JOHNSON COUNTY WASTEWATER
PROCEDURES FOR PRIVATELY FINANCED GRAVITY MAIN PROJECTS

A. DISTRICT ENLARGEMENTS. All areas served by sewer mains under the jurisdiction of Johnson County Wastewater (JCW) in Johnson County must be in the legally created Consolidated Main Sewer District (CMSD). See the JCW Minimum Plan Requirements for Gravity Main Projects (MPR) document for requirements pertaining to district enlargements. The MPR document is available at www.jcw.org in the Development and Permitting section on the Privately-Financed Sewer Main Projects page.

B. PROJECT SUBMITTALS. See the MPR document for the detailed requirements for project submittals. The project will not be reviewed if any required submittal items have been omitted. Resubmittal of revised drawings and/or other documents to address review comments is required.

C. PLAN STATUS.
   1. Plan submittals are reviewed in the chronological order of receipt by JCW.
   2. Project team members can monitor Privately-Financed Sanitary Sewer Project Status through the My Government Online portal at www.mygovernmentonline.org.
   3. JCW cannot provide the date that submittal comments will be sent to the engineer. Anticipate a minimum of two weeks to receive comments on the initial submittal for a project and a minimum of one week to receive comments on subsequent submittals.
   4. Phone messages and e-mails concerning the review comments are typically returned within one business day unless the project reviewer is not in the office.

D. GARDNER LEAWOOD, LENEXA, OLATHE. JCW will send plans to Gardner, Leawood, Lenexa or Olathe for approval prior to JCW release of the project for construction in these Cities.

E. PLAN ADMINISTRATION FEE. The Plan Administration Fee (PAF) is required with the second submittal. See the JCW MPR document for the PAF calculation. The project name must be noted on the PAF check. Project review can proceed only when the payment has been accepted by JCW.

F. PLATS AND WRITTEN EASEMENTS.
   1. FOR ALL PROJECTS THAT INCLUDE PLATTING:
      a. A copy of the draft final plat is required with the first submittal.
      b. All plats shall be reviewed and accepted by JCW prior to recording of the plat. Refer to the MPR document for plat requirements.
      c. JCW acceptance of the plat is required for release of the project for construction.
      d. A recorded copy of the plat accepted by JCW is required for JCW acceptance of the constructed project.
   2. FOR ALL PROJECTS THAT INCLUDE WRITTEN EASEMENTS:
      a. Draft written easement(s) on JCW’s easement form with the easement exhibit are required no later than the second submittal.
      b. All written easements shall be reviewed and accepted by JCW prior to execution of the written easement(s). Refer to the MPR document for easement requirements.
      c. Upon JCW acceptance of the written easement(s), the easement(s) shall be executed and the document original(s) submitted to JCW.
      d. JCW acceptance of the executed written easement(s) is required for release of the project for construction.
e. JCW records all written easement originals with the Department of Records and Tax Administration (RTA). JCW recording of the executed written easement is required for JCW acceptance of the constructed project.

G. PLAN RELEASE.
1. JCW shall notify the Engineer, in writing, when the project is released for construction. Note: The Engineer is the Engineer of record that is designing the project, sealing the project documents (plans, calculations, etc.) and providing full-time inspection of the project construction.
2. Construction may not proceed until:
   a. JCW has released the plans to the Engineer.
   b. The Engineer has reviewed and approved all items listed below in Section I.
3. The Engineer has provided all required documents listed in Section I to JCW for review and approval. A copy of the plans released by JCW shall be on the job site at all times. Construction activities may be halted if the signed plans released by JCW are not on the job site.
4. Any revisions to the plans released by JCW shall be reviewed and re-released by JCW prior to construction of the revision. For JCW review and release:
   a. Notify JCW and upload electronically sealed PDFs of the applicable plan sheet(s) to the My Government Online portal with all revision(s) clouded.
   b. The revision(s) shall be numbered and a brief explanation of the revision(s) shall be included (with the corresponding number) on the plan sheet(s).
   c. A revised JCW Information Sheet, calculations, easements, additional PAF, etc., shall be provided as applicable. Contact JCW to confirm the information required. As with the plan sheet(s), all revisions to other documents shall be clouded and numbered.
   d. Construction shall not proceed until the revised plan sheet(s) and/or other documents have been released by JCW for construction.
   e. All revised plan sheet(s) and/or other document(s) shall be on the job site at all times.

H. KDHE PERMITTING.
Projects that include sewer main extensions are submitted to KDHE for permitting when JCW releases the project for construction. Construction of the project may proceed at the developer’s risk, as the project shall not be accepted by JCW until KDHE has issued the permit for the project and any KDHE permit comments have been addressed.

I. PRE-CONSTRUCTION REQUIREMENTS. Construction shall not proceed until the Engineer has received confirmation of receipt of all information listed in this Section I from JCW’s Inspection Group. The Engineer shall upload PDFs to My Government Online of the following prior to the start of construction:
1. START WORK LETTER: Upload the electronically signed “Start Work” letter (See Attachment 1), prior to the start of construction. Include the following:
   a. Scheduled start date.
   b. The contract amount for the sanitary sewer work.
   c. The sanitary sewer main project contractor.
   d. Provide a copy of all certifications and shop drawings as attachments.
2. SANITARY SEWER MAIN CONTRACTOR:
   a. The Engineer shall confirm the sanitary sewer main contractor is listed on the Contractor List For Privately-Financed Sewer Main Projects, prior to performing any work.
   b. JCW makes no warranties (implied or otherwise) as to the work performed by Contractors that have been listed.
c. Contractors that do not appear on the list may submit a completed Johnson County Wastewater's Contractor Listing Questionnaire with all required documentation for consideration. After all required information is provided to JCW, the review process takes a minimum of two weeks.

3. PIPE CERTIFICATION: The Engineer shall confirm the pipe certification meets or exceeds JCW specifications and meets or exceeds the service requirements prior to submittal to JCW. The pipe certification letter from the pipe manufacturer must include the following information:
   a. The manufacturer’s name
   b. The project name
   c. The main extension contractor’s name
   d. The pipe type
   e. Pipe ASTM designations
   f. Certification that the pipe to be installed on the project meets or exceeds JCW specifications and is designed to meet or exceed the intended service requirements (such as appropriate pipe class selection for depth of burial).
   g. Certification is required for each type and class of pipe to be installed on the project. See Attachment 2 for a pipe certification example for standard PVC pipe.
   h. Certification information for ductile iron pipe linings and encasements or other types of pipe shall also be provided as applicable.

4. MANHOLE CERTIFICATION: The Engineer shall confirm that the manhole certification meets or exceeds JCW specification requirements prior to submittal to JCW. The manhole certification letter from the manhole manufacturer must include the following information:
   a. The manufacturer’s name
   b. The project name
   c. The main extension contractor’s name
   d. Manhole ASTM designations
   e. Manhole diameter, wall thickness, base thickness, and other dimensions.
   f. Manhole reinforcing and concrete mix design
   g. Manhole joint sealant information
   h. Manufacturer, model and ASTM designation information for:
      i. manhole steps
      ii. castings
      iii. joint gaskets
      iv. joint wrap
      v. pipe to manhole gaskets
   i. A separate certification shall be provided for each diameter manhole supplied on the project (i.e., 4’ dia., 5’ dia., etc.).
   j. See Attachment 3 for a manhole certification letter example.
   k. In addition to the manhole certification review, the Engineer shall review shop drawings for the manholes on the project for general conformance with the plans and specifications.

5. PIPE BEDDING MATERIAL CERTIFICATE
6. CONCRETE MATERIAL CERTIFICATE
7. To review the status of JCW acceptance of the Pre-Construction Requirements, access the project through the www.MyGovernmentOnline.org portal. Locate the “Start Work - Notice, Pipe Certifications and Manhole Shop Drawings with Certifications Approved and Provided by Engineer” requirement under the “Requirements” tab. That Requirement will identify if it has been completed or not. Contact the Inspection Group at 913-715-8500 for assistance.
J. FULL-TIME INSPECTION.
   1. In accordance with KDHE (K.A.R. 28-16-55) and JCW requirements, the Engineer shall provide
      full-time engineering observation of the sanitary sewer construction by a qualified Resident
      Project Representative (RPR) to ensure the work is constructed in accordance with the plans
      and specifications released by JCW and permitted by KDHE and to ensure elimination of
      extraneous surface water and groundwater from the sanitary sewer system.
   2. The RPR shall be employed by the Engineer.
   3. The RPR shall record daily events in a Daily Inspection Log Diary. See Attachment 4 for:
      “A Listing of the Duties, Responsibilities and Limitations of Authority
      of the Resident Project Representative” which describes the duties and responsibilities of the
      Engineer’s RPR on the JCW Privately-financed Sewer Main Projects page. This document
      describes the expected scope and level of effort provided by the RPR. Failure to perform these
      duties may result in a delay in JCW acceptance of the project until identified issues are
      resolved.
   4. The Engineer shall schedule the JCW acceptance inspection and all punch list inspection(s) of
      the work with the JCW Senior Inspector. The Engineer’s RPR is responsible for recording and
      distributing (to the JCW inspector and the contractor) the punch list developed during the JCW
      acceptance inspection and any subsequent punch list inspections.
   5. A copy of the daily log(s) from Engineer’s full-time RPR shall be submitted to JCW upon
      request.

K. PROJECT ACCEPTANCE.
   1. The Engineer is responsible for monitoring the status of all submittal items required for project
      acceptance. The following are required for JCW acceptance of a sanitary sewer project and
      issuance of the Project Acceptance Date:
      a. JCW acceptance inspection.
      b. JCW inspection of all punch list items found during the acceptance inspection.
      c. The Engineer is responsible for submittal of the air, mandrel and vacuum test results
         confirming all mains and manholes have met specified testing requirements to JCW.
      d. The Engineer is responsible for submittal of all compaction test results or certification of
         flowable fill and/or rock back fill installation at all pavement crossings as required by JCW
         and, where applicable, the City. The Engineer shall provide written confirmation that all
         compaction tests have met specified testing requirements and required certifications have
         been provided.
      e. JCW review and acceptance of recorded plat. The Engineer shall submit of a copy of the
         recorded plat when applicable.
      f. JCW acceptance of the Contractor Maintenance Bond and Developer Bond Option.
      g. The Engineer is responsible for the submittal of any documentation and, as applicable,
         ensuring the completion of any special requirements noted in the JCW Conditions of
         Release Memorandum.
   2. Status of JCW acceptance of test records, certifications, plat(s), inspections, other information
      required for project acceptance and JCW issuance of the Project Acceptance Date may be
      checked at www.jcw.org in the Development and Permitting section on the Privately-financed
      Sewer Main Projects page. Select “Privately-Financed Sanitary Sewer Project Status” from the
      menu on the page. Select the project name from the drop down menu on the Sewer Project
      Status page, select “Check Status” button then select the “Construction” tab.
   3. The Engineer shall request the Project Acceptance Date from the JCW Senior Inspector after
      the Engineer has provided all submittals required for project acceptance and all inspections
      have been completed. The project is not considered complete until JCW has issued the Project
      Acceptance Date in writing.
4. The Engineer sealing the plans must prepare, sign and seal an Acceptance Letter certifying the project was completed in accordance with the plans and specifications approved by JCW and KDHE as witnessed by the Engineer’s full-time RPR and recommending JCW acceptance of the project. See Attachment 5 for the required format for the Acceptance Letter. The Engineer shall submit the letter with the initial As-built Record submittal.

**L. SEWER MAIN CONTRACTOR MAINTENANCE BOND.**

1. **CONTRACTOR RESPONSIBILITY:** The Sanitary Sewer Main Contractor (Contractor) is required to provide a three-year maintenance bond as a condition of continued listing on the JCW Contractor List. The Contractor is required to guarantee the installation, including all material and workmanship, for a period of three years. Please see the Privately-Financed Main Extension Procedure document for complete information about the main project process.

2. **COMPLETING THE MAINTENANCE BOND FORM:** Download the JCW Maintenance Bond Form, including the prefilled project information, from the www.MyGovernmentOnline.org portal after the Engineer has notified JCW of the Sanitary Sewer Main Contractor and the sewer main construction cost. The Bond Company will insert the bond specifics as shown in the example below.

   The Maintenance Bond shall be executed by the Sanitary Sewer Main Contractor and the Bond Company. The local bond company’s address, and telephone, and fax numbers and email address of the local bond company must be included on the bond document. The Bond Form and the Power of Attorney shall include a legible seal for the Bond Company. An inked seal press or rubber stamp may be used. All signatures must include the typed or legibly printed name below the signature. The date of the Power of Attorney for the bond must match the execution date listed on the bond. Contact the Permit Group, at 913-715-8520, for assistance in completing the form.

3. **SANITARY SEWER MAIN CONTRACTOR:** All privately-financed sewer main contractors must be listed on the JCW Privately-financed Sewer Main Contractor List. The Engineer shall confirm the Contractor’s listing before submitting their information.

4. **BOND AMOUNT:** The amount of the maintenance bond is 50% of the sanitary sewer contract amount as certified by the engineering firm sealing the sanitary sewer construction plans.

5. **BOND EXPIRATION:** The maintenance bond expires three years from the date the project was accepted by JCW.

6. **STATUS:** To review the status of JCW acceptance of the maintenance bond, access the project through the www.MyGovernmentOnline.org portal. Locate the “Contractor Maintenance Bond Accepted v2” requirement under the “Requirements” tab. The “Bond Requirement” will identify if it has been completed or not. Contact the Permit Group at 913-715-8520 for assistance.

7. **PROJECT ACCEPTANCE:** The maintenance bond shall be provided to and accepted by JCW before JCW will accept the sewer main project.

**M. DEVELOPER BOND OPTIONS.**

1. **DEVELOPER RESPONSIBILITIES:** A three-year Bond Option is required from the site developer to ensure the repair of any Johnson County Wastewater (JCW) at-grade structures...
damaged by site improvements and/or development-related activities. The developer is required to repair damages to any at-grade structures (or damages to the main or service stub resulting from at-grade structure damage) or adjust at-grade structures to match finish grade during development of the project. Should the developer fail to correct damages within 30 days of notification from JCW, JCW will collect the entire amount of the funds secured by the Bond Option or, if applicable, contact the Bond Company, for the correction work.

2. COMPLETING THE BOND OPTION FORMS: The developer must provide the three-year Bond Option in one of the following formats:

   a. Developer Agreement - secured by a cashier’s check issued to JCW
   b. Escrow Agreement - obtained through a financial institution
   c. Irrevocable Letter of Credit - obtained through a financial institution
   d. Developer Bond - obtained through a bonding company

The developer shall provide the Bond Option and it shall be accepted by JCW before JCW will accept the sewer main project.

Download the applicable JCW Developer Bond Option Form, with prefilled project information, from the www.MyGovernmentOnline.org portal. These forms may not be retyped. The following apply:

   a. The selected Bond Option shall be executed by the parties noted on the form.
   b. As applicable for the selected form, the developer, bank, or bonding agent’s address, telephone number, fax numbers and email address must be included on the Bond Option document.
   c. All signatures must include the typed or legibly printed name below the signature.
   d. The Irrevocable Letter of Credit form must be copied on the issuing bank’s letterhead.
   e. For the Bond, the Bond Form and Power of Attorney shall include the legible bonding company’s seal using an inked seal press or rubber stamp. The date of the Power of Attorney for the bond must match the execution date listed on the bond.

Contact the Permit Group, at 913-715-8520, for assistance in completing the selected form.

3. BOND OPTION AMOUNT: The Developer Bond Option amount is calculated at $300 per manhole (minimum $900.00 bond) in the area affected by the development. The number of manholes will be identified by JCW and reflected in the Bond Option document.

4. BOND OPTION EXPIRATION: The Developer Bond Option expires three years from the date the project was accepted by JCW. Upon bond period expiration, JCW returns the expired Bond Option to the developer named on the bond option, provided there are no development related damages to correct. If the developer changes during the three-year Bond Option period, a new Developer Bond Option from the new developer shall be provided. The original Bond Option shall be returned to the original provider. For funds secured under an Escrow Agreement, Letter of Credit or Bond, JCW will notify the financial institution or bonding company of release.

5. STATUS: To review the status of JCW acceptance of the Developer Bond Option, access the project through the www.MyGovernmentOnline.org portal. Locate the “Developer Bond Option Accepted v2” requirement under the “Requirements” tab. The “Bond Requirement” will identify if it has been completed or not. Contact the Permit Group at 913-715-8520 for assistance.
6. PROJECT ACCEPTANCE: The selected Developer Bond Option document shall be provided to and accepted by JCW before JCW will accept the sewer main project.

N. AS-BUILT RECORDS.
   1. The Engineer is responsible for providing accurate as-built records for the sewer main project construction and for preparing and submitting the As-built Records (including the project plans and any other required documentation) for the project to JCW.
   2. The Engineer shall submit the As-built Records after the Project Acceptance Date has been issued by JCW.
   3. The Engineer shall submit As-built Records in accordance with the requirements noted in Section XIII. As-Built Record Requirements of the JCW MPR.
   4. As-built records shall be provided to JCW 30 days after JCW Project Acceptance. As-built records submitted prior to the Project Acceptance Date will not be reviewed. For most projects connection permits may be issued with the condition that the service line and/or any other service appurtenances shall not be installed and will not be inspected by JCW until the As-Built Drawings have been provided to and accepted by JCW. If the As-built Drawings for the project have not been approved by JCW within 60 days of project acceptance, connection permits will not be issued and service lines and/or appurtenances shall not be installed. Permit issuance and JCW inspection of conditioned service line and/or appurtenance permits will not resume until the As-built Drawings have been accepted by JCW.
   5. A copy of the Engineer's As-Built survey notes and the Engineer's inspection record notes shall be submitted to JCW upon request.
   6. As-Built drawings are reviewed in the chronological order of receipt by JCW. Anticipate a minimum of two weeks to receive comments on the initial as-built submittal and a minimum of one week to receive comments on subsequent submittals.
   7. Status of JCW acceptance of the As-built Records will be reflected in the “Project Status” tab in the online portal.

O. RE-PLATS. If the area served by the sewer main project is platted or re-platted after the sewer main project plans have been released for construction, the Site Developer is responsible for providing a copy of the proposed plat and updated as-built plans showing the new plat to JCW for review and acceptance.

JCW acceptance of the recorded plat is required before sewer connection or modified use permits shall be issued in the development.

P. RESIDENTIAL SEWER CONNECTION PERMITS. Sewer connection permits for single-family (including single family multiplex units with an individual service line for each unit) construction can be issued by JCW only when:
   1. The construction of sanitary sewer main project is complete.
   2. JCW has accepted the sewer main project and issued the Project Acceptance Date as noted in Section K.
   3. The checklist for residential sewer connection permitting is available at www.jcw.org on the “Permitting: Residential” page in the Permitting section under Development and Permitting.
   4. Permit Condition: Service line installation and connections to main shall not be allowed until the As-built Records for the sewer main have been accepted by JCW.
   5. Please note that the sanitary sewer connection permit is required to obtain the building permit from the City.
Q. COMMERCIAL SEWER CONNECTION PERMITS.

1. **The application, submittal and review process for commercial sewer connection permitting is separate from the sanitary sewer main project process.**
2. All projects other than single family and multi-family are considered commercial.
3. A separate application and commercial site plan(s) are required for each building connection. The application and submittal checklists for commercial sewer connection permits are found at [www.jcw.org](http://www.jcw.org) on the “Permitting: Commercial” page in the Permitting section under Development and Permitting.
4. Please note that the sanitary sewer connection permit is required to obtain the building permit from the City.
5. Application for commercial sewer connection permits can be made concurrently with the sanitary sewer main extension project review. The connection permit review can proceed upon JCW acceptance of the proposed connection design in the sanitary sewer main project plans serving the building. However, commercial connection permits may be issued only as follows:
   a. **SITE DEVELOPER AND BUILDING OWNER ARE THE SAME:** For commercial developments, where the sanitary sewer main project developer financially controls both the sanitary sewer main project and building construction (i.e. the site developer and building owner are the same), sewer connection permits may be issued to the developer/owner as follows:
      i. The sanitary sewer main project has been released for construction.
      ii. It will be a condition of the sewer connection permit that service line installation and connections to main shall not be allowed until the As-Built Record Drawings for the sewer main project have been accepted by JCW.
   b. **SITE DEVELOPER AND BUILDING OWNER ARE SEPARATE PARTIES:** For commercial developments, where the sewer construction and the building construction are controlled by separate individuals or groups, sewer connection permits may be issued as follows:
      i. Written confirmation by the building owner acknowledging and accepting all risk involved with proceeding with building construction and/or site development prior to installation and JCW acceptance of the sanitary sewer main
      ii. Connection permit will be issued with the condition that the building owner acknowledges and accepts all risk involved with proceeding with building construction and/or site development prior to installation and JCW acceptance of the sanitary sewer main
      iii. It will be a condition of the sewer connection permit that service line installation and connections to main shall not be allowed until the As-Built Record Drawings for the sewer main project have been accepted by JCW.
   c. **RELOCATION PROJECTS:** Sewer connection permits shall not be issued for any building(s) (regardless of building and developer relationships) where a sewer main relocation is required. Sewer connection permits may be issued only as follows:
      i. The construction of sanitary sewer main relocation is complete.
      ii. JCW has accepted the relocation portion of the project and issued a partial Project Acceptance Date.
      iii. It will be a condition of the sewer connection permit that service line installation and connections to main shall not be allowed until the As-Built Record Drawings for the sewer main project have been accepted by JCW.
Date: ______________

Johnson County Wastewater
Attn: JCW Collection Systems Inspection Manager
11811 S. Sunset Drive, Suite 2500
Olathe, Kansas 66061-7061

RE: Start Work Notification
Sanitary Sewer Project Name (as noted on the sewer main project plans) including Plat Name and/or Phase Number as applicable
Sub-District Name with Number, LSD Number, Section Number
KDHE Permit Number* (*Label as “Permit Pending” if KDHE permit has not been issued at the time of this letter).

This letter serves as notification that Contractor will begin construction of the above referenced project on Date. I have verified that Contractor is on the current Johnson County Wastewater Contractor List for Privately-Financed Main Projects.

The contract amount for this sanitary sewer main project is $__________________.

In accordance with the Kansas Department of Health and Environment K.A.R. 28-16-55 and Johnson County Wastewater requirements, our firm will provide full-time construction observation for the purpose of ensuring the compliance with the plans and specifications approved by KDHE and released by JCW for construction and to ensure the elimination of extraneous surface and groundwater from the system.

The pipe and manhole certifications are attached. The certifications certify that the pipe and manholes to be supplied and installed for this project meet or exceed the Johnson County Wastewater Construction and Material Specifications for Sanitary Sewers. In addition, I have reviewed and approved the shop drawings for this project.

Sincerely,

Signature by the P.E. sealing the plans.
Engineering Company Name

Attachments

cc: Developer – Development Company
    Sewer Main Project Contractor – Construction Company

3/17
Certification of Conformance

Date: August 16, 2001

This is to certify that J-M Manufacturing's standard inspection procedure was used in the inspection of the material covered by this order. The inspection indicates that the material supplied on:

J-M Order No.: 
Your Order No.: 
Project Name: 
Distributor: 
Branch/City/State: 

has been manufactured in accordance with the specific requirements of the appropriate specification(s) (as noted below) for the product(s) shipped.

( ) 4" - 8" SDR35 Gasketed Fittings per ASTM D3034
( ) 4" - 15" SDR35 and SDR26 Sewer Pipe per ASTM D2695
( ) 18" - 27" PS46 Sewer Pipe per ASTM F679
( ) 18" - 36" PS46 Ribbed Profile Sewer Pipe per ASTM F794
( ) 18" - 48" Ribbed Profile Pipe per AASHTO M364
( ) 8" - 15" Perma-Rib Pipe per ASTM F794
( ) ½" - 12" Iron Pipe Size Pressure Pipe per ASTM D2241
( ) 4" - 12" Cast Iron Outside Diameter Pressure Pipe per AWWA C-900
( ) 14" - 30" Cast Iron Outside Diameter Pressure Pipe per AWWA C-905
( ) ½" - 12" Schedule 40 and 80 Pressure Pipe per ASTM D1785
( ) 1½" - 8" Schedule 40 Drain, Waste, Vent (DWV) Pipe per ASTM D2665 and D1785
( ) 1½" - 6" Schedule 40 DWV Cellular (Foam) Core Pipe per ASTM F891
( ) 3" - 6" Solvent Weld Drain Pipe per ASTM D2729
( ) 4" - 12" Solvent Weld Perforated Underdrain Pipe per AASHTO M278
( ) ½" - 6" Schedule 40 and 80 UL-651 NEMA TC-2 Federal Spec WC-1094-A (Type II)
( ) 1½" - 6" Schedule 40 and 80 UL-651 NEMA TC-2 Federal Spec WC-1094-A
( ) 1½" - 6" DB-EB Type "C" NEMA TC-6 & TC-8 ASTM F512
( ) 6" - 15" PIP PVC Irrigation Pipe Dimensions per SCS 430-DD
( ) 15" - 27" PIP PVC Irrigation Pipe Dimensions per Annex A1 of ASTM D2241
( ) 1½" - 6" ABS Schedule 40 Foam Core/DWV Pipe per ASTM F-628
( ) PVC cell classification as defined in ASTM D1784 (Foam Core pipe per ASTM D4396)
( ) All Gaskets per ASTM F477

Certification for products or specifications not listed above will require submission of a copy of the specification for review by J-M Manufacturing Company's Quality Assurance Department in order to determine if certification is possible.

Sincerely,

Robert Wang
Sales Coordinator
J-M HQ - Livingston, NJ

cc: Order Packet
48" (I.D.) Manhole

Design Build Height
Top of Casting + 974.59
Outlet Invert - 956.36
Wall Thk./Inv Adj + 0.39
Design Height = 18.62
Casting/Adj Ring - 1.17
Manhole Hgt = 17.45

Stack Build Height
Casting + .75
Adjusting Ring + .38
Cone + 3.00
Riser + 9.00
Mono Base + 5.42
Base Thickness + .25
Outside Height = 19.30

Opening Schedule
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<th>ID</th>
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<th>Invert Pipe</th>
<th>Opening/Top of C-Line Blm of Holes</th>
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<td></td>
</tr>
<tr>
<td>J3</td>
<td>18&quot; DIP</td>
<td>958.36</td>
<td>0.00 19.5 630 Alok 24.0616 13.75in</td>
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Elevation
Lifting Device: EZ LRPin
Ext Joint Wrap: 6IN x 100FT E-Z WRAP

Notes
KDOT mix design.
Contractor to advise if complete structure is desired.

Item List
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Swift Lift System

The Swift Lift System is a quick connect/disconnect system that allows precast concrete elements to be handled repeatedly, with speed, safety and economy. The System is a non-welded system and void of threaded connections. The quality, reusable Swift Lift Lifting Eyes' heavy duty construction will provide years of good service.

The Swift Lift System is available with safe load ratings of 1, 2, 4, 8 and 20 tons. Each component is clearly marked with its maximum safe working load. The system is extremely versatile and can be utilized for vertical and diagonal pulls. It can be used to lift concrete elements from a horizontal to a vertical position without the aid of a lifting table.

P-50 Swift Lift Universal Lifting Eye

The Swift Lift Universal Lifting Eye (P-50) consists of a flat-sided, spherical lifting body and a high strength ball. The lifting body has a T-shaped slot that permits rapid attachment and release of the head on Swift Lift Anchors.

The design of the P-50 Universal Lifting Eye permits the ball to freely rotate 360°, while the complete lifting eye may rotate through a 360° arc. This design feature allows precast concrete elements to be turned, tilted and/or rotated under load.

Dayton Superior does not recommend the use of this lifting eye for edge lifting of thin precast concrete panels.

<table>
<thead>
<tr>
<th>Rated Load Tons</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.90&quot;</td>
<td>2.30&quot;</td>
<td>1.30&quot;</td>
<td>1.50&quot;</td>
<td>1.90&quot;</td>
<td>2.00&quot;</td>
<td>3.00&quot;</td>
<td>4.00&quot;</td>
<td>5.00&quot;</td>
<td>6.00&quot;</td>
<td>7.00&quot;</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.80&quot;</td>
<td>3.50&quot;</td>
<td>1.60&quot;</td>
<td>1.80&quot;</td>
<td>2.20&quot;</td>
<td>2.30&quot;</td>
<td>3.50&quot;</td>
<td>4.50&quot;</td>
<td>5.50&quot;</td>
<td>6.50&quot;</td>
<td>7.50&quot;</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4.20&quot;</td>
<td>5.00&quot;</td>
<td>2.60&quot;</td>
<td>2.80&quot;</td>
<td>3.20&quot;</td>
<td>3.30&quot;</td>
<td>4.50&quot;</td>
<td>5.50&quot;</td>
<td>6.50&quot;</td>
<td>7.50&quot;</td>
<td>8.50&quot;</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>6.30&quot;</td>
<td>7.00&quot;</td>
<td>4.40&quot;</td>
<td>4.60&quot;</td>
<td>5.00&quot;</td>
<td>5.10&quot;</td>
<td>6.30&quot;</td>
<td>7.50&quot;</td>
<td>8.50&quot;</td>
<td>9.50&quot;</td>
<td>10.50&quot;</td>
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<tr>
<td>20</td>
<td>8.40&quot;</td>
<td>9.00&quot;</td>
<td>6.00&quot;</td>
<td>6.20&quot;</td>
<td>6.60&quot;</td>
<td>6.80&quot;</td>
<td>8.00&quot;</td>
<td>9.00&quot;</td>
<td>10.00&quot;</td>
<td>11.00&quot;</td>
<td>12.00&quot;</td>
<td></td>
</tr>
</tbody>
</table>

The rated load is a factor of safety of approximately 5 to 1 (ultimate to rated load).

Inspection and Maintenance

The P-50 Universal Lifting Eye may be subjected to wear, misuse, overloading and other factors that can affect the lifting eye's rated load. Therefore, it is imperative that the lifting eye be user-inspected at least once a month to determine its general condition and degree of wear.

During the user's monthly inspection, the lifting eye should be checked for evidence of heat application. If evidence of heat application is found, the unit must be scrapped. Check for a bent or twisted ball and discard all units found to have these flaws. Also, check to make certain that the ball rotates freely in all directions.

At least once every three months, dimensions "H" and "M" on each unit should be checked. The upper limits are shown in the chart. If either of these limits is exceeded, the P-50 Universal Lifting Eye must be removed from service and destroyed.

The proper method for scrapping a lifting eye is to cut through the ball with a cutting torch to render the unit useless as a lifting device.

No repairs or welding to the P-50 Swift Lift Universal Lifting Eye are permitted.
Swift Lift System

P-52 Swift Lift Anchor

The P-52 Swift Lift Anchor is hot forged from carbon steel. The formed head provides spherical seating that the Lifting Eye engages, while a disc-shaped foot is embedded in the concrete. Due to its being a forged part, the Swift Lift Anchor does not depend on welds or thread engagement to develop its safe working load. Forging provides maximum safety with its advantageous material structure. This allows the anchor to easily meet the OSHA requirement of a 4 to 1 factor of safety.

In addition to the carbon steel anchors, Type 304 or 316 Stainless Steel Swift Lift Anchors are available on special order. Use stainless steel anchors when maximum protection against corrosion is required.

For safety, refer to the P-52 Swift Lift Anchor Selection Chart on page 31 to determine the actual safe working load of an individual anchor. The MAXIMUM safe working load is clearly visible on the head of the anchor for easy recognition of the appropriate hardware and accessories for use with each Swift Lift Anchor.

To Order:
Specify: (1) quantity, (2) name, (3) system size, (4) length
Example:
200 P-52 Swift Lift Anchor, 1-1/2" long

P-52 Swift Lift Anchor and Recess Plug Dimensions

**Swift Lift Round Recess Plug Dimensions**

<table>
<thead>
<tr>
<th>Swift Lift Anchor</th>
<th>Diameter of Recess Plug</th>
<th>Dimension &quot;Z&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2-7/16&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>2</td>
<td>3-5/16&quot;</td>
<td>1-7/16&quot;</td>
</tr>
<tr>
<td>4</td>
<td>4&quot;</td>
<td>1-13/16&quot;</td>
</tr>
<tr>
<td>8</td>
<td>5&quot;</td>
<td>2-5/16&quot;</td>
</tr>
<tr>
<td>20 Tons</td>
<td>6-3/8&quot;</td>
<td>3-1/8&quot;</td>
</tr>
</tbody>
</table>

Note: The diameter of the narrow recess plug is the same as the diameter of the round recess plug.

**P-52 Swift Lift Anchor Dimensions**

<table>
<thead>
<tr>
<th>Swift Lift Anchor</th>
<th>Dimension &quot;A&quot;</th>
<th>Dimension &quot;B&quot;</th>
<th>Shaft Diameter</th>
<th>Foot Diameter</th>
<th>Head Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/16&quot;</td>
<td>7/8&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
<td>11/16&quot;</td>
</tr>
<tr>
<td>2</td>
<td>7/16&quot;</td>
<td>1-1/16&quot;</td>
<td>9/16&quot;</td>
<td>1-5/16&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>4</td>
<td>9/16&quot;</td>
<td>1-5/16&quot;</td>
<td>3/4&quot;</td>
<td>1-7/16&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>8</td>
<td>9/16&quot;</td>
<td>1-5/8&quot;</td>
<td>1-3/16&quot;</td>
<td>2-5/16&quot;</td>
<td>1-7/8&quot;</td>
</tr>
<tr>
<td>20 Tons</td>
<td>9/16&quot;</td>
<td>2-5/8&quot;</td>
<td>1-1/2&quot;</td>
<td>3-3/4&quot;</td>
<td>2-5/16&quot;</td>
</tr>
</tbody>
</table>

06/08
P-52 Swift Lift Anchor Tensile and Shear Capacity

When anchors are used in the face of thin concrete elements

The following table lists the P-52 Swift Lift Anchors that are currently manufactured. Other sizes and lengths are available on special order. However, the sizes and lengths of anchors shown will handle the majority of flat precast concrete elements.

When the P-52 Swift Lift Anchor is properly embedded in normal weight concrete, the tabulated working loads are applicable for any direction of load. This applies even if the direction of load is parallel to the axis of the anchor, perpendicular to it or at any other angle.

Minimum distance between anchors is twice the minimum edge distance.

It is critical to remember that in order to obtain the safe working loads listed in the table below, the normal weight concrete must have obtained the minimum concrete strength shown, prior to initial load application.

<table>
<thead>
<tr>
<th>Swift Lift Anchor Ton x Length</th>
<th>Safe Working Load</th>
<th>Minimum Concrete Strength</th>
<th>Minimum Edge Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ton x 2-2/3&quot;</td>
<td>1,700 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>1 ton x 3-2/3&quot;</td>
<td>2,000 lbs.</td>
<td>3,200 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>1 ton x 3-8/15&quot;</td>
<td>2,000 lbs.</td>
<td>1,200 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>1 ton x 4-7/16&quot;</td>
<td>2,000 lbs.</td>
<td>1,000 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>2 ton x 2-3/4&quot;</td>
<td>2,100 lbs.</td>
<td>2,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>2 ton x 3-3/8&quot;</td>
<td>2,900 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>2 ton x 3-7/8&quot;</td>
<td>4,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>3 ton x 4-1/2&quot;</td>
<td>4,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 3-3/4&quot;</td>
<td>4,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 3-7/8&quot;</td>
<td>4,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 4-1/2&quot;</td>
<td>5,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 4-3/4&quot;</td>
<td>5,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 6&quot;</td>
<td>7,400 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 6-1/2&quot;</td>
<td>8,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 6-3/4&quot;</td>
<td>8,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 8&quot;</td>
<td>8,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 8-1/2&quot;</td>
<td>8,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>4 ton x 10&quot;</td>
<td>8,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>5 ton x 8-3/4&quot;</td>
<td>8,400 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>5 ton x 10&quot;</td>
<td>8,400 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>6 ton x 10&quot;</td>
<td>9,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>6 ton x 12&quot;</td>
<td>9,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>6 ton x 14&quot;</td>
<td>9,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>8 ton x 10&quot;</td>
<td>11,200 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>8 ton x 12&quot;</td>
<td>13,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>8 ton x 14&quot;</td>
<td>13,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>10 ton x 10&quot;</td>
<td>16,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>10 ton x 12&quot;</td>
<td>16,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>12 ton x 12&quot;</td>
<td>16,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>16 ton x 10&quot;</td>
<td>26,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
<tr>
<td>20 ton x 10&quot;</td>
<td>40,000 lbs.</td>
<td>3,500 psi</td>
<td>10&quot;</td>
</tr>
</tbody>
</table>

Safe Working Loads provide a factor of safety of approximately 4 to 1 in normal weight concrete.
Safe Working Load is based on anchor setback from face of concrete "X" dimension, as shown on page 28.

SAMPLE
NPC – Bidco C-56
Butyl Mastic Sealant
Data Sheet & Installation Instructions

NPC Bidco C-56 Butyl Mastic Joint Sealant is custom engineered to meet the most exacting standards of the precast concrete industry. C-56 remains flexible and forms a permanent bond to a wide variety of substrates including concrete, metals and plastics.

Adhesion and cohesion at the time of installation are excellent and actually improve after the joint has been formed and placed into service. This sealant is designed not to shrink, oxidize or harden and has excellent resistance to temperature extremes, acid and alkaline environments.

C-56 Butyl Mastic Joint Sealant is designed to fully comply with current ASTM Standards and Specification as required by Federal, State and Local agencies or by the precast concrete industry and contractors.

Product Features:
- Reliable in strip or bull nose
- Excellent adhesion
- Non-sticky, non-toxic, plastic bonding

Primary Application:
- Concrete Pipe
- Box Culverts
- Utility Vaults
- Burial Vaults
- Septic Tanks
- Wet Wells
- Sanitary & Storm Sewer Manholes
- Concrete Wall Panel Systems

NPC Bidco C-56 Meets or Exceeds:
- Federal Specifications SS-S-210 A "Sealing Compound, Preformed mastic for Pipe Joints", Type 1, Rope Form
- AASHTO Designation M-198.214, Type B, Flexible Plastic Gasket (Bump Strip)
- ASTM Designation C-791.
Surface Preparation:
Joint surfaces should be clean and dry. Due to the high adhesive quality of NPC Bidco C-56 Sealant, priming of the joint surface is usually not required. In case of wet or unusually demanding applications, it is recommended that an adhesive primer be applied to the joint surface and allowed to dry before application of the Sealant.

Installation Instructions:
The size (cross-section) of C-56 required for a specific joint is determined by the annular space resulting in a fully sealed joint. The joint must be coupled with sufficient compression to form a proper watertight seal.

C-56 bonds instantly to joint surfaces and to itself. Always butt ends of preformed sealant together. Never overlap.

Leave protective plastic backing on sealant during application and remove when joint is ready for coupling.

---

<table>
<thead>
<tr>
<th>Chemical Composition</th>
<th>Specification</th>
<th>C-56</th>
<th>NPC 2620</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consistency</strong></td>
<td></td>
<td>85-95</td>
<td>85-95</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
<td>6050</td>
<td>6050</td>
</tr>
<tr>
<td><strong>Shrinkage</strong></td>
<td></td>
<td>1-2</td>
<td>1-2</td>
</tr>
<tr>
<td><strong>Coefficient of Thermal Expansion</strong></td>
<td></td>
<td>5.3×10^-5</td>
<td>6.2×10^-5</td>
</tr>
<tr>
<td><strong>Water Resistance</strong></td>
<td></td>
<td>203 days</td>
<td>203 days</td>
</tr>
<tr>
<td><strong>Accelerated Aging</strong></td>
<td></td>
<td>60-210 days</td>
<td>210 days</td>
</tr>
<tr>
<td><strong>Chemical Resistance</strong> (Polar Inhibition-30 Days)</td>
<td></td>
<td>No Visible Deterioration</td>
<td>No Visible Deterioration</td>
</tr>
<tr>
<td>Saturated Solutions</td>
<td></td>
<td>No Visible Deterioration</td>
<td>No Visible Deterioration</td>
</tr>
</tbody>
</table>

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Trelleborg

Bidco, Inc.
St. Joe Drive & Lewis Street, P.O. Box M, Park Hills, MO 63601 U.S.A.
Tel: 573-431-1019 800-442-6041 Fax: 573-431-1033  www.trelleborg.com/apc
January 3, 2012

CERTIFICATE OF COMPLIANCE

This is to certify that the EZ-WRAP Rubber Wrap and the Wrap contained in EZ-WRAP Rubber Wrap, as manufactured by Press-Seal Gasket Corporation, Fort Wayne, Indiana, comply with the requirements of ASTM C 877, Type III.

This certification does not include test or testing performance criteria. These are dependent upon material, dimensions and tolerances, as well as field installation conditions, which are outside the control of the manufacturer.

PRESS-SEAL GASKET CORPORATION

Michael R. Miller
Quality Manager
EZ-WRAP

SPECIFICATION and SELECTION GUIDE

BUTYL JOINT WRAP WITH PLASTIC BACKING

The joints and/or joining surfaces of the structures shall be sealed with a butyl-rubber-based tape. The material shall be EZ-WRAP Plastic as supplied by PRESS-SEAL GASKET CORPORATION, Fort Wayne, Indiana, or approved equal. The butyl component of the tape shall consist of 80% (min.) butyl rubber, shall contain 2% or less volatile matter, and shall be .050" thick. The backing component shall be high-density polyethylene film. A release paper may be utilized.

For manholes, the tape width shall be 6" wide. The tape shall be overlapped at least twice its width. The tape shall not be stretched during application. Primer and/or adhesive as recommended by the tape supplier shall be employed for adverse, critical, or other applications.

Testing of joints and compliance with construction requirements shall be conducted in strict conformance with the requirements of the sealant supplier.

BUTYL JOINT WRAP WITH RUBBER BACKING

The joints and/or joining surfaces of the structures shall be sealed with a butyl-rubber-based tape. The material shall be EZ-WRAP Rubber as supplied by PRESS-SEAL GASKET CORPORATION, Fort Wayne, Indiana, or approved equal. The butyl component of the tape shall consist of 50% (min.) butyl rubber, shall contain 2% or less volatile matter, and shall be .030" thick. The backing component shall be EPDM rubber, and shall be .045" thick. A release paper may be utilized.

For manholes, the tape width shall be 6" wide. The tape shall be overlapped at least twice its width. The tape shall not be stretched during application. Primer and/or adhesive as recommended by the tape supplier shall be employed for adverse, critical, or other applications.

Testing of joints and compliance with construction requirements shall be conducted in strict conformance with the requirements of the sealant supplier.

EZ-WRAP PLASTIC

HDPE Plastic Backing .004" Thick

<table>
<thead>
<tr>
<th>Width</th>
<th>Backing</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>HDPE</td>
<td>276.773.6</td>
</tr>
<tr>
<td>9&quot;</td>
<td>HDPE</td>
<td>276.773.9</td>
</tr>
<tr>
<td>12&quot;</td>
<td>HDPE</td>
<td>276.773.12</td>
</tr>
</tbody>
</table>

EPDM Rubber Backing .045" Thick

<table>
<thead>
<tr>
<th>Width</th>
<th>Length</th>
<th>Backing</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>100'</td>
<td>EPDM</td>
<td>276.011.6</td>
</tr>
<tr>
<td>9&quot;</td>
<td>100'</td>
<td>EPDM</td>
<td>276.011.9</td>
</tr>
<tr>
<td>12&quot;</td>
<td>50'</td>
<td>EPDM</td>
<td>276.081.12</td>
</tr>
</tbody>
</table>

ALSO AVAILABLE: EZ-WRAP PACKS are pre-cut packages of EZ-WRAP designed specifically to seal manhole joints. Each EZ-WRAP PACK includes an easy-to-use spray adhesive and pre-cut wraps for standard 48", 60", or 72" manhole joints.

NOTE:
- EZ-WRAP is designed to be used with EZ-STIK No. 4 primer, or our spray adhesive
- EZ-WRAP should not be stretched during installation

If you have any questions, please contact our Customer Service Department or your Press-Seal representative.

PRESS-SEAL GASKET CORPORATION 800-349-7235 Fax (269) 439-1908 email: sales@press-seal.com web: www.press-seal.com

Made in USA

Attachment 3
PS2-PF 004-510 Manhole Step

1 1/8" [28mm]

13" [330mm]

14 3/4" [375mm]

13 3/4" [340mm]

3 3/8" [86mm]

9 1/4" [235mm]

1 3/8" [35mm]

SECTION-A

Concentric Polypropylene Plastic

13mm 1/2" GRADE 50 STEEL REINFORCEMENT

MEETS: ASTM C-478
ASTM D-4101
ASTM A-615
AASHTO M-199

M.A. INDUSTRIES, INC.

P.O. Box 2322, 303 Dividend Dr. • Peachtree City, GA 30269 • Phone (770) 487-7781 • Mailing Sales Fax (770) 487-1482 • Corporate Fax (770) 924-4079
A LISTING OF THE DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE

ENGINEER shall provide a qualified Resident Project Representative (RPR), assistants and other qualified field staff necessary to assist ENGINEER in observing performance of the work of the CONTRACTOR required.

Through more extensive on-site observations of the Work in progress and field checks of materials and equipment by the RPR, assistants and other field staff, ENGINEER shall provide further protection for JCW against defects and deficiencies in the Work; but the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs, or responsibility for CONTRACTOR’S failure to perform the Work in accordance with Project Plans and Specifications.

The duties and responsibilities of the RPR are limited to those of ENGINEER and in the construction Contract Documents, and are further limited and described as follows:

A. GENERAL
   RPR is ENGINEER’S agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR’s action. RPR’s dealings in matters pertaining to the on-site work shall, in general, be with ENGINEER and CONTRACTOR and JCW.

B. DUTIES AND RESPONSIBILITIES OF RPR
   1. Schedules: Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.
   2. Conferences and Meetings: Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
   3. Liaison:
      a. Serve as ENGINEER’S liaison with CONTRACTOR, working principally through CONTRACTOR’S superintendent and assist in understanding the intent of the Project Plans and Specifications; and assist ENGINEER in serving as JCW’s liaison with CONTRACTOR when CONTRACTOR’S operations affect JCW’s on-site operations.
      b. Assist in obtaining from JCW additional details or information, when required for proper execution of the Work.
4. Shop Drawings and Samples:
   a. Record date of receipt of Shop Drawings and Samples.
   b. Receive Samples which are furnished at the site(s) by CONTRACTOR, and notify ENGINEER of availability of Samples for examination.
   c. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by ENGINEER.

5. Review of Work, Rejection of Defective Work, Inspections and Tests:
   a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
   b. Report to ENGINEER and JCW whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
   c. Verify that tests, equipment and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and start-ups.
   d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.

6. Interpretation of Project Plans and Specifications: Report to ENGINEER when clarifications and interpretations of the Project Plans and Specifications are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.

7. Modifications: Consider and evaluate CONTRACTOR'S suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER and JCW. Transmit to CONTRACTOR decisions as issued by ENGINEER and JCW.

8. Records:
   a. Maintain at the job site(s) orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to
the execution of the Agreement, ENGINEER’S clarifications and interpretations of the Project Plans and Specifications, progress reports, and other Project related documents.

b. Keep a diary or log book, recording CONTRACTOR hours on the job site(s), weather conditions, data relative to questions of Work Directive Changes, Change Orders, or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.

c. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors and major suppliers of materials and equipment.

d. Maintain field measurements on the installation location of the sewer main and all apparatuses to be incorporated in obtaining GPS coordinates and creating As-Builts.

9. Reports:
   a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR’S compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
   b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of the Work.
   d. Report immediately to ENGINEER and JCW the occurrence of any accident observed requiring Public Safety response.

10. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Project Plans and Specifications, and have this material delivered to ENGINEER for review and forwarding to JCW.

11. Completion:
   a. Before JCW issues the Project Acceptance, submit to CONTRACTOR, with copy to the ENGINEER and JCW, a list of observed items requiring completion or correction.
   b. Conduct final inspection in the company of ENGINEER, JCW and CONTRACTOR and prepare a final list of items to be completed or corrected.
   c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER and JCW concerning acceptance.
C. LIMITATIONS OF AUTHORITY
Resident Project Representative:

1. Shall not authorize any deviation from the Project Plans and Specifications or substitution of materials or equipment, unless authorized by ENGINEER and approved by JCW.

2. Shall not exceed limitations of ENGINEER'S authority.

3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR'S superintendent.

4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Project Plans and Specifications.

5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.

6. Shall not accept Shop Drawing or Sample submittals from anyone other than CONTRACTOR.

7. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER. Shall, however, identify compaction test locations as necessary.
Date: ________________

Johnson County Wastewater
11811 S. Sunset Drive, Suite 2500
Olathe, Kansas 66061-7061

RE: Letter of Acceptance
Sanitary Sewer Project Name (as noted on the sewer main project plans)
including Plat Name and/or Phase Number as applicable
Sub-District Name with Number, LSD Number, Section Number
KDHE Permit Number

Insert Engineering Firm Name has made final inspection of the above referenced project. This project was accepted by JCW on Acceptance Date.

We certify that this project was completed in accordance with the plans and specifications approved by JCW and by the Kansas Department of Health and Environment on __Date__ under Permit Number ________________.

The project includes _______ linear feet of ________ inch __pipe type__ pipe and ______ number____-foot diameter manholes. (Also include pipe and manhole removals.)

We hereby recommend that the above referenced project be accepted by the JCW subject to a 3-year Maintenance Bond by __Contractor__ and the 3-year Developer Bond Option by __Developer__.

It is understood that all manholes that need adjustment to match the final grade will be the responsibility of the developer.

Sincerely,

P.E. Seal, Signature and date.

Signature by the P.E. sealing the plans.
Engineering Company Name

cc: Developer Contact – Development Company
Sewer Main Contractor – Construction Company

ACCEPTED: Johnson County Wastewater

SIGNATURE: _________________________ DATE: ________________
Aaron Witt, P.E.
Chief Engineer

6/16
MAINTENANCE BOND

BOND NO: _Insert number__

KNOW ALL MEN BY THESE PRESENTS:
That we, {prefill}____________________as Principal, hereinafter referred to as “Contractor,” and ___________ Insert Bond Company as Surety, are held and firmly bond unto Johnson County Wastewater, Johnson County, Kansas, in the full and just sum of {prefilled}_____Dollars (${prefill}) for the payment of which, well and truly to be made, we, and each of us, bind ourselves, our heirs, executors and assigns, themselves, and its successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such, that whereas Contractor has completed the installation of Sanitary Sewers, for the project known as {prefilled}, Sub-District {prefilled}, LSD {prefilled}, Section {prefilled}, and has agreed to guarantee the installation, including all material and workmanship, (and same has been certified by the Engineer and accepted by Johnson County Wastewater as having been built in accordance with the approved plans and specifications) for a period of three (3) years. Contractor agrees and authorizes the County to insert the date of JCW Construction Acceptance (below) to this document following the determination of such date.

NOW THEREFORE, IF SAID Contractor shall guarantee the above work for a period of three (3) years from the JCW Construction Acceptance date, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed, sealed and delivered this _______ day of ____________________, 20__.

by: Contractor Signature______________________________
Legibly Print Name:______________________________
(Principal)

by: Surety Signature______________________________
Legibly Print Name:______________________________
(Surety Attorney-In-Fact)

Address: ______________________________________
Phone: _________________________________
Fax: _________________________________
Email: _________________________________

Date of JCW Construction Acceptance: __________ (to be completed by the COUNTY)

_Power of Attorney attached_
Example - DEVELOPER AGREEMENT

This agreement made and entered into this _____ day of _________________, 20___, by and between {prefilled}______________________________ (hereinafter referred to as the "DEVELOPER"), and Johnson County Wastewater (hereinafter referred to as the "COUNTY"),

WITNESSETH:

WHEREAS, the DEVELOPER has completed, and the COUNTY has formally accepted construction of sanitary sewers upon certain property located within Sewer Sub-District {prefilled}, LSD {prefilled}, Section {prefilled}, project known as {prefilled} a subdivision in the City of {prefilled}, Johnson County, Kansas (hereinafter referred to as the "PROPERTY"); and

WHEREAS, the DEVELOPER wishes to proceed with additional development activities upon the PROPERTY; and

WHEREAS, the COUNTY requires assurance that funds are available to make repairs in the event the sanitary sewer facilities located on the PROPERTY are damaged by such additional development activities; and

WHEREAS, in order to provide such assurance that the DEVELOPER is willing to assume responsibility to repair such damages and to deposit the required security with the COUNTY.

NOW THEREFORE, in consideration of the covenants and terms of this AGREEMENT, the COUNTY and the DEVELOPER agree as follows:

1. The DEVELOPER agrees to deposit the sum of $ {prefilled}, payable to the COUNTY, for the purpose of securing payment for any future repairs to the sewer facilities on the PROPERTY proximately caused by the DEVELOPER’S additional development activities thereon.

2. In the event the DEVELOPER fails to repair to the COUNTY’S satisfaction any damage to the sewer facilities located on the PROPERTY proximately caused by such additional development activities conducted by or on behalf the DEVELOPER within thirty (30) days from the provision of written notice of such damage by the COUNTY to the DEVELOPER, the COUNTY shall retain all such deposited funds and any interest accrued thereon and this AGREEMENT shall upon such occurrence be deemed terminated. Written notice of such damage shall be sent by the COUNTY to the DEVELOPER at the address(es) set forth below.

3. Provided no such damage to the sewer facilities occurs, or if it does occur and it is repaired to the COUNTY’S satisfaction within such thirty (30) day notice period, this AGREEMENT shall otherwise terminate upon the expiration of three (3) years from the date of JCW Construction Acceptance by the COUNTY of the DEVELOPER’S construction of the sanitary sewer main system on the PROPERTY, said date of JCW Construction Acceptance being ____________________.

Developer agrees and authorizes the County to insert the JCW Construction Acceptance date to this
document following the determination of such date. Upon such expiration of this AGREEMENT, the COUNTY shall authorize payment to the DEVELOPER of the sum representing the principal amount of the funds originally placed on deposit less accrued interest.

4. Accrued interest shall be retained by the COUNTY to cover the expenses incurred in administration of this AGREEMENT.

DEVELOPER: JOHNSON COUNTY WASTEWATER:

BY: Developer Signature RECEIVED BY: ____________________________
Signature

______________________________
Legibly Print Name

______________________________
Address

______________________________
Phone and Fax

______________________________
Email address

NOTARY

State of __________________________ )
SS
County of __________________________ )

Subscribed and sworn to before me this ___ day of ____________, 20__.

______________________________
Notary Signature
Notary Public

My Commission Expires: ________________
Example - ESCROW AGREEMENT

This agreement entered into this _______ day of _____________ 20_____, between

__________________________, hereinafter referred to as the "Escrow Agent," and {prefilled}______________________, hereinafter referred to as the "Developer," is entered into to comply with Johnson County Wastewater requirements for ensuring the repair of facilities damaged by development-related activities.

The Developer agrees to purchase and deliver to the Escrow Agent a certificate of deposit issued by a Kansas Bank or Savings and Loan Association in the amount of $ {prefilled}, which amount the Developer warrants is the amount established by Johnson County Wastewater as the required bond. The Developer may not assign, pledge as security for any loan, or otherwise encumber the certificate during the period of this agreement.

In order for Johnson County Wastewater to accept the sanitary sewer project known as {prefilled}_________ Sub-District {prefilled}, LSD {prefilled}, Section {prefilled}, The Developer hereby grants Johnson County Wastewater a security interest in the following described property: Certificate of Deposit number {prefilled}, in the amount of $ {prefilled}, to be held in trust by the Escrow Agent for and made payable to Johnson County Wastewater to secure payment for repair of facilities damaged by development-related activities.

The Escrow Agent hereby acknowledges receipt of notification of Johnson County Wastewater’s security interest in the above described property.

The Escrow Agent acknowledges receipt of the aforesaid certificate and will not return said certificate to the Depositor nor allow said certificate to be assigned, pledged, or otherwise encumbered during the period of this agreement except as provided below. The Escrow Agent shall remit interest on the certificate annually to the Developer.

In the event the Developer fails to repair damage to Johnson County Wastewater facilities after thirty (30) days written notice thereof, the Escrow Agent, upon written demand from Johnson County Wastewater, shall remit the entire proceeds of the Certificate of Deposit and any interest accrued to date of notification to Johnson County Wastewater or its authorized agent. Upon such remittance to Johnson County Wastewater, this agreement shall be deemed terminated.

This agreement shall expire three (3) years from the date of JCW Construction Acceptance of the sanitary sewer, said date being ___________________. Developer and Escrow Agent agree and authorize County to insert the JCW Construction Acceptance date following the determination of such date. Upon expiration of the agreement, the Escrow Agent is authorized to release the Certificate of Deposit to the Developer if no notice of damage to the facilities of Johnson County Wastewater has been sent to the Developer. A copy of any notice to the Developer shall also be sent to the Escrow Agent.

Nothing in this agreement shall be so construed to increase the liability of the Escrow Agent beyond the amount and provisions of this agreement.
Dated at Insert Bank this ____ day of ____________, 20__.

Bank Agent’s Signature  
Escrow Agent Signature  

Legibly Print Name and Title  
Address, Phone and Fax  

Email address  

NOTARY  
State of __________________  
County of __________________  

Subscribed and sworn to before me this ____ day of ____________, 20__.

My Commission Expires: __________________
Example - IRREVOCABLE LETTER OF CREDIT

DATE: ______________________________ LETTER OF CREDIT NO.: Insert No. __________

AMOUNT: $ {prefilled}

TO: Johnson County Wastewater
11811 S. Sunset Drive, Suite 2500
Olathe, KS 66061-7061

The ______________________________, hereinafter referred to as the "Bank", hereby establishes its Irrevocable Letter of Credit authorizing Johnson County Wastewater of Johnson County, Kansas, hereinafter referred to as the "County", to draw from the Bank for the account of {prefilled} ______________________________, hereinafter referred to as the "Developer", by a single draft at sight for 100% of value noted above to be accompanied by the original Letter of Credit. The conditions of this obligation are such that the Developer is now proceeding with additional development activities upon the property and assumes liability for damage to sewage facilities, Sewer Sub-District {prefilled}, LSD {prefilled}, Section {prefilled}, proximately caused thereby when said damage is caused by or due to development-related construction activities within {prefilled} ______________________________ a subdivision in the City of {prefilled}, Johnson County, Kansas.

In the event facilities damaged by development-related activities for the above mentioned project are found during the three (3)-year inspection, all funds under this Letter of Credit shall be made available, upon delivery of your sight draft, together with your written notice stating the nature of the discrepancy.

The draft must be dated and presented to the Bank for payment no later than the close of the Bank’s regular business day on ______________. Whereas, the Bank agrees and authorizes the County to insert the final date of draw from the account to this document following the determination of such date, being three (3) years from the date of JCW Construction Acceptance. The draft must be marked “Drawn under the _______ Insert Bank ______________ Kansas, Letter of Credit No. __________.”
This credit is subject to Article V of the Uniform Commercial Code as enacted in the State of Kansas (and subject to the “Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600”).

The Bank agrees that this credit shall be duly honored on due presentation to the drawee by drawers, endorsers and bona fide holders hereof drafts in compliance with the terms stated herein.

Payment cannot be made unless the above document is furnished exactly as requested.

BY Bank Agent's Signature

____________________________
Signature

____________________________
Legibly Print Name and Title

____________________________
Bank

____________________________
Address

____________________________
Phone and Fax

____________________________
Email
Example - DEVELOPER BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, {prefilled} ________________, as Principal, hereinafter referred to as “Developer”, and
________________, as Surety, are held and firmly bound unto Johnson County Wastewater, Johnson County, Kansas, in the full and just sum of $ {prefilled}, for payment of which, well and truly to be made, we, and each of us, bind ourselves, our heirs, executors and assigns, themselves, and its successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such, that whereas “Developer,” upon completion of the installation of Sanitary Sewers, (and same has been certified by the Engineer and accepted by Johnson County Wastewater as having been built in accordance with the approved plans and specifications) is now proceeding with additional development activities upon the property; and whereas, the Developer assumes liability for damage to sewage facilities proximately caused thereby when said damage is caused by or due to development-related construction activities, for the period of three years beginning on the date of JCW Construction Acceptance for the project known as {prefilled}__, Sub-District ____, LSD ____, Section ____. Developer agrees and authorizes the County to insert the JCW Construction Acceptance date (below) to this document following the determination of such date.

NOW, THEREFORE, if said Developer shall guarantee the above work for a period of three (3) years from date of JCW Construction Acceptance, then the obligation shall be null and void, otherwise to remain in full force and effect.

Signed, sealed and delivered this _____ day of ________________, 20__.

by: Developer Signature _______________________________________________________________________
    Principal (Signature and Legibly Print Name)

by: Surety Signature _______________________________________________________________________
    Surety Attorney-in-fact (Signature and Legibly Print Name)

________________________________________________________________________________________
Address

________________________________________________________________________________________
Phone and Fax

    Power of Attorney attached.

Date of JCW Construction Acceptance: ________________ (to be completed by the COUNTY)