

**Schedule A - Sewer Service Connections  
and  
Schedule B - Sewer Main Extensions**

Schedule A shall be completed for all sewer service connections where the proposed single building discharge equals or exceeds 1,500 gallons Design Average Flow and for multiple building discharge sources where the lot or parcel was not classified as Immediate Flow under a previous Permit to Construct and Operate. An application is not required when the discharge is for a single building and will ultimately discharge less than 1,500 gallons Design Average Flow.

Schedule A covers the discharge and the service requirements of the Illinois Recommended Standards for Sewage Works. Schedule A does not replace the requirement for the RRWRD Industrial-Commercial application as part of the RRWRD standard service connection permit process for commercial, industrial or residential buildings having five (5) or more units. A detailed review of the proposed service and pre-treatment features required by the RRWRD Code of Ordinances is done as part of the Industrial-Commercial application review.

Schedule B shall be completed for all sewer extensions, upsizing and relocations.

When the item is not applicable to the project write "Not Applicable" or "N/A".

Items that are self-explanatory to the specific schedules are omitted from these instructions.

**1. Name of the Project**

The name of the project must be the same as the project name indicated on WPC-PS-1.

**2. Type of Service(s)**

Check all boxes that apply to what the sewer connection or sewer extension will directly serve. Industrial must be light industrial, domestic only, use.

**3. Nature of Project**

This is a brief summary of the type of project. Check all boxes that apply.

**4. Project Location, Service Area and Population**

Provide a detailed location map and clear suitable layout of the project to meet the project location and layout requirement. This may be included in the plans.

Provide an Immediate and Ultimate Service Area map of sufficient scale and clarity that displays all lots and parcels being served both directly (immediately) and ultimately by the proposed sewer extension or service connection. Clearly distinguish between the immediate and ultimate parcels.

Provide detailed calculations of the immediate and ultimate design flows associated with the lots and parcels shown in the service area map.

**5. Facilities Planning Area**

A facilities planning area (FPA) is a defined area that anticipates sewer service to be provided by a specific wastewater treatment facility. This information should be available from the owner/operator of the sewer system or owner of the treatment facility. List the FPA the project is within.

**6. Type of Development**

For multi unit apartment buildings provide an itemized list for each building, including the number of bedrooms per unit, the PE per building and total PE for all buildings. For multi unit buildings where there will or can be individual ownership of the units each unit is considered a single family dwelling.

Commonly used flows from miscellaneous types of facilities are listed in Appendix B, Table 2 of the Illinois Recommended Standards for Sewage Works. If another source or means of calculating the flow is used the supporting source documentation must be attached. For multi unit buildings provide an itemized list for flow for each unit of the building, the unit PE and total building PE. For industrial facilities identify domestic and non-domestic flows. If industrial facility flow generated will be non-domestic in characteristic complete and submit the required IEPA forms instead of the RRWRD forms.

## **7. Deviation from Design Criteria**

If the project does not comply with the Illinois Recommended Standards for Sewage Works design criteria then "does not" shall be checked and detailed justification for each deviation submitted. Attach additional sheets as needed.

## **8. Infiltration/Exfiltration Limits**

The current limit is 200 gallons per inch diameter of sewer pipe per mile per day.

## **9. Summary of Sewers**

For Service Connections (Schedule A) this item includes all pipes between the building foundation and sewer main or existing public sewer service stub. This information should be indicated under the columns labeled Schedule A Connections.

For Sewer Extensions (Schedule B) the information should be indicated under the columns labeled Schedule B Extensions. No service stub information should be included under a Schedule B application.

The total length should be rounded to the nearest foot and include the distance through the manholes.

In general by RRWRD Code of Ordinances a minimum of 5 feet of cover is required over all sewers.

Pipe and joint ASTM/AWWA designations are required. Indicate the Standard Dimension Ratio (SDR) for PVC pipe.

All sewer lines must be terminated in a manhole. The upstream manhole shall be considered part of the downstream line.

If any part of the project is within a flood plain contact the Illinois Department of Natural Resources, Division of Water Resources Management, for additional permit requirements.

## **10. Erosion Control**

The design criteria are contained in the Illinois Urban Manual. Justification must be attached for each deviation from the criteria.

## **11. Existing Sewer System**

An analysis of the downstream transport capabilities must be evaluated on order to ensure no overflows or backups occur.

## **12. Water Supply Protection**

The location of existing and proposed watermain(s) must be shown in both plan and profile views on the plan/profile sheets and for each crossing in the profile view. By RRWRD Code of Ordinances horizontal and vertical separations are outside of pipe to outside of pipe. Detailed drawings(s) for crossings, either typical or specific, shall be shown on the drawings. Separation requirements include the service(s) between the sewer main(s) and right-of-way or exclusive sanitary sewer easement line for the water system and appurtenances.

Unless impossible due to site restrictions proposed sewer lines and services must be at least 18 inches clear vertical separation below watermains and water services. A sewer main or service may cross above a watermain or water

service only where it is impossible to cross below the watermain or water service. Proper justification and protective measure must be submitted if the proposed sewer system is not 18 inches or more below the water system.

All potable water sources, including private wells, must be shown on the plans that are within the limits specified in the Illinois Recommended Standards for Sewage Works.

### **13. Pipe and Manhole Testing**

Air testing of all gravity sewer pipe is required. RRWRD air testing requirements allow no more than a 0.5 psig drop. Proposed service stubs to the right-of-way or sanitary sewer easement line must be installed prior to air testing. Vacuum testing of all manholes is required. Pressurized water testing is required of all forcemain pipe.

### **14. Flexible Pipe Testing**

Mandrel testing is required on all non-rigid gravity sewer main pipe.

### **15. Miscellaneous Requirements**

Include the items on the plan sheets or in the specifications or special provisions as indicated. RRWRD Code of Ordinances and RRWRD requirements may be more restrictive than the Standard Specifications for Sewer and Water Construction in Illinois.

Rock River Water Reclamation District  
Engineering Dept.  
3501 Kishwaukee Street  
Rockford, IL 61109

\_\_\_\_\_ SCHEDULE A SERVICE CONNECTION(S)

\_\_\_\_\_ SCHEDULE B SEWER EXTENSION(S)  
(Check One)

*This form is for use for sanitary sewer connections or extensions for flows having domestic wastewater characteristics.*

1. NAME OF PROJECT: \_\_\_\_\_

2. TYPE OF SERVICE(S): Residential \_\_\_; Commercial \_\_\_; Industrial \_\_\_; Recreational \_\_\_

3. NATURE OF PROJECT: Project consists of: a sewer extension \_\_\_; a sewer connection \_\_\_; a trunk sewer \_\_\_; a replacement sewer \_\_\_; a relief sewer \_\_\_; an interceptor sewer \_\_\_; a new sanitary sewer \_\_\_. (Check all that apply.)

4. PROJECT LOCATION, SERVICE AREA AND POPULATION: Submit map(s) of the service area that includes the following:

4.1 An 8 ½ x 11 inch detailed project location map or USGS map showing the project with respect to major roadways. In lieu of this map, a letter from the Illinois Historic Preservation Agency indicating compliance with the Illinois Historical Preservation act for this project may be submitted.

4.2 The proposed sewer layout and project location.

Township \_\_\_\_\_ Section \_\_\_\_\_ Range \_\_\_\_\_

4.3 Residential and/or non-residential areas and their associated waste loads to be immediately served by the sewers of this project.

4.4 Potential residential and/or non-residential areas and their associated loads must be included in the overall design of the sewers of this project.

5. FACILITIES PLANNING AREA: This project is \_\_\_ is not \_\_\_ being constructed entirely within the Facilities Planning Area (FPA) boundaries. Name of FPA: Rock River Water Reclamation District

6. TYPE OF DEVELOPMENT: The following design criteria should be used in estimating the population equivalent (P.E.) of a residential building:

Efficiency or Studio Apartment	= 1	P.E.	
1 Bedroom Apartment	= 1.5	P.E.	Commonly used quantities of sewage flows from miscellaneous
2 Bedroom Apartment	= 3	P.E.	type facilities are listed in Appendix B, Table No. 2 of the
3 Bedroom Apartment	= 3	P.E.	Illinois Recommended Standards for Sewage Works.
Single Family Dwelling	= 3.5	P.E.	
Mobile Home	= 2.25	P.E.	

6.1 RESIDENTIAL BUILDINGS: Number of building(s) \_\_\_; Number of single family dwelling building(s) \_\_\_;

Number of multiple dwelling buildings\* \_\_\_; Estimated total population \_\_\_ P.E.

\*Please provide an itemized list for each multiple dwelling building including: Number of 1,2 and 3 bedroom units; the total P.E. for each building and the total P.E. for multiple family dwellings. Attach supplemental pages as needed.

6.2 **NON-RESIDENTIAL BUILDINGS:** Describe use of building(s) \_\_\_\_\_

Principal product(s) or activities \_\_\_\_\_

Number of building(s) to be served under this Permit \_\_\_\_\_

Estimated number of employees \_\_\_\_\_; Estimated number of occupants (transients) \_\_\_\_\_.  
 Estimated population equivalent (one population equivalent is 100 gallons of sewage per day, containing 0.17 pounds of BOD<sub>5</sub> and 0.20 pounds of suspended solids). Flow P.E. \_\_\_\_\_; BOD P.E. \_\_\_\_\_; Suspended Solids P.E. \_\_\_\_\_.  
 Non-domestic waste is \_\_\_\_\_ is not \_\_\_\_\_ produced inside the building(s). If liquid wastes other than domestic are produced, submit a data sheet. An IEPA Permit may be required.

6.3 Total loading for this project (Sum of 6.2 and 6.1) Design Average Flow \_\_\_\_\_ GPD; Design Max. Flow \_\_\_\_\_ GPD  
 P.E. \_\_\_\_\_ BOD; P.E. \_\_\_\_\_ Suspended Solids

7. **DEVIATION FROM DESIGN CRITERIA:** The design criteria for sewers are contained in the "Illinois Recommended Standards for Sewage Works", Current Edition. This submittal does \_\_\_\_\_ does not \_\_\_\_\_ include deviations from said criteria. **If deviations are included, justification for said deviations must be attached.**

7.1 Will "Standard Specifications for Water and Sewer Main Construction in Illinois", Current Edition, govern the construction of this system? YES \_\_\_\_\_ NO \_\_\_\_\_. If "NO" specifications must be furnished for the construction of the sewer.

8. **INFILTRATION/EXFILTRATION LIMITS:** \_\_\_\_\_ gallons per inch diameter of sewer pipe per mile per day.

9. **SUMMARY OF SEWERS:** Submit plan and profile drawings for all sanitary sewer extensions and for all sanitary sewer connections where either the domestic wastewater source serves more than one building, where the domestic wastewater source is 1.5 P.E. or more, where non-domestic waste is produced or where the connection is not direct to either a publicly-owned or publicly-regulated sewer.

	Schedule A Connections		Schedule B Extensions		
Pipe size – inches					
Total Length – feet					
Min. Slope used - %					
Max. Slope used - %					
Min. cover over sewers – feet					
Pipe Material & Specs.					
Joint Material & Specs.					
Total Manholes					
Max. Distance Between Manholes					
Bedding Class for Rigid Pipe (A,B, or C per ASTM C12)					
Bedding Class for Flexible Pipe (IA, IB, II, or III per ASTM 2321-89)					

9.1 Is the project located in a flood plain? YES \_\_\_\_\_ NO \_\_\_\_\_. If yes, contact the Illinois Department of Natural Resources, Division of Water Resources Management for further permit requirements.

9.2 Water tight manhole covers used on all manholes where the manhole tops are below cover or where the tops may be flooded by surface runoff or high water? YES \_\_\_\_\_ NO \_\_\_\_\_.

10. **EROSION CONTROL:** The design criteria for Erosion Control are contained in the "Illinois Urban Manual" Current Edition, distributed by the National Resource Conservation Service. This submittal does \_\_\_\_\_ does not \_\_\_\_\_ include deviation from said criteria. If deviations are included, justification for said criteria must be attached. (See instructions for Schedule P to determine if Schedule P must be submitted.)

**11. EXISTING SEWER SYSTEM:**

11.1 This project will connect to \_\_\_ a proposed sanitary sewer \_\_\_ an existing combined sewer \_\_\_ an existing sanitary sewer. This project \_\_\_ is \_\_\_ is not tributary to a combined sewer system. (If project is tributary to a combined sewer system, provide a written discussion and demonstration of potential affects on downstream combined sewer overflows.)

11.2 Size and location of downstream sewer \_\_\_\_\_

**12. WATER SUPPLY PROTECTION:** The horizontal and/or vertical separation between sanitary sewers and watermains is in accordance with Section 370.350 of the Illinois Recommended Standards for Sewage Works.

YES \_\_\_ NO \_\_\_

The location of proposed and existing watermain(s) must be shown in both the plan and profile views on plan sheets (s) for each water-sewer line crossing and at all locations within 10 feet horizontal distance of the proposed sewer line. Detailed drawing(s) for crossings, either typical or site-specific, shall be shown on the plan sheet(s).

**12.1 HORIZONTAL SEPARATION:** All sewer line(s) is (are) 10 feet from water line (s) YES \_\_\_ NO \_\_\_.

If no, provide justification AND describe the precautionary features against contamination \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

All proposed forcemain(s) 10 feet from water line(s) YES \_\_\_ NO \_\_\_ N/A \_\_\_.

**12.2 VERTICAL SEPARATION:**

- A. The water line(s) is (are) at least 18 inches above the sewer line(s) YES \_\_\_ NO \_\_\_. If no, continue with 12.2.B and provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.
- B. The water line(s) is (are) above the sewer line(s) but less than 18 inches YES \_\_\_ NO \_\_\_. If no, continue with 12.2.C and provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.
- C. The water line(s) is (are) at least 18 inches below the sewer line(s) YES \_\_\_ NO \_\_\_. If no, provide justification below as to why this is not possible and describe precautionary measures taken to prevent contamination.

Justification and precautionary measures: (attach supplemental pages as needed)

\_\_\_\_\_  
\_\_\_\_\_

**12.3 Proximity to wells, reservoirs, and other potable water sources:** YES \_\_\_ N/A \_\_\_.

If yes, Minimum distance \_\_\_\_\_ feet. Describe precautionary measures taken to avoid contamination:

\_\_\_\_\_  
\_\_\_\_\_

Location of all potable water sources shown on plan sheets YES \_\_\_ NO \_\_\_ No Known Sources \_\_\_

**13. PIPE AND MANHOLE TESTING:**

- Is infiltration test included in plans, specifications, or special provisions? YES \_\_\_ NO \_\_\_
- Is exfiltration test included in plans, specifications, or special provisions? YES \_\_\_ NO \_\_\_
- Is air testing included in plans, specifications, or special provisions? YES \_\_\_ NO \_\_\_
- Leakage testing for manholes included in plans, specifications, or special provisions? YES \_\_\_ NO \_\_\_

**14. FLEXIBLE PIPE TESTING:**

Is deflection test included in specifications in accordance with the Illinois Recommended Standards for Sewage Works,

Current Edition? YES \_\_\_ NO \_\_\_ N/A \_\_\_

**15. MISCELLANEOUS REQUIREMENTS:**

The following requirements should be included on the plan sheets where so indicated. For items where this is not specified, the requirements may be on the plan sheets, in the specifications, or in the special provisions:

- 15.1 Standard Specifications for Water and Sewer Main Construction in Illinois, Current Edition, govern the construction of this project. Yes \_\_\_\_ NO \_\_\_\_ . If no, please provide specifications.
- 15.2 Pipe and joint ASTM designation included on plan sheets. YES \_\_\_\_ NO \_\_\_\_
- 15.3 All flexible gravity sewer pipe installed in accordance with ASTM D2321-89; embedment materials for bedding, haunching, and initial backfill to at least 6 inches over the top of the pipe with Class IA or IB or II or III; processed material produced for highway construction used in the project classified according to particle size, shape, and gradation in accordance with ASTM D2321-89, Section 9 and Table 1.  
YES \_\_\_ NO \_\_\_ N/A \_\_\_\_.
- 15.4 All rigid gravity sewer pipe installed in accordance with ASTM C12 and bedding material Class A, B, or C. YES \_\_\_\_ NO \_\_\_\_ N/A \_\_\_\_.
- 15.5 Pickholes in all manholes likely to be flooded not larger than 1 inch in diameter and of the concealed type. YES \_\_\_\_ NO \_\_\_\_ N/A \_\_\_\_.
- 15.6 All manholes numbered. YES \_\_\_\_ NO \_\_\_\_ N/A \_\_\_\_.
- 15.7 Match lines shown on all plan sheets. YES \_\_\_\_ NO \_\_\_\_ N/A \_\_\_\_.

*This Agency is authorized to require this information under Illinois Compiled Statutes, 1998, Chapter 415, Title X, Section 5/39 et seq. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied.*