

# River Heights City

## SSMP – General Information

This Sanitary Sewer Management Plan was adopted by the River Heights City Council on February 23, 2016.

The responsible representative(s), position and phone number for River Heights City with regard to this SSMP is/are

Clayten Nelson

Public Works Supervisor

River Heights City

520 S 500 E

River Heights, UT 84321

435-752-2646 x2

### **Description of Roles and Responsibilities**

The following positions have the described responsibility for implementation and management of the specific measures as described in the SSMP.

(Include specific public entity information below]

#### ***Manager***

This individual is responsible for overall management of the sanitary sewer collection system. Responsibilities include working with governance to assure sufficient budget is allocated to implement the SSMP, maintenance of the SSMP documentation, development of a capital improvement program and general supervision of all staff.

#### ***Superintendent***

This individual is responsible for daily implementation of the SSMP. This includes maintenance activities, compliance with SORP requirements, and monitoring and measurement reporting requirements.

***Pretreatment Program Coordinator***

This individual is responsible for implementation of the pretreatment program including the fats oil and grease program.

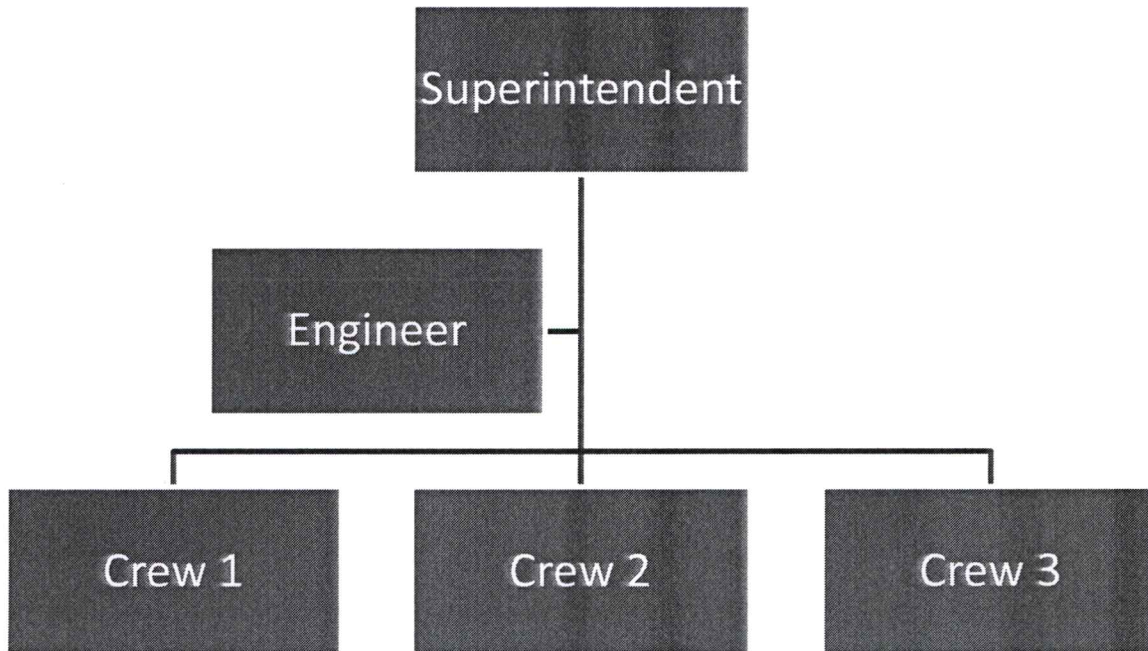
***Engineer***

This individual is responsible for the development and maintenance of collection system design standards, maintenance of collection system mapping and maintenance of the SECAP program.

[note that the above positions may be multiple people or it may be all one person depending on the size of the organization]

**Organization Chart**

Below is the organization chart associated with the SSMP [this could be a large chart or just one person depending on organization size]:



# River Heights City

## Sanitary Sewer Management Plan

### Introduction

River Heights City is a public entity established in Utah under the Utah State Code. River Heights City was established in 1882 and provides sewage collection to River Heights City and its residents. This Sewer System Management Plan (SSMP) manual has been established to provide a plan and schedule to properly manage, operate, and maintain all parts of the sewer collection system to reduce and prevent SSOs, as well as minimize impacts of any SSOs that occur. The Management for this entity recognizes the responsibility it has to operate the sewer system in an environmentally and fiscally responsible manner. As such, this manual will cover aspects of the collection system program necessary to provide such an operation. This manual may refer to other programs or ordinances and by reference may incorporate these programs into this manual.

### Definitions

The following definitions are to be used in conjunction with those found in Utah Administrative Code R317. The following terms have the meaning as set forth:

- (1) "BMP" means "best management practice".
- (2) "CCTV" means "closed circuit television.
- (3) "CIP" means a "Capital Improvement Plan".
- (4) "DWQ" means "the Utah Division of Water Quality".

(5) "FOG" means "fats, oils and grease". This is also referred to as a Grease Oil and Sand Program (GOSI).

(6) "I/I" means "infiltration and inflow".

(7) "Permittee" means a federal or state agency, municipality, county, district, and other political subdivision [public entity] of the state that owns or operates a sewer collection system or who is in direct responsible charge for operation and maintenance of the sewer collection system. When two separate federal or state agency, municipality, county, district, and other political subdivision of the state are interconnected, each shall be considered a separate Permittee.

(8) "SECAP" means "System Evaluation and Capacity Assurance Plan".

(9) "Sewer Collection System" means a system for the collection and conveyance of wastewaters or sewage from domestic, industrial and commercial sources. The Sewer Collection System does not include sewer laterals under the ownership and control of an owner of real property, private sewer systems owned and operated by an owner of real property, and systems that collect and convey storm water exclusively.

(10) "SORP" means "Sewer Overflow Response Plan"

(11) "SSMP" means "Sewer System Management Plan".

(12) "SSO" means "sanitary sewer overflow", the escape of wastewater or pollutants from, or beyond the intended or designed containment of a sewer collection system.

(13) "Class 1 SSO" (Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that:

(a) affects more than five private structures;

(b) affects one or more public, commercial or industrial structure(s);

(c) may result in a public health risk to the general public;

(d) has a spill volume that exceeds 5,000 gallons, excluding those in single private structures; or

(e) discharges to Waters of the State of Utah.

(14) "Class 2 SSO" (Non Significant SSO) means a SSO or backup that is not caused by a private lateral obstruction or problem that does not meet the Class 1 SSO criteria.

(15) "USMP" means the "Utah Sewer Management Program".

## **General SSO Requirements**

The following general requirements for SSO's are stipulated in R317-801 and are included here as general information.

*1) The permittee shall take all feasible steps to eliminate SSOs to include:*

*(a) Properly managing, operating, and maintaining all parts of the sewer collection system;*

*(b) training system operators;*

*(c) allocating adequate resources for the operation, maintenance, and repair of its sewer collection system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures in accordance with generally acceptable accounting practices; and,*

*(d) providing adequate capacity to convey base flows and peak flows, including flows related to normal wet weather events. Capacity shall meet or exceed the design criteria of R317-3.*

*(2) SSOs shall be reported in accordance with the requirements below.*

*(3) When an SSO occurs, the permittee shall take all feasible steps to:*

*(a) control, contain, or limit the volume of untreated or partially treated wastewater discharged;*

*(b) terminate the discharge;*

*(c) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water; and,*

(d) *mitigate the impacts of the SSO.*

## **SSO Reporting Requirements**

R317-801 stipulates when and how SSO's are reported. Following are those reporting requirements as of 04/23/2012.

*SSO REPORTING. SSOs shall be reported as follows:*

*(1) A Class 1 SSO shall be reported orally within 24 hrs and with a written report submitted to the DWQ within five calendar days. Class 1 SSO's shall be included in the annual USMP report.*

*(2) Class 2 SSOs shall be reported on an annual basis in the USMP annual report.*

*ANNUAL REPORT. A permittee shall submit to DWQ a USMP annual operating report covering information for the previous calendar year by April 15 of the following year.*

## **Sewer Use Ordinance**

River Heights City has a sewer use ordinance that has been adopted by the governing body. This ordinance contains the following items as stipulated by Utah State Code R317-801:

1. Prohibition on unauthorized discharges,
2. Requirement that sewers be constructed and maintained in accordance with R317-3,
3. Ensures access or easements for maintenance, inspections and repairs,
4. Has the ability to limit debris which obstruct or inhibit the flow in sewers such as foreign objects or grease and oil,
5. Requires compliance with pretreatment program [delete if no pretreatment program exists],
6. Allows for the inspection of industrial users, and

7. Provides for enforcement of for ordinance or rules violations.

The following elements are included in this SSMP:

- General Information
- Operations and Maintenance Program
- Sewer Design Standards
- Sanitary Sewer Overflow Response Plan
- Grease, Oil and Sand Interceptor Management Program
- System Evaluation and Capacity Assurance Plan
- SSMP Monitoring and Measurement Plan
- Sewer System Mapping Program
- Basement Backup Program [Optional]
- No Fault Sewage Backup Claims Program [Optional]

This program is intended to be a guidance document and is not intended to be part of a regulatory requirement. As such, failure to strictly comply with documentation requirements is, in and of themselves, not a failure of the program's effectiveness. Documentation failures are intended to be identified during system self-audits and will be addressed as training opportunities. Significant system failures will be followed up with corrective action plans. This corrective action process will be implemented by all individuals involved in the SSMP program. Not all [public entity] employees will necessarily be involved in the collection system operations. As such, not all employees will receive program training. Finally, although not a part of this SSMP program, River Heights City is an active participant in the Blue Stakes of Utah Utility Notification system. This system, regulated under title 54-8A of the Utah State Code, stipulates utility notification of all underground operators when excavation takes place. The intent of this regulation is to minimize damage to underground facilities. River Heights City has a responsibility to mark their underground sewer facilities when notified an excavation is going to take place. Participation in the Blue Stakes program further enhances the protection of the collection system and reduces SSO's.

# River Heights City

## Operations and Maintenance Program

River Heights City has established this sanitary sewer system operations and maintenance program to ensure proper system operations, to minimize any basement backups or SSOs, and to provide for replacement, refurbishment, or repair of damaged or deteriorated piping systems. The combined maintenance program should insure that the environment and health of the public are protected at a reasonable cost for the end users. To this end, the following areas are described and included in this maintenance program:

- System Mapping
- System Cleaning
- System CCTV Inspection
- Manhole Inspection
- Defect Reporting
- Damage Assessment

### System Mapping

An up to date map is essential for effective system operations. River Heights City has assigned the mapping responsibility to the facility engineer and Public works Director who will prepare and maintain current mapping for the entire sanitary sewer system. Mapping may be maintained on either paper or in a graphical information system (GIS) or a combination of both. Current mapping is available at the following locations:

520 South 500 East  
River Heights, UT 84321

Should any employee identify an error in the mapping, they should document the error on a defect report and give it to the Public Works Director.

### System Cleaning

Sanitary sewer system cleaning is accomplished through various means and methods.



River Heights City has established a goal to clean the entire system every five years. Based on experience over the past 20 years, this frequency significantly reduces the number of basement backups, controls grease problems and flushes any bellies in the system. In addition River Heights City has a listing of identified hot spots which are maintained at a higher frequency. Systems which may have roots are mechanically rodded or hydraulically cut out and areas where restaurants are close together are hydraulically flushed with a high pressure jet truck. The following methods are employed to provide system cleaning:

- Hydraulic Cleaning
- Mechanical Rodding.
- Chemical Root Control
- Chemical FOG Control

Cleaning records are maintained at the River Heights City Office 520 S. 500 E. Contractors are required to provide cleaning records associated with their work. Cleaning history may also be entered into the GIS; however, this is not always necessary. Should the cleaning process identify a serious defect, the problem should be reported on a Defect Report Form. The Public Works Director should be given the defect reports for further action. The defect report should be specific as to location and type of problem. A copy of the Defect Report Form is included at the end of this narrative section. A summary of cleaning activities shall be prepared annually by the Public Works Director or designee. This summary will normally be presented to the River Heights City Council.

#### System CCTV Inspection

Closed Circuit TV inspections of the sanitary sewer system are used to assess pipe condition and identify problems or possible future failures which need current attention. The CCTV process also identifies the piping condition to allow for replacement prior to failure. Generally River Heights City will conduct CCTV inspection with its own staff, contractor or both. Inspections of the system will occur every 10 to 15 years. This inspection frequency is based on the pipe aging process. As such, once the system has been inspected completely, change usually occurs gradually. CCTV will also be employed when a systems operation or capacity is questioned or when an SSO occurs. Any defects identified during the CCTV process should be reported on a Defect Report Form and the form should be given to the Public Works Director for possible repairs. Documentation of CCTV activities will be maintained at the River Heights City Office

520 S. 500 E. When contractors are employed to inspect the sanitary sewer system they will be required to submit records for their work. The Public Works Director will prepare an annual summary of CCTV completed for that calendar year.

#### Manhole Inspection

River Heights City schedules annual inspection of the sanitary sewer manholes (M/H). The M/H inspection involves the identification of foreign objects and surcharging that may be present. Crews inspecting the manholes will be given maps by the Public Works Director who will monitor the progress and completeness of the inspection process. When a potential defect is identified the manhole should be flagged. Flagged manholes should be checked by an operator within several days to determine further action. If, during the inspection process, the inspection crew believes a problem is imminent, they should immediately cease inspecting and inform the Public Works Director of the problem. A cleaning crew should be dispatched immediately to ensure correct system operations. All inspection records should be retained for documentation of work performed.

#### Defect Reporting

Defect Reports generated through the cleaning, CCTV inspection or manhole inspection programs will be prioritized for correction by the Public Works Director. Any defects which have the potential for catastrophic failure and thus create a sanitary sewer overflow should be evaluated immediately and discussed with the Public Works Director for repair. Repair methods may include:

- Spot Excavation Repairs
- Spot Band Repairs
- Segment Excavation Replacements
- Segment Lining
- Manhole Rehabilitation

When a defect is not flagged for immediate repair, it should be considered for placement on the "hot spot" list. This will allow for vigilant maintenance to ensure failure and a subsequent sanitary sewer overflow do not take place. Defect reports should be used in the Budget process to determine what financial allocation should be made in the next Budget year. The Public Works Director should include outstanding defects in the annual report.

## Collection System Damage

Collection damage may occur as a result of multiple factors, some identified as a result of inspection activities and some identified as a result of damage by third parties such as contractors.

### Damage Identification

The identification of system damage which may result in an SSO or basement backup is important to prevent environmental, public health, or economic harm. Identification of damage may be from either internal activities or external activities.

Internal activities which may result in the identification of damage include the following:

1. Collections Maintenance Activities
2. CCTV Inspection Activities
3. Manhole Inspection Activities

These three activities are discussed in this Maintenance Program and the identification of damage will result in the generation of a Defect Report. Generally, damage identification is an iterative and continuous process.

External activities which identify damages include:

1. Contractor Notification of Damage
2. Directional Drilling Notification of Damage
3. Public Damage Complaints

All three of these notifications generally require immediate response. Staff should respond and evaluate the seriousness of the damage and the effect on the environment. Damages which include a release to the environment should be handled in accordance with the SORP. Damages which cause a basement backup should trigger the Basement Backup program. Damages which remain in the trench should be deemed minimal and do not require more action than the repair of the damage.

Whatever the cause of collection system damage, the response should be expeditious to prevent environmental or economic harm. City staff should

consider all damages an emergency until it is shown by inspection to be a lower priority.

### Damage Response Actions

When damages occur in the collection system, the following actions help define the path staff should take. These action plans are not inclusive of all options available but are indicative of the types of response that may be taken.

#### **Stable Damage**

Inspection activities may show a system damage which has been there for an extended period of time. Such damage may not require immediate action but may be postponed for a period of time. When stable damage is identified and not acted upon immediately, a defect report should be prepared. If such a defect is identified and repaired immediately, a defect report is not needed. An example of stable damage could be a major crack in a pipeline or a severely misaligned lateral connection where infiltration is occurring.

#### **Unstable Damage**

Unstable damage is damage which has a high likely hood that failure will occur in the near future. Such damage may be a broken pipe with exposed soil or a line which has complete crown corrosion. In these cases, action should be taken as soon as there is a time, a contractor, materials and other necessary resources available. When such unstable damage is identified, if possible, consideration should be given to trenchless repairs which may be able to be completed quicker than standard excavation. Immediately after identification the Manager should be contacted to review and take care of budget considerations.

#### **Immediate Damage**

When a contractor or others damage a collection line such that the line is no longer capable of functioning as a sewer, this immediate damage must be handled expeditiously. Such damage allows untreated wastewater to pool in the excavation site, spill into the environment or possibly backup into a basement. Under such conditions priority should be given to an immediate repair. Since excavation damage may be a result of contractor negligence or it could be a failure of [public entity] to adequately protect

the line by appropriately following the Damages to Underground Utilities Statute 54-8A, priority should be given to effecting a repair and not to determining the eventual responsible party.

As can be determined from the above action plans, priority should always be preventing SSO's and attendant environmental damage, to prevent basement backups and financial impacts, and to prevent public health issues.

## **River Heights City**

# **Sewer Design Standards**

Included in this section are the sanitary sewer design standards for River Heights City. These design standards are intended to be used in conjunction with Utah Administrative Code R317-3. Where a conflict exists between these two standards, the Administrative Code shall prevail.

## SECTION 11

### SANITARY SEWERS

1. Poly (Vinylchloride) Sewer Pipe (PVC)

- a. General. This specification covers requirements for PVC pipe and fittings to be furnished for sanitary sewer.

Pipe and fittings produced to the standards below should be installed in accordance with ASTM recommended practice D-2321, underground installation of flexible thermoplastic sewer pipe. The plastics nomenclature used in the specifications is in accordance with the definitions given in nomenclature D-883, unless otherwise indicated.

- b. Applicable Documents. PVC sewer pipe furnished under this specification shall meet the

following ASTM standards: D-256, Impact Strength. D-638, Tensile Strength and Modulus of Elasticity, D-648, Deflection temperature under load of 264 psi, D-1784, Specifications for rigid Poly(Vinylchloride) compounds and chlorinated Poly(Vinylchloride) compounds, D-3034 (SDR 35) type PSP Poly(Vinylchloride) (PVC) sewer pipe and fittings. The requirements of this specification are intended to provide pipe fittings suitable for non-pressure drainage of sewage.

- c. Materials: Basic materials of the pipe and fittings shall be PVC plastic having a self-classification of 12454-B and shall meet the minimum physical properties and chemical resistance of the PVC compound as defined in ASTM D-1784.
- d. Connection Joints. All sizes and classification of PVC gravity sewer pipe shall have bell and spigot joints utilizing rubber gasket for sealing conforming to ASTM C-443. The gasket shall be confined in a groove on the spigot so that pipe movement or hydrostatic pressure cannot displace the gasket.
- e. Workmanship. The pipe and fittings shall be homogenous throughout and free from visible cracks, holes, foreign inclusions or other injurious defects. The pipe shall be as uniform as commercially practical in color, density, and other physical properties.
- f. Requirements. All materials, dimensions, strengths, qualities, and test requirements shall meet the applicable ASTM requirements. All material used shall be new and shall be protected from any long exposure to the sun.
- g. Inspections. Inspection of the material shall be made as agreed upon by the purchaser and the seller as part of the purchase contract.
- h. Certification. When agreed upon in writing by the purchaser and the seller the certification shall be made upon the basis of the acceptance of the material. This shall consist of a copy of the manufacturers test report or a statement by the seller, accompanied by a copy of the test results, that the material has been sampled, tested, and inspected in accordance with the provisions of the specification. Each certification so furnished shall be signed by an authorized agent of the seller or manufacturer. Copies will be furnished to the City and/or to the City Engineer.
- i. Marking. Pipes in compliance with this standard shall be clearly marked at intervals of five



(5') feet or less. The marking on SDR-35 shall be:

1. Mfg's Quality
2. Nominal Pipe Size
3. PVC 12454-B
4. SDR-35
5. PVC Sewer Pipe
6. ASTM D3034

2. Concrete Sewer Pipe

- a. Description: Sanitary sewers shall include the performance of all operations necessary to lay sewer pipe mains, wye branches, individual sewer mains to manholes, test mains for leaks and all incidental work necessary to complete the work in a satisfactory manner.
- b. Sewer Pipe: All pipe for the sanitary sewer mains shall be bell and spigot. The type of pipe the Contractor proposes to install shall have approval before work is commenced. No interchanging of type of pipe will be allowed.
- c. Non-Reinforced Concrete Sewer Pipe: Non-Reinforced concrete sewer pipe shall conform to Concrete Sewer Pipe ASTM Designation C-14.
- d. Reinforced Concrete Sewer Pipe: Reinforced concrete sewer pipe shall conform to the requirements for "Reinforced Concrete Sewer Pipe: ASTM Designation C-73. Cement used in the pipe shall conform to Type 11A, (the air entraining agent shall be inter-ground at the mill), low alkali cement, conforming to Federal Specifications, 192a, of ASTM Designation C-15.
- e. Length of Pipe: Pipe thirty-six (36") inches in diameter and under shall be at least thirty-six (36") inches long, except specials. Pipe over thirty-six (36") inches in diameter shall be at least as long as the inside diameter. The maximum length of pipe shall be twenty-four (24') feet.
- f. Testing: Random samples of pipe and all fittings and specials such as short radius bands, wyes and tees shall be tested as specified for the type of pipe being used.

g. Laying: No pipe shall be laid under any circumstances until the pipe has been tested, and the samples selected have satisfactorily passed the requirements. All pipe shall be laid up-grade from structure with the bell end of the pipe up-grade. All pipe shall be laid true to line and grade, with a uniform bearing under the full length of the barrel of the pipe, and suitable excavation shall be made to receive the bell of the pipe. All adjustments to grade shall be made by scraping away or tamping earth under the pipe. Wedging or blocking under the hub will not be permitted. As each unit of pipe is laid a sufficient amount of selected backfill materials shall be carefully placed and thoroughly tamped about the lower portion of the pipe to hold it firmly in position. If adjustment of the position of a length of pipe is required after it has been laid, it shall be removed and rejoined as for a new pipe. When laying is not in progress the ends of the pipe lines shall be kept closed to prevent the entrance of foreign material.

h. Rubber Gasket Joints: Pipe for rubber gasket joints shall be of the bell and spigot type, detail of the type the Contractor proposes to use shall be furnished with the bid and must have the approval of the Owners Engineer before the work is to be commenced. The joint shall be so designed as to provide for self-centering and when assembled, to compress the gasket to form a water tight seal. The pipe design and gasket shall be such that movement of the pipe or hydrostatic pressure cannot displace the gasket. In order to assure watertightness the clearance between the inner surface of the bell and the outer surface of the spigot, as well as the dimensional tolerances of this annular space, shall be such that the gasket residual deformation is neither less than twenty (20%) percent nor more than forty-five (45%) percent when the spigot is seated to the full depth of the bell socket.

i. Rubber Gaskets: The rubber gasket for use on pipe shall be cured in such a manner that any cross section will be dense, homogeneous, and free from porosity and other imperfections. The gasket shall be extruded or molded to the specific size within a tolerance of plus or minus 1/32 inch at any cross section of the gasket. The gasket shall be fabricated from a high-grade tread-type compound. The basic polymer shall be natural rubber, or a copolymer of butadiene-styrene synthetic. The compound shall have the following characteristics:

Tensile strength, PSI, minimum.....	2,300
Elongation at break, percent, minimum.....	425
Shore Durometer (Type A).....	40 to 65
Absorption of Water, by weight 2 days at	

70 degree C, percent maximum.....	5
Compression set (constant deflection), percent of original deflection maximum.....	20
Tensile strength after oxygen bomb aging (48 hours, 158 degrees F, 300 per square inch), percent of tensile strength before aging, minimum....	80
Increase in Shore Durometer hardness after oxygen bomb aging, maximum increase over original Shore Durometer.....	8
Acetone, extract percent, maximum.....	15

The physical properties of the rubber compound shall be determined by test performed in accordance with appropriate section of Federal Specifications ZZ-R-601a, except for Shore Durometer and compression set. All tests for compression set shall be made in accordance with method B, ASTM Designation D395 for compression set of vulcanized rubber under constant deflection. Tests for Shore Durometer shall be made in accordance with ASTM designation D676. The Contractor shall furnish certified copies of test reports as evidence of the rubber compound used in all rubber gaskets before any gaskets are used to join pipes. All rubber shall be stored in as cool a place as practicable, preferably at 70 degrees F. or less, and in no case shall the rubber for joints be stored exposed to the direct rays of the sun. All rubber gaskets shall be stored so as to permit free circulation of air about the rubber.

In all cases during the laying of the pipe extreme care must be taken to see that the rubber gaskets are properly fitted in place and at all times are free from twisting and unusual displacement.

### 3. Sewer Appurtenances

#### a. Manholes:

1. General: This item shall consist of the construction or installation of concrete manholes of the various types and diameters shown on the plans and at the designated locations. The item shall include: Ring and cover, steps, and all other incidentals necessary to fully complete the manholes.

2. Precast Manholes: Precast manholes shall consist of sections of rings of tongue and grooved reinforced concrete pipe on a cast in place foundation. Both circular and conical sections shall meet the requirements of "Reinforced Concrete Sewer Pipe (ASTM Specifications C 75-56)."

Approved eccentric manholes with rungs will be accepted. Concentric manholes will not be accepted.

The precast base sections shall be recessed on the bottom edge to receive the pipe entering the manhole. The base section shall extend at least two (2") inches into the concrete of the floor. When practical the base section shall be set in position before the floor is poured; in any case the base section shall be imbedded in the floor before the concrete has taken its initial set.

Joints between sections shall be set in (a) cement grout, or (b) asphaltic sewer joint compound. Joints shall be water tight.

3. Manhole covers: The Contractor will furnish and install the cast iron frame and cover shown on the plans as a part of the manhole.
4. Castings, Quality of Metal: All castings shall be made of good quality cast iron, strong, tough, straight grained and free from flaws, cracks, blow holes or other defects and of exact form and dimensions shown on the plans. They shall be evenly and firmly set and imbedded as to afford the chance of any movement. The seats and bearings of all frames and covers shall be machine faced and shall fit evenly and firmly and so made as to be interchangeable. Iron shall conform to "Standard Specifications for Gray Iron Castings" ASTM Specification A 48-48 or Class 30.
5. Grade: Necessary adjustment to bring the cover to finished street grade shall be required.
6. Manhole Ladders: Manhole ladder steps as shown on manhole plans shall be formed from 3/4 inch mild steel bar coated with polyethylene or cast iron rungs.
7. Split Pipe and Stubs in Manholes: The Contractor will be required to furnish and

place, where plans may require, split pipe in the bottom of the manhole and inlets of the size and shape shown on the plans. The inlets, when required shall be fitted with a cap of the same description as specified for Wye Branches.

8. Revisions to Existing Manholes: All work required to revise or modify existing manholes as shown on the plans necessary to complete the project shall be done by the contractor and no extra compensation shall be allowed for this work. This work shall include such incidentals as raising manhole floors, providing drop type inverts, new invert openings, etc.
  - b. Sewer Laterals: Any lateral connections into new sewer mains shall be through pre-formed wye's or tees. All connections into existing sewer mains shall be done with a sewer tapping machine and tapping saddle as shown on the City Standard Drawings, or by other approved means. Minimum slope for four inch (4") lateral is two percent (2%) unless otherwise approved by the City Engineer. Lateral sizes other than four inch (4") shall be approved by the City Engineer. Cementing of joints is allowed.
4. Separation of Water Mains from Sewer Lines: horizontal distance between water mains and sanitary sewer lines shall be at least ten feet (10'). Where a water main and a sewer line cross, the water main shall be at least eighteen inches (18") above the sewer line. Measure separation distances from the nearest edge of the facilities. Water and sewer lines shall not be installed in the same trench. Any exceptions shall be approved by the City Engineer. See State of Utah Administrative Rules for Drinking Water Systems for special provisions and approval of exceptions as applicable.
5. Tests on Sewer Lines: The Contractor will be required to conduct an air test and television inspection test on all sewer main lines in the presence of the City Engineer or his representative. Sewer laterals are to be tested with the sewer main line. Television inspection of laterals is not required. In addition, any or all of the following other required tests may be conducted on sewer mains in the presence of the City Engineer or his representative as requested. Tests shall be performed as follows:
  - a. Displacement Test: In conducting the displacement test a light will be flashed between manholes or, if the manholes have not as yet been constructed, between the locations of the manholes, by means of a flashlight or by reflecting sunlight with a mirror. If the illuminated interior of the pipe shows broken, misaligned, or displaced pipe or other

defects, the defects designated by the City Engineer shall be remedied at the Contractor's expense.

b. Infiltration Test: The Contractor shall furnish labor, equipment and materials, including pumps, and shall conduct infiltration tests on the completed sewer in the presence of the Engineer or his designated representative before it can be placed into service. The Contractor shall furnish and install the measuring weirs or other measuring devices. The length of line to be tested at any time shall be subject to the approval of the City Engineer. The maximum allowable infiltration shall not exceed 150 gallons per inch diameter per mile per 24 hours for all installed sewer pipe. If the quantity of infiltration is in excess of the maximum allowable, the leaking joint shall be repaired to the satisfaction of the City Engineer at the expense of the Contractor.

c. Ex filtration Test: In areas where groundwater does not exist, ex filtration tests may be required in lieu of infiltration tests.

1. Each section of the sewer shall be tested between successive manholes by closing the lower end of the sewer to be tested and the inlet sewer of the upper manhole with stoppers. The pipe and manhole shall be filled with water to a point approximately four feet above the invert of the sewer at the center of the upper manhole.

2. The allowable leakage will be computed by the formula:

$$E = 0.25 D H$$

Where: E is the allowable leakage in gallons per minute per 1000 feet of sewer tested

D is the internal diameter of the pipe in inches

H is the difference in elevation in the water surface in the upper manhole and the invert of the pipe at the lower manhole (feet)

3. If the leakage from the sewer, as shown by the test, exceeds that allowed by the formula, the Contractor shall make the necessary corrections to reduce the ex filtration to within permissible limits as determined by additional testing.

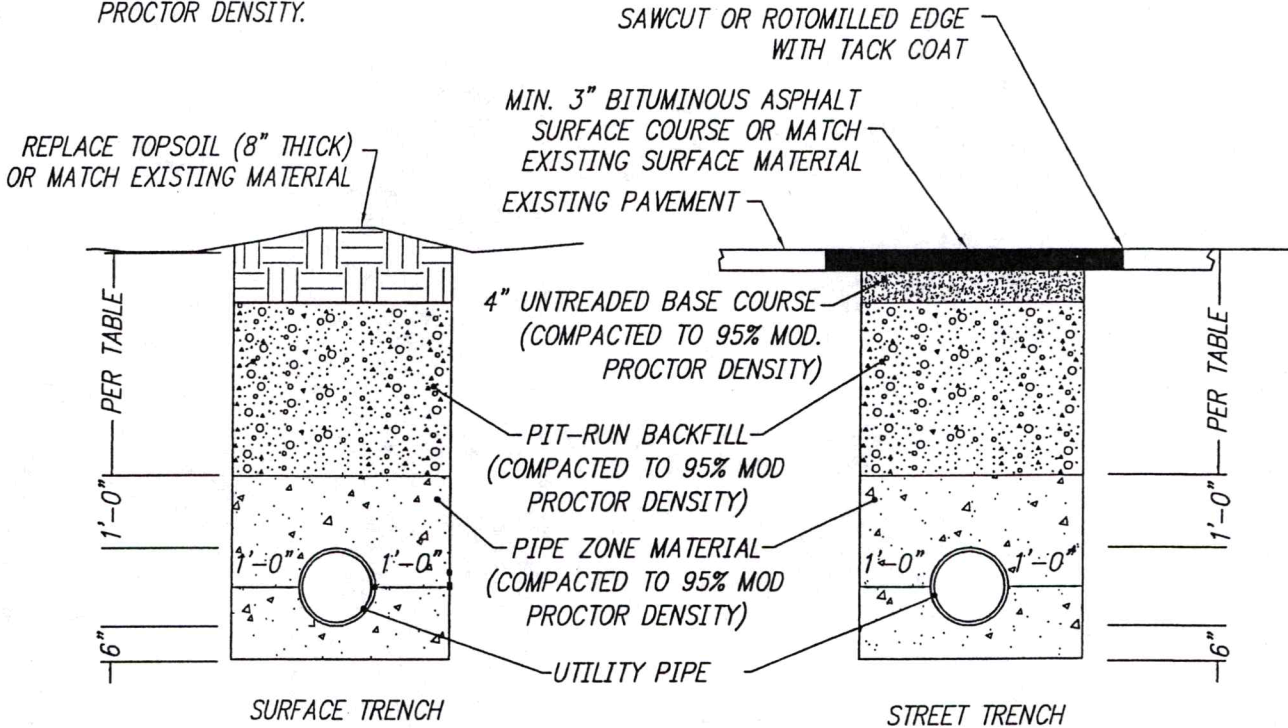
4. Where the difference in elevation between inverts of adjacent manholes exceeds 10 feet, no ex filtration leakage tests will be required.

5. House service laterals shall be considered part of the main line sewer to which they are

connected and shall be tested with the main line sewer.

- d. Air Test: The Contractor or his representative (a qualified firm or individual approved by the City Engineer) shall furnish labor, equipment, and materials, including pumps and compressors, and shall perform, in the presence of the City Engineer, air tests of the completed pipe before it can be placed in service each section of sanitary sewer pipeline between manholes shall be tested after all the service laterals (and plugs) have been installed. Each test section shall be pressurized to 4.0 psi. For the purpose of stabilizing the air pressure in each test section, the 4.0 psi pressure shall be maintained for a two-minute period. Each test section shall then be re-pressurized to 4.0 psi for a period of four minutes. The test section shall be accepted if, after four minutes, the pressure gauge indicated 3.5 psi or greater. Failure of the Contractor's testing equipment to properly function shall render the test unacceptable. All faulty sections of pipeline shall be repaired and re-tested until the minimum air testing requirements have been met.
  
- e. Television Check: After any or all of the above tests are completed and passed satisfactorily and before the sewer main line is placed in service, the Contractor shall arrange for a television inspection of the entire main sewer line. A video tape of the television inspection shall be made, and the tape will be presented to the City Engineer for review and approval before the sewer main line is placed in service. Any problems noticed or any debris identified shall be removed and/or corrected and approved by the Engineer before the sewer main is placed in service. This video tape shall be correlated by manhole number, station, etc., so that exact lines and locations in the lines can be determined.

NOTE:  
 SUITABLE NATIVE MATERIAL MAY BE  
 SUBSTITUTED FOR PITRUN BACKFILL WHEN  
 APPROVED BY THE CITY ENGINEER. COMPACT  
 NATIVE MATERIAL TO 95% MODIFIED  
 PROCTOR DENSITY.



DEPTH TABLE	
LINE TYPE	DEPTH
SEWER	VARIABLES PER PLAN
WATER MAIN	4' MINIMUM
WATER SERVICE	3' MINIMUM

## TYPICAL TRENCH CROSS SECTION

NOT TO SCALE

Rev.	Date	By	Description

### River Heights Standard Drawings

**SARGENT**

Sargent Engineers, Inc.  
 221 N. Spring Creek Parkway, Suite H  
 Providence, UT 84332  
 Tel. 435 753-7214 • Fax 435 753-7295

Designer: NJK

Ref. No.

Checker: CLR

SEI Job No. B95101.46

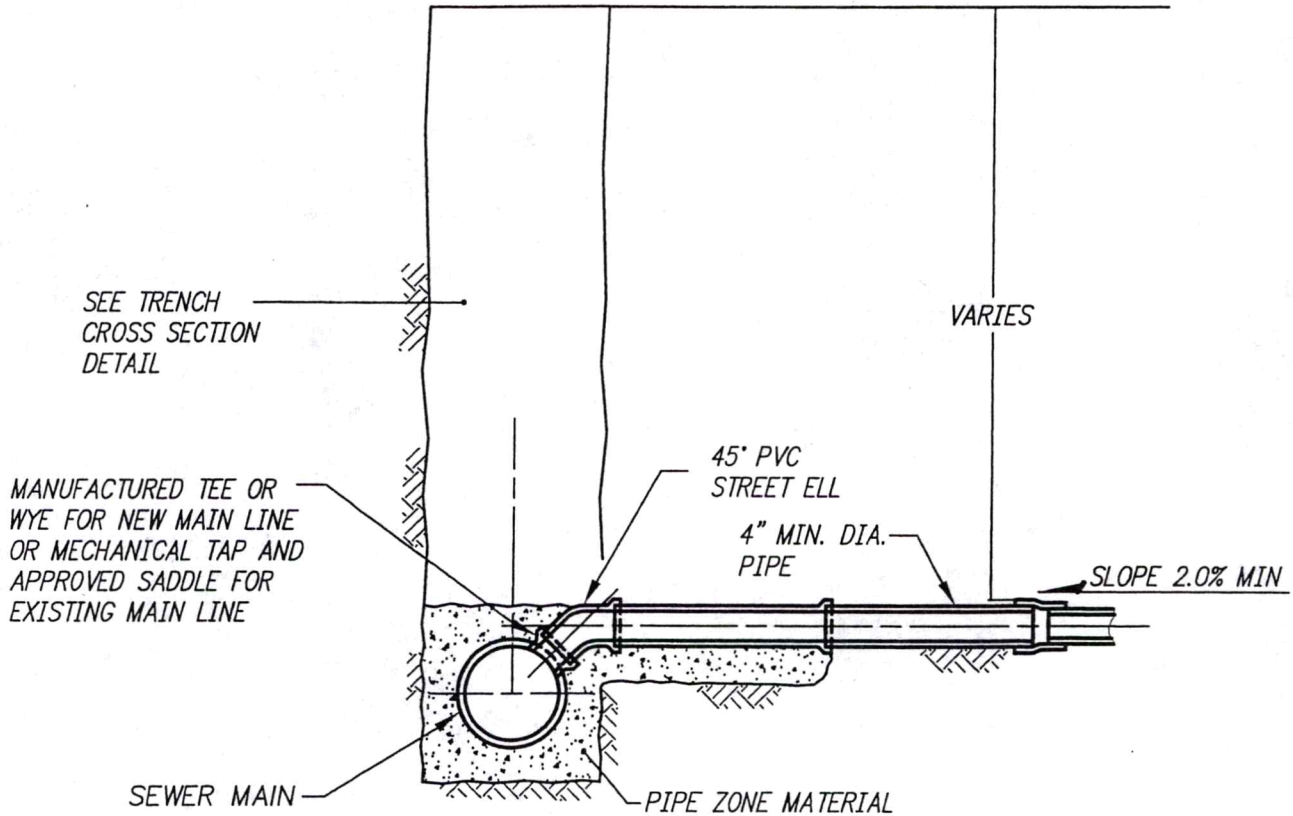
Drafter:

Issue Date: July 2003



NOTES:

1. PVC PIPE AND FITTINGS TO CONFORM TO ASTM D-3034 WITH SDR 35.
2. PLACE 4" SERVICE AT MIN 2% SLOPE. LARGER SERVICES AND/OR FLATTER SLOPES FOR SPECIAL CASES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
3. USE A PREFORMED WYE OR TEE FOR ALL SANITARY SEWER LATERAL CONNECTIONS IN NEW SUBDIVISIONS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
4. EXTEND SEWER SERVICE 5' MIN BEYOND PROPERTY LINE, PLUG WITH WATER TIGHT PLUG, AND MARK WITH WOOD POST OR MARKER EXTENDING 2 FT ABOVE GRADE.



## TYPICAL SEWER SERVICE LATERAL

NOT TO SCALE

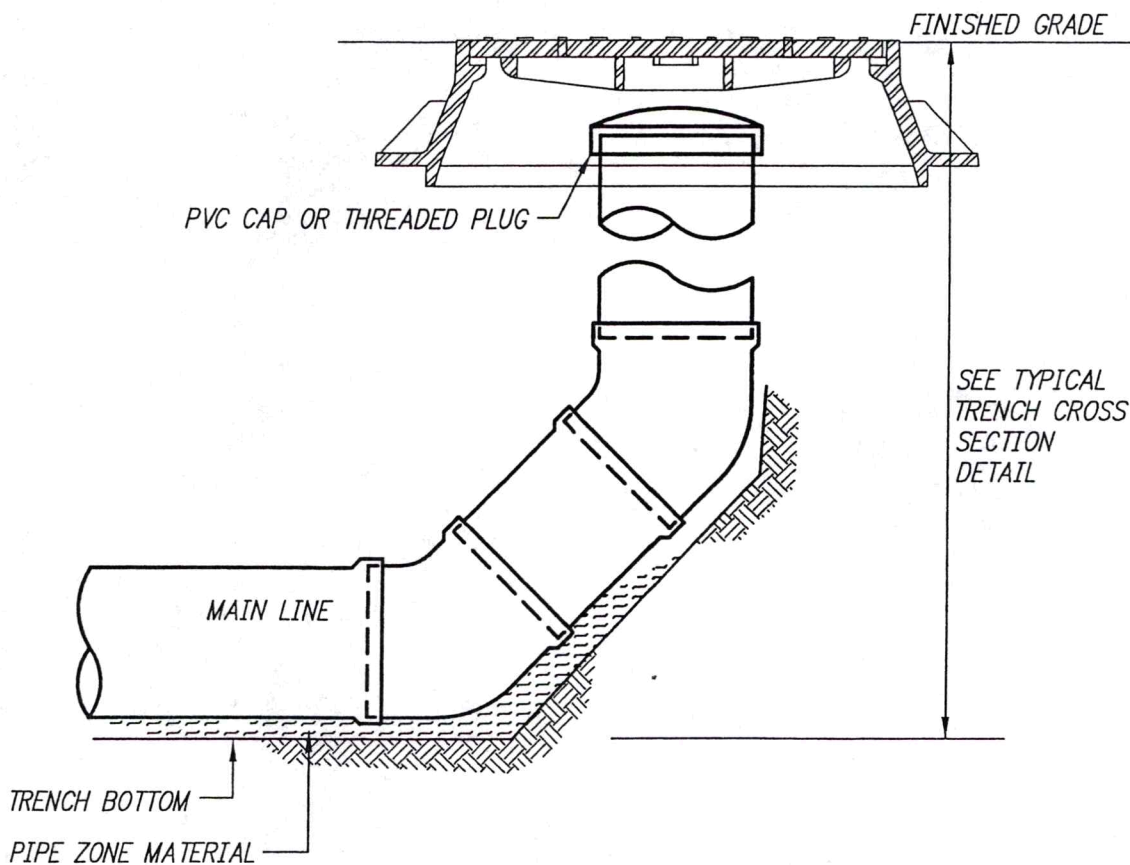
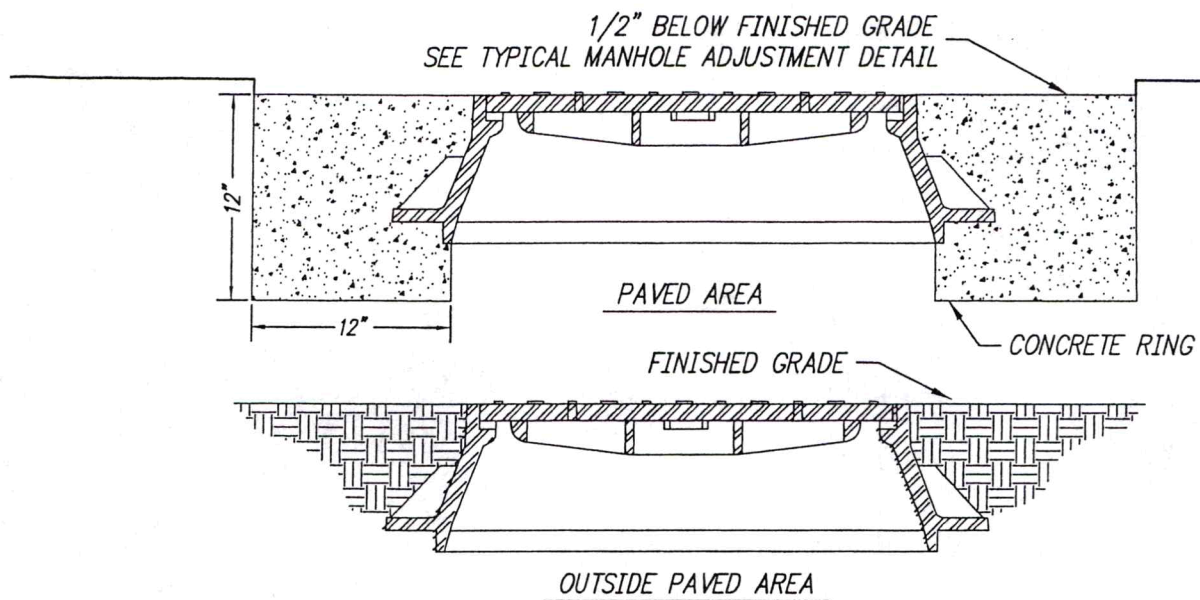
Rev.	Date	By	Description

### River Heights Standard Drawings

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Drafter:	
Issue Date: July 2003	



## TYPICAL MAIN LINE SEWER CLEANOUT

NOT TO SCALE

Rev.	Date	By	Description

### River Heights Standard Drawings

**SARGENT**

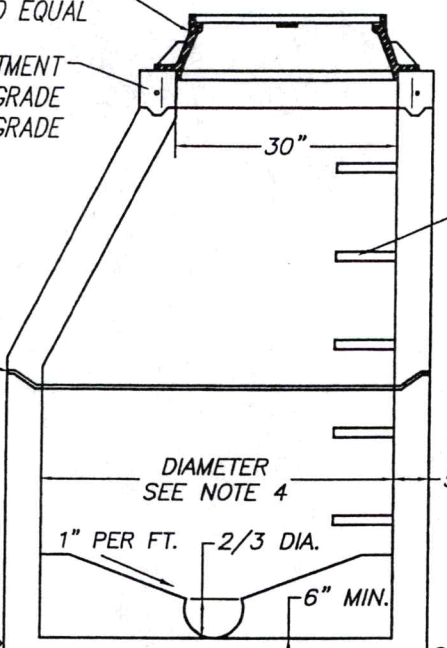
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Designer: NJK	Ref. No.
Checker: CLR	SEI Job No. B95101.46
Drafter:	
Issue Date: July 2003	

D&L A-1180 RING & COVER  
OR APPROVED EQUAL

SEE MANHOLE ADJUSTMENT  
DETAIL TO MATCH GRADE  
RINGS TO FINAL GRADE

GROUT JOINTS  
WATER TIGHT



APPROVED MANHOLE  
STEPS REQUIRED

ECCENTRIC CONE  
SECTION REQUIRED

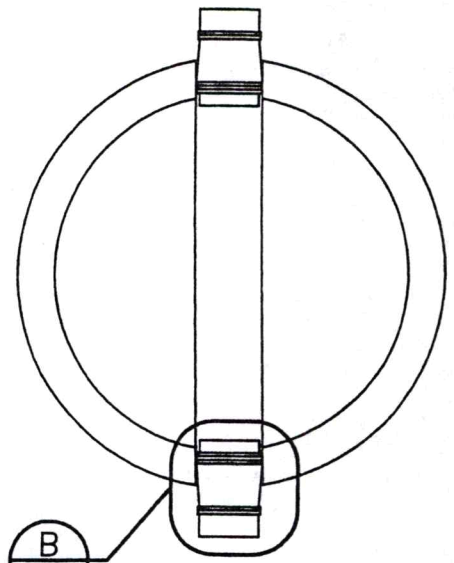
DIAMETER  
SEE NOTE 4

5" MIN.

1" PER FT. 2/3 DIA.

6" MIN.

8" COMPACTED GRAVEL TO COVER  
ENTIRE BOTTOM OF EXCAVATION,  
1-1/2" MAX. AGREGATE SIZE.



**SECTION A**  
NOT TO SCALE

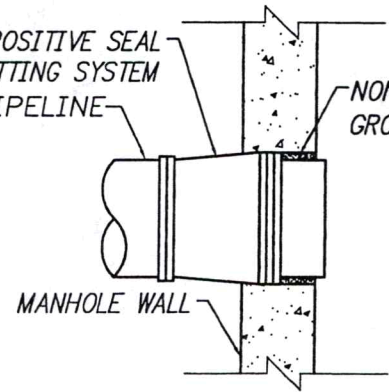


NOTE:

1. FLOWLINE, RING AND COVER ARE TO MATCH FINAL GRADE.
2. MANHOLE AND CONE SECTIONS ARE TO REMAIN LEVEL.
3. RUBBER BOOT TYPE CONNECTION TYPICAL ON ALL NEW MANHOLES WHERE PIPES ENTER AND EXIT.
4. USE 5' DIAMETER MANHOLES WITH 3 OR MORE PIPES ENTERING THE MANHOLE OR WITH PIPES 12" OR GREATER. ALL OTHER MANHOLES TO BE 4' DIAMETER.

POSITIVE SEAL  
GASKETING SYSTEM  
PIPELINE

NON-SHRINK  
GROUT (TYP.)



**SECTION B**  
NOT TO SCALE



## TYPICAL SEWER MANHOLE

NOT TO SCALE

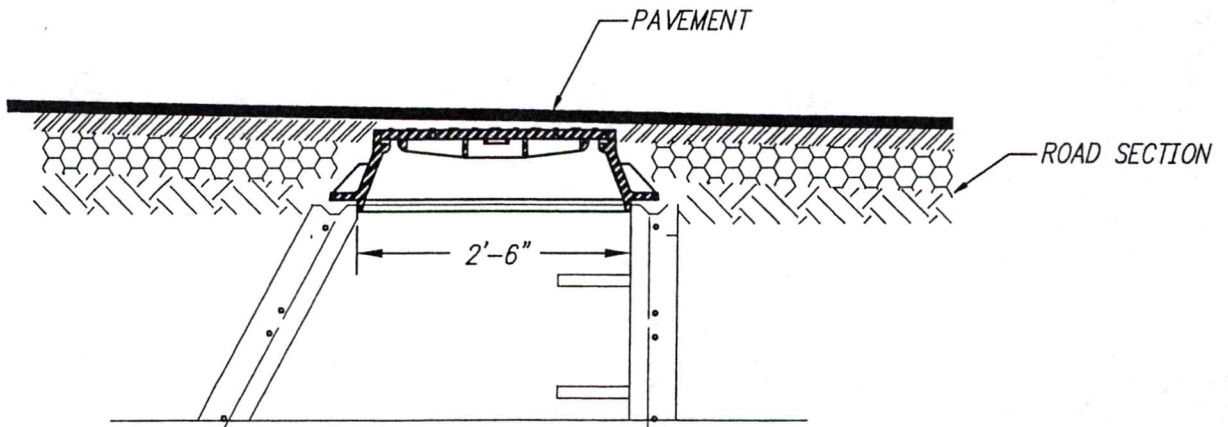
Rev.	Date	By	Description

### River Heights Standard Drawings

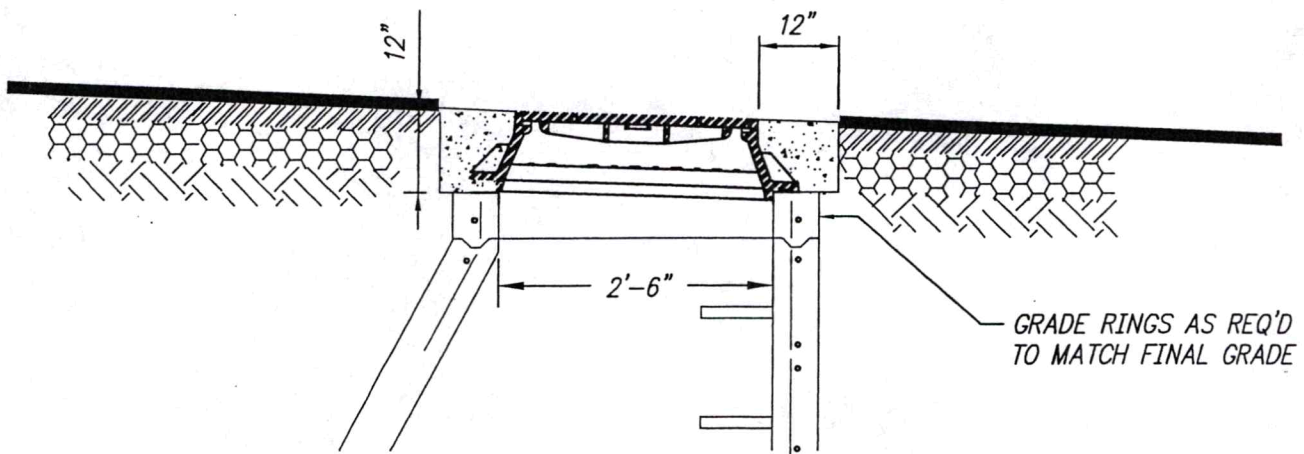
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Drafter:	
Issue Date: July 2003	



NOTE:  
INITIAL POSITION OF MANHOLE SHALL  
FALL BELOW ASPHALT GRADE.



PROCEDURE:

ADJUST ELEVATION OF EXISTING MANHOLES BY ADDING OR REMOVING ELEVATION RINGS AS REQUIRED TO MATCH DESIGN ELEVATION. ASPHALT SHALL BE CUT 12" WIDE AROUND SEWER MANHOLE RING AND COVER SHALL THEN BE RAISED AND BLOCKED PRIOR TO PLACING CAST-IN-PLACE CONCRETE RING TO SECURE ADJUSTMENT. RING AND COVER ARE TO FALL 0.5" BELOW FINAL GRADE AND PARALLEL WITH THE ROAD SURFACE.

## TYPICAL MANHOLE ADJUSTMENT

NOT TO SCALE

Rev.	Date	By	Description

### River Heights Standard Drawings

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Drafter:

Issue Date: July 2003

## River Heights City

### Sanitary Sewer Overflow Action Plan

Whenever sanitary sewage leave the confines of the piping system, immediate action is necessary to prevent environmental, public health or financial damage from occurring. In addition, quick action is normally needed to mitigate damage which may have already occurred. For the purpose of this section, the following are part of the emergency action plan.

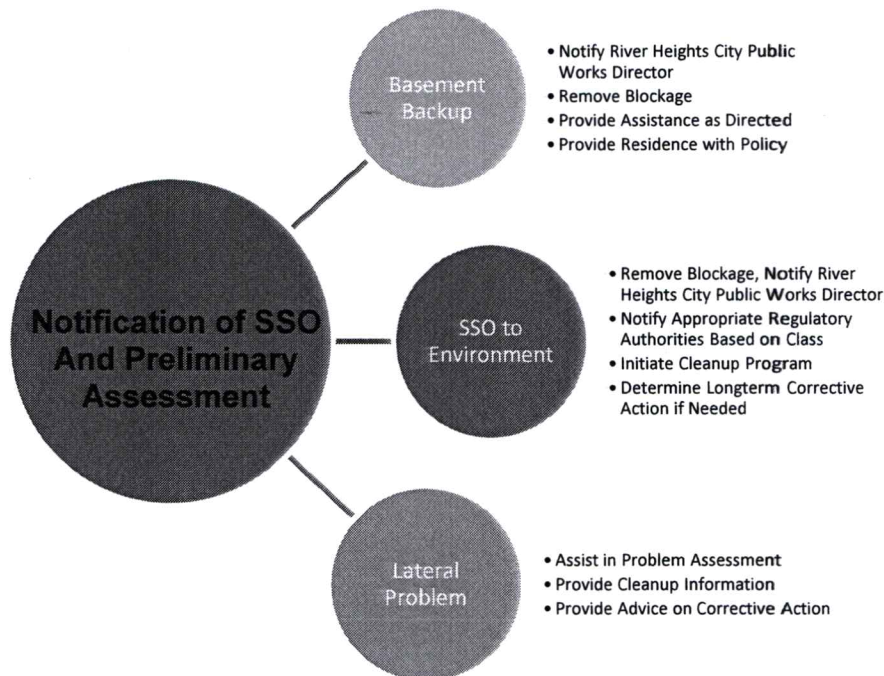
1. Basement backups
2. Sanitary sewer overflows
3. Sanitary sewer breaks which remain in the trench
4. Sewer lateral backups

All of the above conditions are likely to cause some damage. Each should be treated as an emergency, and corrective actions taken in accordance with River Heights City directions. Items 1 & 2 above should be reported immediately based on whether they constitute a Class 1 or Class 2 SSO. As stated in the definition section of the SSMP Introduction, a Class 1 SSO is an overflow which affects more than five private structures; affects a public, commercial or industrial structure; results in a significant public health risk; has a spill volume more than 5,000 gallons; or has reached Waters of the State. All other overflows are Class 2 SSO's. All Class 1 SSO's should be reported immediately. Class 2 SSO's should be documented and reported in the annual SSMP report and included in the Municipal Wastewater Planning Program submitted to the State. Item 3 may be reported to the local health department if, in the opinion of the responsible staff member there is potential for a public health issue. An example of where a public health issue may be present is when an excavator breaks both a sewer and a water line in the same trench. In such cases, the local health department representatives should be contacted and the situation explained. If the health representative requests further action on the part of River Heights City, staff should try and comply. If, in the opinion of the responsible staff member, the health department request is unreasonable, The Manager should be immediately notified. Care should always be taken to error on the side of protecting public health over financial considerations. When a basement backup occurs, the staff member responding should follow the Basement Backup Program procedures. Lateral backups, while the responsibility of the property owner, should also

be treated as serious problems. Care should be taken to provide advice to the property owner in such cases, but the property owner is ultimately the decision maker about what actions should be taken.

### Response Activities

There are specific steps that should be followed once a notification is received that an overflow may be occurring. The following figure outlines actions that could be taken when the [public entity] receives notice that a possible overflow has or is occurring.



### **General Notification Procedure**

When a Class 1 SSO occurs specific notification requirements are needed. In such cases the following Notification procedure should be followed and documented. Failure to comply with notification requirements is a violation of R317-801.

### Agency Notification Requirements

Both the State of Utah Division of Water Quality and the local health department should be immediately notified when an overflow is occurring. Others that may require notification include local water suppliers, affected property owners and notification may

be required to Utah Division of Emergency Response and Remediation if hazardous materials are involved. The initial notification must be given within 24 hours. However, attempts should be made to notify them as soon as possible so they can observe the problem and the extent of the issue while the problem is happening. A notification form is provided to document notification activities. After an SSO has taken place and the cleanup has been done, a written report of the event should be submitted to the State DEQ within five days (unless waived). This report should be specific and should be inclusive of all work completed. If possible the report should also include a description of follow-up actions such as modeling or problem corrections that has or will take place.

### Public Notification

When an SSO occurs and the extent of the overflow is significant and the damage cannot be contained, the public may be notified through proper communication channels. Normally the local health department will coordinate such notification. Should River Heights City need to provide notification it could include press releases to the local news agencies, publication in an area paper, and leaflets delivered to home owners or citizens in the area of the SSO. Notification should be sufficient to insure that the public health is protected. When and if Federal laws are passed concerning notification requirements, these legal requirements are incorporated by reference in this document. In general, notification requirements should increase as the extent of the overflow increases.

### Overflow Cleanup

When an overflow happens, care should be taken to clean up the environment to the extent feasible based on technology, good science and financial capabilities. Cleanup could include removal of contaminated water and soil saturated with wastewater and toilet paper, disinfection of standing water with environmentally adequate chemicals or partitioning of the affected area from the public until natural soil microbes reduce the hazard. Cleanup is usually specific to the affected area and may differ from season to season. As such, this guide does not include specific details about cleanup. The responsible staff member in conjunction with the State DEQ, the local health department and the owner of real property should direct activities in such a manner that they are all satisfied with the overall outcomes. If, during the cleaning process, the responsible staff member believes the State or the County is requesting excessive actions, the Manager should be contacted.

### Corrective Action

All SSO's should be followed up with an analysis as to cause and possible corrective actions. An SSO which is the result of grease or root plug may be placed on the preventative maintenance list for more frequent cleaning. Serious or repetitive plugging problems may require the reconstruction of the sewer lines. An overflow that results from inadequate capacity should be followed by additional system modeling and either flow reduction or capacity increase. If a significant or unusual weather condition caused flooding which was introduced to the sanitary sewer system incorrectly, the corrective action may include working with other agencies to try and rectify the cross connection from the storm sewer to the sanitary sewer or from home drainage systems and sump pumps. Finally, should a problem be such that it is not anticipated to reoccur, no further action may be needed.



## River Heights City

# Grease, Oil and Sand Management Program

### **Purpose:**

The purpose of this program is to provide for the control and management of grease, oil and sand discharges to the District collection system. This program will provide a means to reduce interference with the collection system operation and pass through at the treatment plant.

### **Regulatory Authority:**

Regulatory authority to implement this program is found in the Code of Federal Regulations in 40 CFR 403, General Pretreatment Regulations. State authority for the program is given in the Utah Administrative Code R317-8-8, Pretreatment. Local Authority is found in the Utah Administrative Code R317-8-8.

### **Program Implementation:**

This program shall be implemented in such a manner as to minimize the impact on businesses which may be affected by this program. In all cases River Heights City will maintain a uniform decision making process. River Heights City shall allow for appeals of program requirements in accordance with the appeal process approved by River Heights City.

The following steps detail the procedure that River Heights City personnel shall follow in implementing this program.

#### *Evaluation:*

River Heights City/Logan City staff will evaluate an industrial user (IU)

discharge to determine if grease, oil or sand management is required at the following events:

1. Issuance of a construction or remodeling building permit.
2. When the collection line in front of the business is CCTV inspected as part of the sanitary sewer system preventative maintenance program.
3. When a downstream sanitary sewer pipeline plugs due to oil, grease or sand.

No further action will be taken if it is determined that no potential exists for significant enrichment of the wastewater with grease, oil or sand.

Enrichment is defined as a discharge with greater volume or concentration of grease, oil or sand than that discharged from a typical residential connection. For oil and grease, the typical residential discharge has less than 100 mg/L of oil and grease for any sample taken. Greater concentrations would be enrichment. Also, a significant buildup of oil and grease in the lateral would indicate enrichment. Sand and dirt is not typically discharged from a residential connection. Any potential for sand or dirt discharge would be enrichment.

*Implementation:*

IU's which are determined to enrich or have the potential to enrich the wastewater with grease, oil, or sand will be required to develop a management plan in accordance with the following tracks.

TRACK 1

This track is available for IU's which exist at the time of program implementation. However, not all existing IU's may be permitted to use it. Determination will be made on a

case by case basis. IU's on this track will be permitted to either pay a contractor or River Heights City to clean the main sewer line from their place of business to the nearest trunk line. A trunk line is any sewer line which has an inside diameter of eighteen inches or larger or has been classified as a trunk line by River Heights City. Cleaning frequency will be determined by inspections performed by River Heights City and/or Logan City.

## TRACK 2

This track requires the IU to install and maintain a grease, oil and/or sand trap on their premises. Quarterly cleaning reports may be required at the discretion of River Heights City and/or Logan City. River Heights City and/or Logan City shall inspect and test the grease trap on a periodic basis. The following fees shall apply:

Inspection Fee	\$ Set by Logan City
Testing Fee	\$ Set by Logan City

Should the testing reveal grease and oil in excess of 100 mg/L, a fine will be assessed for each pound of oil and grease discharged for the past reporting period shall be assessed. The pounds of grease and oil shall be determined by using the following equation:

$$(\text{Total Reporting Period water use in MG})(\text{mg/L O\&G} - 100)(8.34)$$

The IU will also be ordered to return to compliance immediately. Retesting will be done within thirty days if the

trap has not been cleaned and a cleaning report submitted. Another inspection and testing fee will be assessed. Should the test results still not comply with the 100 mg/L oil and grease limit, enforcement will be escalated in accordance with the [public entity]'s Enforcement Response Plan. In addition, an entity which is frequently violating the 100 mg/L limit may be issued a pretreatment permit in order to further regulate the IU

Should the testing reveal TSS in excess of 250 mg/L, a fine will be assessed for each pound of TSS discharged for the past reporting period shall be assessed. The pounds of TSS shall be determined by using the following equation:

$$(\text{Total Reporting Period water use in MG})(\text{mg/L TSS} - 250)(8.34)$$

The IU will also be ordered to return to compliance immediately. Retesting will be done within thirty days if the trap has not been cleaned and a cleaning report submitted. Another inspection and testing fee will be assessed. Should the test results still not comply with the 250 mg/L TSS surcharge limit, the IU will be placed on a continuous inspection, testing and the surcharge schedule for TSS.

By following the steps discussed above, River Heights City hopes to maintain a collection system free from excessive backups and a treatment plant in compliance with UPDES discharge conditions.

*List of Acceptable Entities That Recycle Oil and Grease*

The following list of grease and oil recyclers should be given to all IU's who

operate a grease trap. This list may not be all inclusive. Other recyclers may be used if it can be shown that they discharge of the waste appropriately.

<b>Recycler</b>	<b>Phone Number</b>	<b>Address</b>
Renegade Oil	801-973-7912	1141 S. 3200 W, SLC, Utah 84104

## River Heights City

# SSMP Monitoring and Measurement Plan

### **Purpose:**

The purpose of this plan is to provide appropriate monitoring and measurement of the effectiveness of the SSMP in its entirety.

### **Records Maintenance**

River Heights City intends to maintain appropriate records on operations and maintenance of the sanitary sewer system to validate compliance with this SSMP. However, failure to meet standards set by State DWQ or other regulatory agency during an inspection does not constitute a violation of the SSMP. Rather, deficiencies identified during inspections should be viewed as an opportunity for improvement.

### **Operations Records**

Operations records that should be maintained include the following:

- Daily cleaning records
- CCTV inspections records
- Manhole inspection records
- Hot spot maintenance list
- Spot repairs
- Major repairs
- System capacity information
- SSO or basement backup records including notification documents to appropriate agencies (call logs, etc.)
- Capital Improvement Plan

Records will be maintained by the Public Works Director in a central location. Records may be maintained either on an electronic record or as a paper record. The extent of the record should be sufficient to demonstrate the activity recorded was completed appropriately.

### **Performance Measurement (Internal Audit)**

Periodically, but not less than annually, River Heights City should assess and audit the effectiveness of the elements of this SSMP. All elements should be reviewed for effectiveness as well as all records should be reviewed for completeness. An internal audit report should be prepared preferably annually but no less than once every five years which comments on the following:

- Success of the operations and maintenance program
- Success of other SSMP elements
- Adequacy of the SECAP evaluations
- Discussion of SSO's and the effectiveness of the response to the event including corrective action
- Review of Defect reports and adequacy of response to eliminate such defects
- Opportunities for improvement in the SSMP or in SSO response and remediation

The annual audit report need not be extensive or long. It should, however be sufficient to document compliance with the standards set in the SSMP. The audit reports should be maintained in accordance with the River Heights City's records retention schedule.

**SSMP Updates**

When a plan deficiency is identified through an audit, inspection or plan review, and the deficiency requires an SSMP update, the plan may be updated at the discretion of the Public Works Director. SSMP updates should be recorded in a revision index maintained by the Public Works Director.

**SSO Evaluation and Analysis**

At least annually in the internal audit and more frequently as needed, River Heights City will evaluate SSO trends based on frequency, location and volume. Trend evaluation will be empirical unless a large number occur sufficient to make a statistical analysis viable. If a trend is identified, a corrective action may be appropriate.

**Public Communication and Outreach**

River Heights City will reach out to the public about the development, implementation and performance of the SSMP. This communication may be accomplished by any of the following methods:

- Public hearings
- Public meetings
- Newsletters
- Direct mailing
- Leaflets
- Other effective methods

River Heights City will accept comments, either written or verbal and will review such comments for applicability. Public interest may be difficult to generate, but should be sought, non-the-less.

## **River Heights City**

### **Sanitary Sewer System Mapping**

This section contains a description on how River Heights City maintains records on the location of sewer lines. Information on the specific type of maps available should be included. Mapping systems include:

- Computer based GIS system
- Paper based mapping system
- Trunkline maps and subdivision maps
- Google Earth pictorial maps

The intent of the section is not to rate one mapping system above another but to encourage up-to-date maps of the sanitary sewer system. For a small system, Google Earth may be a way to show pictorially where the sewer lines are and to document the number of connections on a sub-system.





## River Heights City

### Basement Backup Program

Basement backups are a serious impact on a home or business owner. As such, all reasonable efforts should be taken to prevent such backups from occurring. Sewer system backups are the result of several system problems. Such problems include any one or a combination of the following:

1. Laterals serving real properties are owned by the property owner and lateral maintenance is their responsibility. Roots, low points, structural failure, and grease are primary problems lateral owners face.
2. Backups caused by main line plugs are usually caused by roots, grease, low points, foreign objects and contractor negligence.
3. Piping system structural damage may cause basement backups. Such structural problems include age or deterioration damage, installation damage, excavation damage and trenchless technology damage.
4. Excess flow problems may surcharge a piping system and cause backups into homes. Excess flows usually occur when major storm waters inflow into sanitary sewers. Sanitary sewers are not designed for such flow. In addition, some homeowners may illegally connect foundation drains and sump pumps to the sanitary sewer system.

#### Basement Backup Response

When River Heights City is notified about a basement backup, staff will log the complaint in a complaint log. The person receiving the call may log the backup complaint or may ask administrative staff to document the complaint.

All backup complaints shall be investigated by staff. If the investigation determines that

the case of the backup is only in the lateral, staff may offer technical information but should not take responsibility for cleanup or subsequent restoration.

When it is determined that the basement backup is the result of a mainline problem, River Heights City will follow the policy approved by its governing authority. A copy of this policy should be given to the home owner. It should be noted that all action River Heights City takes are on a no-fault basis. River Heights City does not accept liability nor does it waive its governmental immunity.

### Backup Prevention Design Standard

River Heights City promotes system designs which minimize backups and insure proper operations. To this end River Heights City has a design standard for all system construction. In addition, River Heights City complies with state design standards contained in R317-3. Finally for laterals, the following policy applies:

## **Policy on the Installation of Backflow Valves**

### Reference Regulatory Documents:

The following regulations are referenced in the establishment of this policy:

- Utah Code Title 15A-2-103(c). This code section adopts the 2009 edition of the International Plumbing Code.
- The 2009 International Plumbing Code, section 715 Sewage Backflow.

### River Heights City Policy:

- The State of Utah has adopted the International Plumbing Code(IPC) as its plumbing building standard;
- River Heights City use the IPC as their statute for plumbing construction and installation;
- And the IPC requires the installation of a sewage backwater valve “where the overflow rim of the lowest plumbing fixtures are below the next upstream manhole in the public sewer.”

Therefore, for new construction, River Heights City requires the installation of backwater valves as stipulated by the IPC already propagated for all new construction.

## River Heights City

### No-Fault Sewage Backup Claims Program

The purpose of this program is to assist in the cleanup of real and personal property, and/or compensate persons for the loss of real or personal property, destroyed or damaged as the result of a backup of River Heights City facilities, regardless of fault, within the restrictions, limitations and other provisions of this policy.

#### **Cleanup of Real and Personal Property:**

- (A) The Public Works Director may, in accordance with the River Heights City's standard procurement procedures, engage the services of one or more cleanup contractors to perform cleanup services at the direction of the River Heights City Council on an as-needed basis.
- (B) Upon discovering backup described in this Policy, a property owner should immediately notify the Public Works Director of such event.
- (C) Upon notification of the occurrence of the event, the Public Works Director may contact a cleanup contractor under contract with River Heights City pursuant to subsection (A) above, and direct the cleanup contractor to perform all cleanup work at the premises, in accordance with established cleanup criteria.
- (D) In the event the property owner engages the services of a cleanup contractor prior to notifying the Public Works Director of the event, River Heights City may reimburse the property owner for actual expenses incurred by the property owner, but only up to the amount River Heights City would have paid its own cleanup contractor under subsection (C) above.
- (E) In the event any real or personal property cannot, in the reasonable judgment of the Public Works Director, be restored to its pre-event condition, in accordance with the cleanup criteria, River Heights City may pay to the property owner the estimated fair market value (not the replacement value) at the time of the event, of such real or personal property, with the exception that carpet and major appliances will be replaced with new like-kind items.
- (F) In no event will River Heights City pay, or reimburse the property owner for the payment of special or consequential damages.

#### **Establishment of Cleanup Criteria:**

The Public Works Director may, from time to time, establish cleanup criteria which will

govern River Heights City's cleanup and payment responsibilities under this Policy. In establishing such cleanup criteria, the Public Works Director may give due consideration to generally available health guidelines, recommendations from governmental and academic experts, and other sources of guidance reasonably deemed by the Public Works Director to be balanced, unbiased, and protective of health and safety.

**Application - Time Limitations:**

Any request for reimbursement of cleanup expenses under this policy, or payment of fair market value, may be made by filing a written application in such form as prescribed by the River Heights City Finance Director. Such application must be submitted to the River Heights City Finance Director within thirty (30) days after the occurrence of the event.

**Qualification for Assistance:**

An application or request for assistance or payment under this Policy may qualify only if the Public Works Director, after due inquiry or investigation, makes an affirmative determination that the event was the result of a backup of River Heights City facilities, and that none of the following circumstances apply:

- (A) The loss was the result of a force majeure including but not limited to acts of God, acts of public enemies, insurrections, riots, war, landslides, lightning, earthquakes, fires, storms, floods, washouts, droughts, civil disturbances, explosions, acts of terrorism, sabotage, or any other similar cause or event not reasonably within River Heights City's control;
- (B) The loss was caused by either an act or omission of the property owner, the property owner's agent, or a member of the property owner's family or business;
- (C) The property owner failed to file a claim hereunder in a timely manner, or failed to comply with any other procedural requirements of this Policy;
- (D) The loss is the result of intentional or negligent acts of third parties; or
- (E) The loss is wholly covered by private insurance.

**Reduction in Assistance:**

River Heights City may limit any assistance, or reduce any payment, under this Policy based upon any of the following:

- (A) The property owner did not act responsibly to prevent, avoid or minimize the loss;
- (B) The property owner is unable to fully substantiate or document the extent of the loss;

(C) The loss is partially covered by private insurance.

**Maximum Payments:**

Without the express action of the River Heights City Council, no assistance or payment under this Policy may be granted.

**Payment Does Not Imply Liability:**

Any assistance or payment made under this Policy shall not be construed as, and does not imply, an admission of negligence or responsibility on the part of the [public entity] for any damage or loss. Any assistance or payment made under this Policy is strictly voluntary on the part of the [public entity]. This Policy shall not in any way supersede, change or abrogate the state government immunity act, Utah Code Annotated, section 63-30-1 et seq., as amended, or its successor, and its application to the [public entity], or establish in any person a right to sue the [public entity] under this Policy. Any assistance or payment made under this Policy and accepted shall constitute a full and complete release of any and all claims against the [public entity], its officers, employees and agents arising from the incident.

**Budget Expenditures:**

River Heights City authorizes a fund from which amounts may be drawn to make the foregoing assistance or payments. Such fund may be established from the ordinary rate structure of River Heights City.

**Claims from Other Governmental Agencies:**

Notwithstanding any other provisions of this Policy, no application shall be accepted from the United States or any of its agencies, the State of Utah or any political subdivision.