer. The final invoice will include an estimate of the job closeout costs. Conditional Acceptance of the main(s) by the District is contingent upon the District receiving payment of the final invoice.
- 5.503 If the final invoice for the project is not paid within 60 days of receipt of the invoice, the entire project will be subject to suspension of sewer and/or water service and the suspension of additional taps being sold for the project until payment of the final invoice is received.
- 5.504 Any other fees charged to the District by others for the owner-developer's benefit will be paid for by the owner/developer.

# **ARTICLE VI**

### ACCEPTANCE PROCEDURES AND GENERAL REQUIREMENTS

- 5.601 All water and sewer mains, except service lines, constructed in the District become the property of Denver Water or the District upon final acceptance of the facility.
- 5.602 The District Engineer performs services on behalf of the District to ensure compliance with the District's Rules and Regulations and Specifications. Engineering services performed by the District Engineer shall be charged to the developer. The District Engineer does not represent the landowner, subdivider or developer. The landowner, subdivider or developer must rely solely on its own engineer to ensure proper design and installation of utilities. The District Engineer also ensures that the utilities to be installed will meet the District's requirements for overall system operation and integrity. While the District Engineer is knowledgeable and does provide assistance in meeting the

requirements of other governmental entities, such as the Denver Water Department and Metro Wastewater Reclamation District, approval of construction plans by the District Engineer does not ensure approval by any other governmental agency.

- 5.603 A main shall be accepted by the District and released for taps when the following conditions have been met:
  - A. The main and all appurtenances have been installed to the satisfaction of the District Engineer, inspector or field engineer and all pertinent as-built notes and measurements have been made and two sets of blue line prints with one electronic verssion of the as-built drawings have been supplied to and approved by the District Engineer.
  - B. The main has been successfully low-pressure air tested and inspected to the requirements of the District. Low pressure air testing is mandatory.
  - C. All compaction test results required by the District have been submitted.
  - D. All easements have been submitted and recorded.
  - E. The owner/developer has submitted a letter to the District Manager documenting the installation costs for the project.
  - F. Drawings have been submitted indicating the "as constructed' location of sewer mains within the boundaries of recorded easements. These drawings must be certified by a registered land surveyor.
  - G. The District's applications for sewer main extensions have been dated and signed by the District Manager and District Engineer.
- 5.604 When the utility lines and as-builts have been accepted, 1 copy of the District's executed Application and Agreement for Extension of Sewer Mains granting probationary acceptance will be distributed to the Developer
- 5.605 Prior to the expiration of the probation period, the utility line shall be inspected for final acceptance and maintenance by the District Engineer and District Manager. The developer and his contractor shall correct any deficiencies observed during the final inspection within the time period set by the District personnel.
- 5.606 Upon final acceptance, the District Manager will distribute a fully executed original Application and Agreement for Extension of Sewer Mains to the Developer.