

## **MIDVALLEY IMPROVEMENT DISTRICT GENERAL DESIGN AND CONSTRUCTION PROCESS**

The following is an outline and general description of the design and construction process for sewer improvements and additions in the Midvalley Improvement District (District). Developers', owners' and contractors' work in the District is governed by the District's Design Standards and Construction Specifications as well as statutes, rules and regulations of the State of Utah. If there are any inconsistencies among these materials, the actual statutes, rules and regulations shall govern design and construction activities in the District.

Work in the District shall proceed in a manner consistent with the following steps:

### **STEP 1: SEWER AVAILABILITY & CONDITIONS**

Verify that sewer services are available to the project using the following general steps:

1. Obtain a copy of the District's Design Standards and Construction Specifications. A copy may be obtained for free on-line at [www.mvdst.com](http://www.mvdst.com) or by purchasing a printed copy from the District office at 160 E. 7800 South, Midvale, Utah, for a cost of \$50.00 per set. Initial questions about the project may be directed to the District or to the District Engineer.
2. Submit two (2) sets of the Project Summary to the District. Project Summary shall include:
  - a. Site Location Map – The proposed development shall be shown on a vicinity map of the Midvalley Improvement District area. The map shall include the street address and legal description of the property where the project will be built.
  - b. Detailed description of the proposed use of the property, the estimated maximum number of units to be served, number of levels per building, zoning, project acreage, and estimated peak and average flows.
3. Based on the information provided in the Project Summary, the District will determine if sewer service is available to the project and will communicate, in writing, the basic requirements of the District for the project.

### **STEP 2: DESIGN PHASE**

Prepare the design plans for the project and pay fees associated with the design for review by the District's Engineer.

1. The Developer shall submit two (2) copies or a PDF set of its design plans to the District. The Design Plans shall be accompanied by an initial plan review fee of

\$500.00. These Plans shall comply with the requirements of the most recent version of the District's Design Standards and Construction Specifications and meet any special requirements needed for the particular project. The Plans shall also comply with the latest revision of the Utah State Department of Environmental Quality, Division of Water Quality, Rules and Regulations.

2. The Design Plans shall be on 22 x 34 or 11 x 17 inch paper. Design plans may be submitted in PDF form.
3. The Plans shall include a topographic map, and shall also identify, by name, all streets within, and in the vicinity of, the project.
4. A copy of all proposed sewer line easements shall be included. These easements shall be on forms approved by the District.
5. A proposed Dedication Plat shall be included with the Plans. This shall show the location of all utility and other easements affecting the project, including without limitation, easements for sewer, water, electrical, telecommunications, cable television, etc. The proposed Dedication Plat shall comply with laws relating to the execution and recording of plats.
6. Once received by the District, the Design Plans will be reviewed by the District engineer for completeness and for compliance with all applicable standards, statutes, ordinances and regulations. If the Plans are incomplete or inadequate in any way, the District will provide the Developer with detailed instructions of the changes that are required before the Plans will be approved. At the discretion of the District, the changes may be outlined in letter form or in "red-line" format on the Plans submitted by the Developer. The District may impose and collect additional fees for each review of plans, in an amount to be determined by the District Engineer for time, costs and expenses associated with the additional review(s). The Developer will be given a statement from the District showing the charges for each review. Said charges shall be paid when each set of plans, as revised, is submitted to the District, and in any event, all fees shall be paid in full before any approval may be issued or before any further review is provided.
7. When the Design Plans are approved, the District will issue a preliminary design approval letter. The letter will include the District's estimate of the project construction costs, a manhole fee of \$400.00 per manhole, and the amount of the bond to be posted by the Developer before construction is started. The letter will also include the District Engineer's fees and costs for inspections and other construction related engineering services, based on 6 percent of the project contractor's bid or the District Engineer's construction cost estimate, which shall be paid in full to the District by the Developer before the pre-construction meeting. Minimum Engineer's fee is \$500.00.

8. The Developer's proposed construction bond shall be submitted with the Plans. This may be a cash bond, an irrevocable letter of credit or a corporate surety bond. The amount of the bond shall be One Hundred Twenty percent (120.0%) of the District Engineer's estimated sewer construction cost. The final amount thereof will be determined by the District, and will be communicated to the Developer upon approval of the Design Plans.
9. A final design approval letter will be issued by the District at a pre-construction meeting and upon receipt of all funds required in the preliminary approval letter including the estimated District engineering fees, the manhole fee and the bond.

### **STEP 3: CONSTRUCTION PHASE**

In this phase, the project will be built by the Developer and periodically inspected by the District. The sequence of this phase will be as follows:

1. Prior to any construction on the project, a pre-construction meeting will be held at the District's offices. The Developer shall deliver the manhole deposit, its executed bond and its payment of the estimated engineering fees prior to the pre-construction meeting. Those to attend shall include: the District engineer and inspectors, the Developer and the Developer's contractor(s). The purpose of the meeting will be to coordinate all aspects of construction and to formulate a proposed schedule for construction.
2. After the pre-construction meeting and before actual construction begins, the Developer shall survey and mark the new sewer line(s) and manholes. Following the completion of the survey, the Developer shall notify the District, and within one business day, the District's inspectors will inspect the proposed alignment of the line(s) and manholes. Construction shall not take place until the alignment is approved by the District engineers.
3. The Developer shall construct the sewer lines and manholes in accordance with the approved Design Plans, as well as all applicable standards, statutes, ordinances and regulations.
4. The District's Engineer and inspectors will visit the construction site and perform periodic inspections of the project. In the event that the District Engineer determines that construction is inadequate, inconsistent with the approved Plans, or otherwise inconsistent with applicable standards, statutes, ordinances and regulations, construction shall cease until the deficiency is corrected.
5. Upon completion of manhole and pipeline construction, and prior to paving, the District shall be notified by the Developer that the lines are ready to be televised. The Developer shall provide the District with not less than two (2) business days' notice that the project is ready for televised inspection.

6. Upon completion of the televised inspection, the District will prepare a preliminary "Punch List" for any defects discovered by televised inspection.
7. The Developer shall remedy to the District's satisfaction any defects noted on the preliminary Punch List. Once this is done, the Developer may pave over the sewer project.
8. Once paving is complete, the District will perform another inspection and issue a final Punch List, to include without limitation, the manhole acceptance requirements set forth below, and any and all other matters required to bring the project into compliance with the Design Plans and applicable standards, statutes, ordinances and regulations.
9. Before the District issues its Preliminary Construction Approval, and releases the initial portion of the Developer's bond (eighty three and one-third percent (83.33%) of the bond posted before the pre-construction meeting, the Developer shall meet the following requirements:
  - a. Manhole testing and requirements: All manholes not set at finished grade of surfaced roads within the subdivision shall be raised or lowered to meet the finished road surface.
  - b. The Developer shall submit written proof of a satisfactory manhole vacuum test conducted by an independent testing contractor on all manholes. Should the Developer elect to perform or have the Developer's contractor perform the testing, the District Engineer shall be notified not less than two (2) business days in advance of testing to ensure that the District's engineer is available to witness the test. All manholes shall pass vacuum test prior to acceptance and the Developer shall clean out all manholes to the District's satisfaction.
  - c. The Developer shall submit written proof of a satisfactory pipeline air test conducted by an independent testing contractor on all pipelines. Should the Developer elect to perform or have the Developer's contractor perform the testing, the District Engineer shall be notified not less than two (2) business days in advance of testing so the testing can be witnessed by the District's inspector. All pipelines shall pass air tests prior to acceptance and the Developer shall clean out all lines to the District's satisfaction.
  - d. The Developer shall deliver to the District "as constructed" drawings of the project, as well as any revised easements as may have been identified as necessary during the course of construction.

- e. The Developer shall deliver to the District all record (“as-constructed”) drawings, maps, plats and unrecorded easements that were approved by the District Engineer. “As-constructed” drawings shall include coordinates for each new manhole in the following format: NAD 1983 State Plane Utah Central FIPS 4302 Feet.
- f. The Developer shall deliver to the District, on CD, DVD, or other approved media, digital copies of all drawings and maps of the project. Drawings and maps shall be in AutoCAD format (.dwg) of the latest revision approved by the District Engineer. Other documents may be submitted in “DOC” or “PDF” format.

#### **STEP 4: CONTINUING WARRANTY & FINAL CONSTRUCTION APPROVAL**

Final construction approval will not be issued by the District and the remaining portion of the Developer’s bond will not be released until the conclusion of the two (2) year Warranty Period and the Developer’s faithful compliance with the District’s regulations.

1. After construction is completed and the District has issued its written Preliminary Construction Approval, the project remains subject to a two (2) year Warranty Period. During this time the District will continue to hold 16.67% of the Developer’s bond.
2. During the Warranty Period, the District may conduct periodic inspections of the project. If deficiencies are noted by the District, the same will be communicated to the Developer who shall diligently and promptly endeavor to remedy the same. If, in the District’s opinion, the Developer fails to diligently and promptly remedy the deficiency, the District may perform the repairs. In that event, the cost of the repairs, plus an overhead fee of fifteen percent (15.0%) shall be paid by the Developer to the District. The District may, at its discretion, draw on the continuing bond for payment of the repair costs and overhead. The failure of the District to draw on the continuing bond will not be a waiver of any of its rights thereunder.
3. No later than thirty (30) days prior to the expiration of the Warranty Period, the Developer shall notify the District to conduct its final inspection of the Project. When this is done, the District will communicate any deficiencies to the Developer, who shall diligently and promptly remedy the same. When the required remedial work is performed to the District’s satisfaction the District will issue its Final Construction Approval and the remaining portion of the bond will be released and returned to the Developer. If, in the District’s opinion, the Developer fails to diligently and promptly remedy any deficiency, the District may perform the repairs. In that event, the cost of the repairs, plus an overhead fee of fifteen percent (15.0%) shall be paid by the Developer to the District. The District may, at its discretion, draw on the continuing bond for payment of the

repair costs and overhead. The failure of the District to draw on the continuing bond will not be a waiver of any of its rights thereunder.

4. The District will have no duty to perform a final inspection or to release the remaining portion of the bond until the Developer has: (1) given the notice required in subparagraph 3, above; (2) complied with all requirements of the District to remedy any deficiencies associated with the project; and (3) otherwise complied with all applicable rules, regulations, statutes and ordinances affecting the project.

**BONDING REQUIREMENTS.** Upon approval of the Developer's Design Plans, the District Engineer will estimate the total sewer extension cost and will calculate the expected bond amount, to be equivalent to One Hundred Twenty percent (120.0%) of the estimated total sewer extension cost. The purpose of the bond is to ensure that the construction of the sewer line and related improvements are completed in a timely and workmanlike manner; and meets all requirements of the Design Plans, the District's Design Standards and Construction Specifications and other applicable laws, rules and regulations. The bond will also secure the Developer's performance during the two (2) year Warranty Period. The Warranty Bond or Continuing Warranty shall be equal to sixteen and two-thirds percent (16.67%) of the total bond posted by the Developer prior to the pre-construction meeting and will be held as a warranty for workmanship and materials for two (2) years. At the conclusion of the two (2) year warranty period, and if the Developer has met all warranty requirements, the Warranty Bond will be refunded. The refund shall be requested in writing to the District.

The Developer may use a bond consisting of: a corporate surety bond; a cash bond; or an irrevocable letter of credit. The forms of these bonds are available from the District. The District will not accept property bonds. If the Developer desires to use a bond form which is different from those approved by the District, it must submit its proposed bond to the District for review by the District's legal counsel, and must pay all costs and fees incurred by the District for that legal review.