

# ICD between PNNL, CHPRC, JCI and MSA for 300 Area Utility Systems and Services

Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy  
under Contract DE-AC06-09RL14728



**P.O. Box 650  
Richland, Washington 99352**

# ICD between PNNL, CHPRC, JCI and MSA for 300 Area Utility Systems and Services

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Mission Support Alliance

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**APPROVED**  
*By Julia Raymer at 10:25 am, Dec 11, 2017*

Release Approval

Date



Release Stamp

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**INTERFACE CONTROL DOCUMENT**

**HNF-58243 Rev. 3**

**BETWEEN**

**PACIFIC NORTHWEST NATIONAL LABORATORY, CH2M HILL PLATEAU  
REMEDATION COMPANY (CHPRC), AND JOHNSON CONTROLS, INC.**

**AND**

**MISSION SUPPORT ALLIANCE, LLC**

**FOR**

**300 AREA UTILITY SYSTEMS AND SERVICES**

**NOVEMBER 2017**

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## 1.0 PURPOSE

This Interface Control Document (ICD) addresses interfaces between Mission Support Alliance, LLC, (MSA), CH2M HILL Plateau Remediation (CHPRC), Pacific Northwest National Laboratory (PNNL), and Johnson Controls, Inc., (JCI). This ICD defines specific roles, responsibilities, authorities, and accountabilities for the prime contractors and their Sub-Contractors, regarding utilities, services, and general administration of government-owned land and facilities in the 300 Area of the Hanford Site. This agreement is required as noted in the approved Operational Agreement between Office of Science, Pacific Northwest Site Office (PNSO), and the Office of Environmental Management, Richland Operations Office (RL), Article 16.

## 2.0 SCOPE

This ICD outlines service responsibilities for the Hanford 300 Area. The 300 Area services covered in this agreement include: Steam, Natural Gas, Water Systems, Electrical Distribution, Storm Drains, Sewer Systems, Fire Department Support, Roads and Grounds, Alarm System (Hanford Site Emergency Alerting System), Telecommunications, and Land Management and Long-Term Stewardship (a.k.a. Real Estate Services). Contractor assignments for delivery of these utilities and services are listed in Attachment 3.

This ICD defines the operational agreement between MSA, PNNL, CHPRC and JCI for those utilities and services specified which MSA is currently responsible for, along with the other utilities and services provided by other Hanford contractors such as Johnson Controls and PNNL. The Hanford Site Services and Interface Requirements Matrix (hereafter referred to as the J.3 table<sup>1</sup>) directs mandatory and optional services provided by and to the Hanford Contractors.

The main body of this ICD addresses Roles, Responsibilities, Accountabilities, and Authorities (R2A2) applicable to all PNNL, CHPRC, MSA and JCI occupied and operated facilities except where facility specific requirements are called out directly.

In 2016, specific scope from the River Corridor Closure Contract was transitioned to the RL Contractors. During this transition, Contractor assignment for “re-lamping” of lighting associated with general use roads and parking lots in the 300 Area was not addressed. Therefore, those items will not be addressed in this document until Contractor assignment is directed by RL.

At the beginning of fiscal year (FY) 2018, the water and sewer systems services, operations, and maintenance was transferred from MSA to PNNL. In FY2017, MSA provided water and sewer system services to CHPRC, as directed in the J.3 table.

NOTE: The Electrical Distribution system was transitioned to the City of Richland in 2014.

## 3.0 DEFINITIONS

Adjacent Land Boundary – Attachments 1 and 2 identify the Adjacent Land Boundary of a building’s outer limits and this above ground surface area is deemed under the operational authority and responsibility of the facility occupant/operator, e.g., MSA, PNNL, CHPRC and JCI. Attachment 2, 300 Area DOE Contractors Facilities and Grounds map, is consistent with the Operational Agreement between PNSO and RL.

### Prime Contractors

- a. CH2M HILL Plateau Remediation - **CHPRC**

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<sup>1</sup> The Hanford Site Services and Interface Requirements Matrix could be named and/or numbered differently in the named contractors respective contracts.

- b. Pacific Northwest National Laboratory - PNNL
- c. Mission Support Alliance – MSA
- d. Johnson Controls, Inc. – JCI

*Building* - Buildings and/or facilities are synonymous terms.

*Configuration Management* - The system for applying technical and administrative direction and surveillance to the identification and documentation of functional and physical characteristics of a product, including control of changes and reporting of change implementation status.

## 4.0 ROLES & RESPONSIBILITIES

### 4.1 Steam System

JCI is the steam provider. The steam provider operates package boilers, steam distribution system, condensate return system, and related facilities and equipment.

#### 4.1.1 Steam Distribution System

The steam provider is responsible for operation, maintenance, repairs, and upgrades of the steam distribution system up to and including the first valve and the associated valve pits. For PNNL facilities, the first valve is typically located inside the facility. Operation and maintenance of these valves will be coordinated with the appropriate point of contact (POC) as identified in Attachment 4.

#### 4.1.2 Condensate Return System

The steam provider is responsible for operation, maintenance, repairs and upgrades of all condensate return headers and collection points beginning with and including the first valve. For PNNL facilities, the first valve is typically located inside the facility. Operation and maintenance of these valves will be coordinated with the appropriate POC as identified in Attachment 4.

### 4.2 Natural Gas Line

JCI is the natural gas provider. The natural gas provider is responsible for operation, maintenance, repairs and upgrades of the natural gas distribution system in the 300 Area.

PNNL is the owner of the gas meters installed in the natural gas lines at PNNL-managed buildings (318, 325, and 331). Changes or modifications to the meters will be coordinated between JCI and PNNL.

PNNL is the owner of the additional 2" gas line and associated gas articles running from the header located at the boiler annex to the 331 Building. This line tees off the header from the ground and heads to the second floor of the 331 Building for the humidification boiler. The demarcations point between JCI and PNNL is the first valve from the header (PNNL valve).

### 4.3 Potable Water System

#### 4.3.1 Domestic Water

PNNL operates and maintains the pressurized potable water delivery system in the 300 Area for water supplied by the City of Richland (COR) via 2 main supplies. PNNL will operate, inspect, and maintain the potable water system, water distribution system, and

other related facilities in the 300 Area in accordance with Washington Administrative Code (WAC) requirements and safe drinking water standards. For operations, maintenance and repairs that are near MSA or CHPRC facilities, or which impact the water supply flow and pressure requirements as described in Section 5.1, PNNL will evaluate and agree on the specifics of the activity with MSA and/or CHPRC.

PNNL shall be responsible for all aspects of the water system up to and including the first off-valve or demarcation point outside the customer's facility or complex of facilities. The customer or facility maintains all responsibility for lines downstream of this agreed-upon point. On side-by-side multiple valve isolations and backflow assemblies, the facility assumes responsibility from the discharge side of the downstream isolation valve. Specific demarcation point details are depicted on Attachment 5 – 300 Area Water and Sewer Infrastructure Drawings.

MSA and CHPRC are responsible for the operation and maintenance of all water distribution systems from the first off-valve nearest the MSA/CHPRC controlled facility. In addition, PNNL is responsible for the operation and maintenance of lawn sprinklers and valves (as applicable).

For emergency response, any demarcation point (e.g. first off-valve) of the responsibility of PNNL may be isolated by the facility owner.

#### **4.3.2 Potable Fire Water**

The pressurized potable water delivery system in the 300 Area for water supplied by the City of Richland (COR), and operated and maintained by PNNL, provides the fire water for the 300 Area, utilizing two main supplies of continuous water flow from the COR.

PNNL will operate, inspect, and maintain the fire water distribution system (includes domestic pumps, fire pumps, and water supply and distribution mains, sectionalizing valves, ground gate valves (GGV)), and other related facilities in the 300 Area in accordance with the latest edition of NFPA 24, Standard for the Installation of Private Fire Service Mains and their Appurtenances, and NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

The Hanford Fire Department (HFD), operated by MSA, will inspect, test, and maintain the post indicator valves (PIVs) and fire hydrants of the fire water system in accordance with NFPA. PNNL will repair PIVs and fire hydrants as required. For outages that will impact the fire protection water, notification will be made per Section 6.

For operations, maintenance and repairs that are near MSA and CHPRC facilities or impact the water supply flow rate and pressure requirements as described in Section 5.1, PNNL with MSA and CHPRC will evaluate and agree on the specifics of the activity. These responsibilities are consistent with HNF-59113, as referenced in Section 4.10 Fire Department Support.

MSA is responsible for the operation and maintenance of all fire water distribution systems downstream of the first off-valve and inside of a MSA or CHPRC facility. CHPRC responsibilities for operation and maintenance of fire systems, inside a CHPRC facility, are assigned in J.3 #20 Fire & Emergency Response Services (Fire Protection System Inspection, Testing and Maintenance). Specific demarcation point details are

depicted on Attachment 5 – 300 Area Water and Sewer Infrastructure Drawings.

For emergency response, any demarcation point of the responsibility of PNNL may be isolated by the facility owner.

*Note: 300 Area Potable Water System and Combined Sanitary/Process Sewer services responsibility were transferred from MSA to PNNL effective the start of FY 2018. PNNL has authorized five Inter-Entity Work Orders (IWOs) for FY 2018 services performance and support as follows:*

- *IWO No. 378095 – 300 Area Water Operational Support*
- *IWO No. 378312 – 300 Area Water and Sewer Outstanding Corrective Maintenance*
- *IWO No. 378340 – 300 Area Sewer and Water System new repair and maintenance*
- *IWO No. 378339 – 300 Area Sewer Operational Support*
- *IWO No. 378333 – 300 Area Diesel Fire Pump Installation*

*Special requirements specific to the IWOs authorizations are applicable while the IWOs are open. Upon completion of the IWOs, the service responsibilities documented in this ICD apply.*

#### **4.4 Raw Water System**

PNNL is the raw water supplier. PNNL operates and maintains the raw water system consisting of the 312 Columbia River Pumping Station (312 Facility), 3614A Electrical Building, and piping system between the pumping station and 331 Building. PNNL is responsible for operations, maintenance, repairs, and upgrades of the system.

*Note: PNNL is responsible for the 312 Pumping Station, 3614A Electrical Building, and piping system – based on approved Inter-Contractor Transfer Order (ICTO) effective August 8, 2013. PNNL provides the raw water utility to other PNNL facilities, only. No OHC facilities receive or require this utility from PNNL.*

#### **4.5 Cross Connection Control**

PNNL is the Water Purveyor in the 300 Area. MSA, PNNL, and CHPRC will adhere to Washington Administrative Code requirements for cross connection control. Additional site requirements above and beyond regulatory requirements that impact ongoing MSA and CHPRC facility operations will be reviewed by MSA, CHPRC and PNNL prior to implementation.

#### **4.6 Electrical Distribution System**

City of Richland (COR) is the electrical service provider to the 300 Area. COR installed new electrical infrastructure in an approved DOE-COR Easement (Contract No. R006-13ES-15192.002) to all the remaining 300 Area buildings and services. COR is responsible for the electrical infrastructure from the COR substation to each building/service connection point (typically the individual transformers and meters). Contractors receiving electrical service from the COR are responsible for the operation, maintenance, and configuration management of their building/service electrical power systems from the connection point to/including the building/service.

*Note: A separate agreement has been established to document the COR 300 Area electrical services operations interfaces and responsibilities between the COR and DOE*

Contractors including the identification of the approved DOE-COR Easement- *The City of Richland 300 Area Electrical Services Agreement between The City of Richland, Pacific Northwest National Laboratory, CH2MHILL Plateau Remediation Company, LLC, and Mission Support Alliance, LLC.*

#### **4.6.1 COR Responsibilities:**

The COR will maintain the electrical distribution system from the COR substation to each building/service connection point up to and including the transformer and metering cabinet consistent with COR operations, maintenance, and services throughout its service area.

#### **4.6.2 CHPRC Responsibilities:**

CHPRC is responsible for the operation, maintenance, and configuration management of their facilities' electrical power systems from the connection point to/including the building/service.

324 area COR LED Parking lot lights as defined in the service contract with COR (Contract 956; light numbers and location map available upon request)

#### **4.6.3 MSA Responsibilities:**

MSA is responsible for the operation, maintenance, and configuration management of their facilities' electrical power systems from the connection point (typically the individual transformers and meters) to/including the building/service.

#### **4.6.4 PNNL Responsibilities:**

PNNL is responsible for the operation, maintenance, and configuration management of their facilities' electrical power systems from the connection point (typically the individual transformers and meters) to/including the building/service.

- a. PNNL is responsible for maintaining the following parking lot lights (circuits feeding these lots are from the building):
  - i. 350 Building south parking lot
  - ii. 331 Building north, south, and east parking lots
- b. COR is responsible for maintaining the street lights attached to COR electrical poles within the DOE-COR easement.

### **4.7 Storm Drains**

Storm drains serving a single facility or facility complex are the responsibility of the facility owner through the disposal point (e.g. 3709A Building drain is the responsibility of MSA, 331 Building drain is the responsibility of PNNL, 324 Building drain is the responsibility of CHPRC). MSA will operate and maintain the multi-facility storm water run-off collection basins within the 300 Area. PNNL and CHPRC are required to annually update MSA for the annual WAC 218 update. Operations, maintenance and repairs near PNNL facilities will be coordinated with the appropriate POC as identified in Attachment 4.

## 4.8 Combined Sanitary/Process Sewer

PNNL will operate and maintain the combined sanitary/process sewer system and sanitary sewer lines within the 300 Area up to the interface with the COR sewer system. This includes the network of pipe, tanks, pumps/lift stations, motors, valves and other related mechanical hardware involved in the disposal of approved sanitary and process sewage waste water streams. Specific demarcation point details are depicted on Attachment 5 – 300 Area Water and Sewer Infrastructure Drawing. Operations, maintenance and repairs near MSA facilities will be coordinated with the appropriate POC as identified in Attachment 4. PNNL administers the Municipal Wastewater Pretreatment Permit with the COR.

All contractors are responsible for routine maintenance and upkeep of the sanitary system and sanitary sewer lines within their respective facilities. MSA provides routine maintenance and upkeep of the sanitary system and sanitary sewer lines within CHPRC general purpose facilities/trailers, as directed by CHPRC contract release. Specific demarcation point details are depicted on Attachment 5 – 300 Area Water and Sewer Infrastructure Drawing. All contractors are responsible for compliance with permit requirements of COR Industrial Wastewater Discharge Permit No. CR-IU010 for discharges from their respective facilities.

MSA and CHPRC are responsible for immediately reporting to PNNL any upset conditions causing accidental discharges to the combined sanitary/process sewer from MSA or CHPRC facilities that could cause problems in the sanitary/process sewer, impact the Public Owned Treatment Works, or challenge compliance to the discharge permit conditions. If applicable, MSA or CHPRC is responsible for providing categorization information of these events for reporting to DOE. Event ownership will be determined on a case-by-case basis depending on the circumstances of the upset condition.

As a part of the on-going contractor interface, MSA, JCI and CHPRC will communicate activities affecting discharge to the sanitary/process sewer. MSA, JCI and CHPRC will notify PNNL of any significant configuration changes to the combined sanitary/process sewer and any significant new discharges of effluent prior to making such changes or conducting new discharges.

*Note: 300 Area Potable Water System and Combined Sanitary/Process Sewer services responsibility were transferred from MSA to PNNL effective the start of FY 2018. PNNL has authorized five IWOs for FY 2018 services performance and support as follows:*

- *IWO No. 378095 – 300 Area Water Operational Support*
- *IWO No. 378312 – 300 Area Water and Sewer Outstanding Corrective Maintenance*
- *IWO No. 378340 – 300 Area Sewer and Water System new repair and maintenance*
- *IWO No. 378339 – 300 Area Sewer Operational Support*
- *IWO No. 378333 – 300 Area Diesel Fire Pump Installation*

*Special requirements specific to the IWOs authorizations are applicable while the IWOs are open. Upon completion of the IWOs, the service responsibilities documented in this ICD apply.*

## **4.9 325 Building Retention Process Sewer Tank System (formerly Retention Transfer System and Retention Process Sewer)**

PNNL discontinued its effluent discharge to the 310 Retention Transfer System effective March 2014 with the disconnection between the 325 Building and the system.

PNNL installed and operates the 325 Building retention process sewer tank system inside the 325 Building and is responsible for compliance with all discharge requirements at the point of discharge to the City of Richland Sanitary Sewer.

## **4.10 Fire Department Support**

### **4.10.1 Fire Department Support to PNNL**

MSA and PNNL have established a MOA document: Administrative Interface Agreement HNF-59113, Rev. 0 Between Pacific Northwest National Laboratory Operated by Battelle and Hanford Fire Department Operated by the Mission Support Alliance LLC For Fire Protection Services. This document is referenced for specifics related to fire services provided to the PNNL 300 Area Buildings.

MSA fire personnel are to notify the PNNL POC of all fire hydrant testing.

MSA fire personnel are to notify the appropriate POC if the fire hydrant to be tested is adjacent to a building (within the 20 foot perimeter). Actions affecting facilities' fire suppression systems will be coordinated with HFD. PNNL is responsible for removal of combustible debris (trash and tumbleweeds) from areas within the Adjacent Land Boundary for the PNNL facilities.

PNNL is responsible for the generation and approval of design documentation related to the fire suppression systems within the PNNL facilities.

### **4.10.2 Fire Department Support to CHPRC**

MSA provides Fire & Emergency Response services, including fire systems Inspection, Testing and Maintenance, to CHPRC, per the J.3 table (items #19 and #20) of their respective Prime Contracts.

## **4.11 Road Maintenance & Snow Removal (Parking lots/Sidewalks/ Walkways/Roadways)**

### **4.11.1**

- MSA will maintain Hanford Site roads and grounds as directed in DE-AC06-09RL14728, Mission Support Contract, and in accordance with applicable state and federal laws and regulations.
- MSA provides snow removal in accordance with Mission Support Alliance Snow Removal Plan HNF-37396.

## **4.12 Alarm Systems**

**4.12.1** MSA is responsible for administration, testing and the maintenance of the Hanford Site Emergency Alerting System; however, PNNL must provide MSA with phone numbers for 300 Area staff to be included in the telephone notification system managed by MSA.

**4.12.2** MSA is responsible for the administration, maintenance, and testing of the fire alarm system RFARs or other technologies used to communicate a signal from the facility fire alarm control panel to the Hanford Fire Department receiving station.

**4.12.3** MSA is responsible for the administration, maintenance, and testing of the security alarm systems that communicate with Hanford Patrol.

PNNL and MSA roles and responsibilities are detailed in the current Memorandum of Agreement (MOA) between PNNL Safeguards and Security and National Security Directorate and MSA Safeguards and Security for Protective Force and Security Operations Support.

CHPRC and MSA roles and responsibilities are detailed in each Contractors' respective Prime Contract with RL.

## **4.13 Telecommunications**

PNNL has the responsibility for the installation, operation and maintenance of all telecommunications systems to the PNNL user stations in the 300 Area.

MSA provides telecommunications system services, including installations, removal, etc. to CHPRC, as directed in a CHPRC contract release, per J.3 #61 and #65.

## **4.14 Hazardous and Radiological Conditions**

CHPRC is responsible for management/ monitoring and/or remediation of existing hazardous/radiological property (buildings, grounds, operational areas, waste sites etc.) within the scope of the Plateau Remediation Contract in the 300 Area. MSA is responsible for management/monitoring of existing contamination areas including Underground Radioactive Material Areas (URMAs) within the scope of the Mission Support Contract in the 300 Area. PNNL will provide CHPRC and MSA access to PNNL facilities or adjacent property to perform site inspections/surveillances as needed for waste site characterization activities or periodic monitoring as required. PNNL is responsible for all hazardous/radiological contamination/spills that result from its operations during PNNL occupancy. However, PNNL is not responsible for remediation

of any legacy contamination on the surface or below grade in an adjacent land boundary or any portion of the 300 Area.

CHPRC's 324 Building is a Nuclear Facility, operated under a DOE-approved safety basis. CHPRC requires advance notice of planned work by MSA, or any other entity, requiring access to areas, systems, buildings, etc., within the 324 facility operating boundary.

## 4.15 Real Estate Services

MSA is responsible for integrated services that include land management, space planning, and building management, as applicable, in a responsive and cost effective manner. Services include:

**4.15.1** MSA and CHPRC are responsible for managing and monitoring institutional controls (ICs) established in the 300 Area Record of Decision (EPA 2013). All contractors are responsible for ICs within their operational areas and will provide access to those areas that require specific inspection when requested. All contractors will provide input to the annual site-wide IC Report to MSA.

**4.15.2** With appropriate contract direction, MSA is responsible for managing the active and inactive Underground Injection Control (UIC) wells not associated with CHPRC or PNNL facilities. CHPRC and PNNL are responsible for operation, inspection and maintenance of all UICs associated with their respective facilities.

**4.15.3** MSA is responsible for General access control of the 300 Area. Specifically MSA will provide access control to those areas of the 300 Area north of Apple Street east of Route 4 South. This does not include access control to any of the CHPRC or PNNL facilities or operational areas. CHPRC and PNNL will maintain access control for their respective facilities and operational areas. **Access Control for this agreement includes physical barriers and/or appropriate signs, as an element of 300 Area institutional controls or, as defined by the contractor's operational requirements.**

**4.15.4** MSA manages the Integrated Land Management (ILM) program that coordinates and integrates requests to use Hanford land. This includes site evaluations, excavation permitting, and area and resource management plans to ensure compliance with the Final Hanford Comprehensive Land-Use Plan Environmental Impact Statement, associated Record of Decisions, and Supplement Analyses. CHPRC and PNNL will coordinate with MSA on these items, as applicable.

**4.15.5** MSA manages all land that is not under the direct control and operation of a program or contractor, regardless if it is previously disturbed land or undisturbed land. This activity is sometimes referred to as a "landlord" responsibility.

## 5.0 FACILITY SPECIFIC REQUIREMENTS

*Note: 300 Area Potable Water System and Combined Sanitary/Process Sewer services responsibility were transferred from MSA to PNNL effective the start of FY 2018. PNNL has authorized five IWOs for FY 2018 services performance and support as follows:*

- *IWO No. 378095 – 300 Area Water Operational Support*
- *IWO No. 378312 – 300 Area Water and Sewer Outstanding Corrective Maintenance*
- *IWO No. 378340 – 300 Area Sewer and Water System new repair and maintenance*
- *IWO No. 378339 – 300 Area Sewer Operational Support*
- *IWO No. 378333 – 300 Area Diesel Fire Pump Installation*

*Special requirements specific to the IWOs authorizations are applicable while the IWOs are open. Upon completion of the IWOs, the service responsibilities documented in this ICD apply.*

### 5.1 300 Area

PNNL is responsible for maintaining the potable water equipment and providing to MSA and CHPRC, when requested, information and testing documentation pertaining to material condition of the delivery capability of the 300 Area (fire) water supply systems.

Examples are:

- Fire pump tests and inspections
- Piping, hydrant and fire water pump flow rate and performance evaluations
- Programmatic concerns such as changes in PM frequency
- Surveillances, functional testing records, and PMs
- Sanitary water system one-line diagrams, piping and instrument diagrams (P&ID)

Components of interest to MSA and CHPRC for the potable water supply system include Building 385 (water supply pumping station), the pumps (includes fire pumps), piping and piping components in the potable water supply system between the pumps and the PIVs that isolate buildings from the main potable water supply system. PNNL is responsible for operation, maintenance, and configuration management of the 300 Area potable water system to provide the necessary fire water supply hydraulic demands.

The minimum PNNL and CHPRC potable water supply fire flow rate and pressure requirements are as follows:

Building	Hydraulic Requirement	Comment
318	930 gpm @ 90 psig	<ul style="list-style-type: none"> <li>• Sprinkler system demand</li> </ul>
318	2,500 gpm @ 20 psig	<ul style="list-style-type: none"> <li>• Assumes sprinkler system is out of service and HFD intervention</li> </ul>
324	1,500 gpm @ 50 psi	<ul style="list-style-type: none"> <li>• Sprinkler system demand</li> <li>• Important to safety fire suppression system</li> </ul>
324	3,500 gpm @ 20 psi	<ul style="list-style-type: none"> <li>• Assumes sprinkler system is out of service and HFD intervention</li> </ul>
325	671 gpm @ 69 psig and 1,500 gpm @ 59 psig	<ul style="list-style-type: none"> <li>• Sprinkler system demands</li> <li>• Safety significant fire suppression system</li> </ul>
325	3,000 gpm @ 20 psig	<ul style="list-style-type: none"> <li>• Assumes sprinkler system is out of service and HFD intervention</li> </ul>
331	837 gpm @ 104 psig and 631 gpm @ 122 psi	<ul style="list-style-type: none"> <li>▪ Sprinkler system demands</li> </ul>
331	2,500 gpm @ 20 psig	<ul style="list-style-type: none"> <li>▪ Assumes sprinkler system is out of service and HFD intervention</li> </ul>
350	924 gpm @ 90 psig	<ul style="list-style-type: none"> <li>▪ Sprinkler system demand</li> </ul>
350	2,500 gpm @ 20 psig	<ul style="list-style-type: none"> <li>▪ Assumes sprinkler system is out of service and HFD intervention</li> </ul>

Minimum of two sources of fire water supply (including two sources of pumping capability) shall be capable of providing flow at the required demand rate. Additionally, PNNL is responsible for maintaining the following in regards to the electric fire pump: 1.) two separate utility connections or 2.) a connection from a generator and a utility connection.

The fire pump start set points shall be maintained no lower than 85 psig.

PNNL will notify MSA and CHPRC as soon as practical and within one hour of any adverse condition or unplanned occurrence with the potable water system (e.g., broken water main, fire pump not starting or "not pass" pump test/inspection, shut valves that affect MSA and CHPRC water supply source, duration, flow rate and pressure requirements). PNNL will make notifications per Section 6 when the water requirements listed above cannot be met.

*Note: Emergency response actions and responsibilities, including notifications, are documented in the Hanford Emergency Management Plan, DOE/RL-94-02 and Emergency Plan Implementing Procedures, DOE-0223.*

## 5.2 325 Building, Radiochemical Processing Laboratory (RPL)

The RPL is a Category 2 Nuclear Facility operated under a DOE-approved Safety Basis. The Safety Basis identifies certain structures, systems and components (SSC) that are categorized as safety-significant. The Safety Basis also establishes the operability

requirements for these safety-significant SSCs. The operability of some of these safety systems relies on the water services provided to the building by PNNL. RPL fire suppression systems are safety significant and lack of water severely restricts facility operation.

*Note: MSA emergency response actions and responsibilities, including notifications, are documented in the Hanford Emergency Management Plan, DOE/RL-94-02 and Emergency Plan Implementing Procedures, DOE-0223. PNNL emergency response actions and responsibilities including notifications are in compliance with the Hanford Emergency Management Plan and documented in PNNL-MA-110 The PNNL Emergency Management Plan.*

### 5.3 324 Building

The 324 Building is a Nuclear Facility operated under a DOE-approved Safety Basis. The Safety Basis identifies the building fire suppression system as important to safety (ITS). The operability of this ITS system relies on the water services provided to the building by PNNL and a lack of water severely restricts facility operation.

PNNL will notify CHPRC as soon as practical and within one hour of any adverse condition or unplanned occurrence with the potable water system (e.g., broken water main, fire pump not starting or not pass pump test/inspection, shut valves that affect CHPRC water supply source, duration, flow rate and pressure requirements). PNNL will make notifications per Section 6 when the water requirements listed above cannot be met.

*Note: Emergency response actions and responsibilities, including notifications, are documented in the Hanford Emergency Management Plan, DOE/RL-94-02 and Emergency Plan Implementing Procedures, DOE-0223.*

## 6.0 NOTIFICATION

*Note: 300 Area Potable Water System and Combined Sanitary/Process Sewer services responsibility were transferred from MSA to PNNL effective the start of FY 2018. PNNL has authorized five IWOs for FY 2018 services performance and support as follows:*

- *IWO No. 378095 – 300 Area Water Operational Support*
- *IWO No. 378312 – 300 Area Water and Sewer Outstanding Corrective Maintenance*
- *IWO No. 378340 – 300 Area Sewer and Water System new repair and maintenance*
- *IWO No. 378339 – 300 Area Sewer Operational Support*
- *IWO No. 378333 – 300 Area Diesel Fire Pump Installation*

*Special requirements specific to the IWOs authorizations are applicable while the IWOs are open. Upon completion of the IWOs, the service responsibilities documented in this ICD apply.*

Timely notifications for planned utility outage, unplanned utility outage, emergency condition, or other unplanned occurrences, all associated with the potable water and combined sanitary/process sewer services, are required. Generally, timely notification is as follows:

- PNNL will provide 60 days' notice to the appropriate MSA, CHPRC or JCI POC for a planned outage that will prevent ongoing operations in a MSA, CHPRC or JCI facility.

- PNNL will provide 30 days' notice to the appropriate MSA, CHPRC or JCI POC for a planned outage that will not prevent ongoing MSA, CHPRC or JCI operations.
- PNNL will notify the appropriate MSA, CHPRC or JCI POC as soon as practical and within one hour of the event of an unplanned utility outage or other unplanned occurrence.
- PNNL will notify the appropriate MSA, CHPRC or JCI POC as soon as practical and within one hour of the event of an emergency condition affecting a MSA, CHPRC or JCI facility.
- PNNL will notify the appropriate MSA, CHPRC or JCI POC as soon as practical and within one hour when any condition is identified that affects the capability of the water supply system to meet the Building 324 or 325 hydraulic requirements specified by this document, including when:
  - Two sources of water are not available
  - Fire pump start set points cannot be maintained at or above 85 psig or when fire pump start tests indicate a fire pump start pressure that is less than 85 psig
  - Fire pump is out of service.
- PNNL will notify the appropriate MSA, CHPRC or JCI POC as soon as practical and within one hour of an event where two separate utility connections to the electric fire pump are not available.
- PNNL will notify the appropriate MSA, CHPRC or JCI POC as soon as practical and within one hour of an event where any fire pump is out of service.
- For the list of contacts, see: Attachment 4 PNNL/CHPRC/JCI/MSA Points of Contact for Utility Facility Issues.

## 7.0 REFERENCES

EPA, 2013, Hanford Site 300 Area Record of Decision for 300-FF-2 and 300-FF-5 and Record of Decision Amendment for 300-FF-1

MSA-MOA-00002, Memorandum of Agreement for the Performance and Payment of Services between Mission Support Alliance LLC and CH2M HILL Plateau Remediation Company LLC, current revision

MSA-MOA-00006, Memorandum of Agreement for the Performance and Payment of Services between Mission Support Alliance LLC and Pacific Northwest National Laboratory, current revision

MSA-MOA-00015, Memorandum of Agreement for Protective Force and Security Operations support between Mission Support Alliance LLC and Pacific Northwest National Laboratory, current revision

PRC-MOA-PNNL-00002, Memorandum of Agreement for the Performance and Payment of Services between CH2M HILL Plateau Remediation Company and Pacific Northwest National Laboratory, current revision

HNF-59113, Administrative Interface Agreement between Mission Support Alliance LLC and Pacific Northwest National Laboratory for Fire Protection Services, current revision

PNNL-HFD, Administrative Interface Agreement between Pacific Northwest National Laboratory and Hanford Fire Department operated by Mission Support Alliance LLC for Fire Protection Services, current revision

## **Attachment 1**

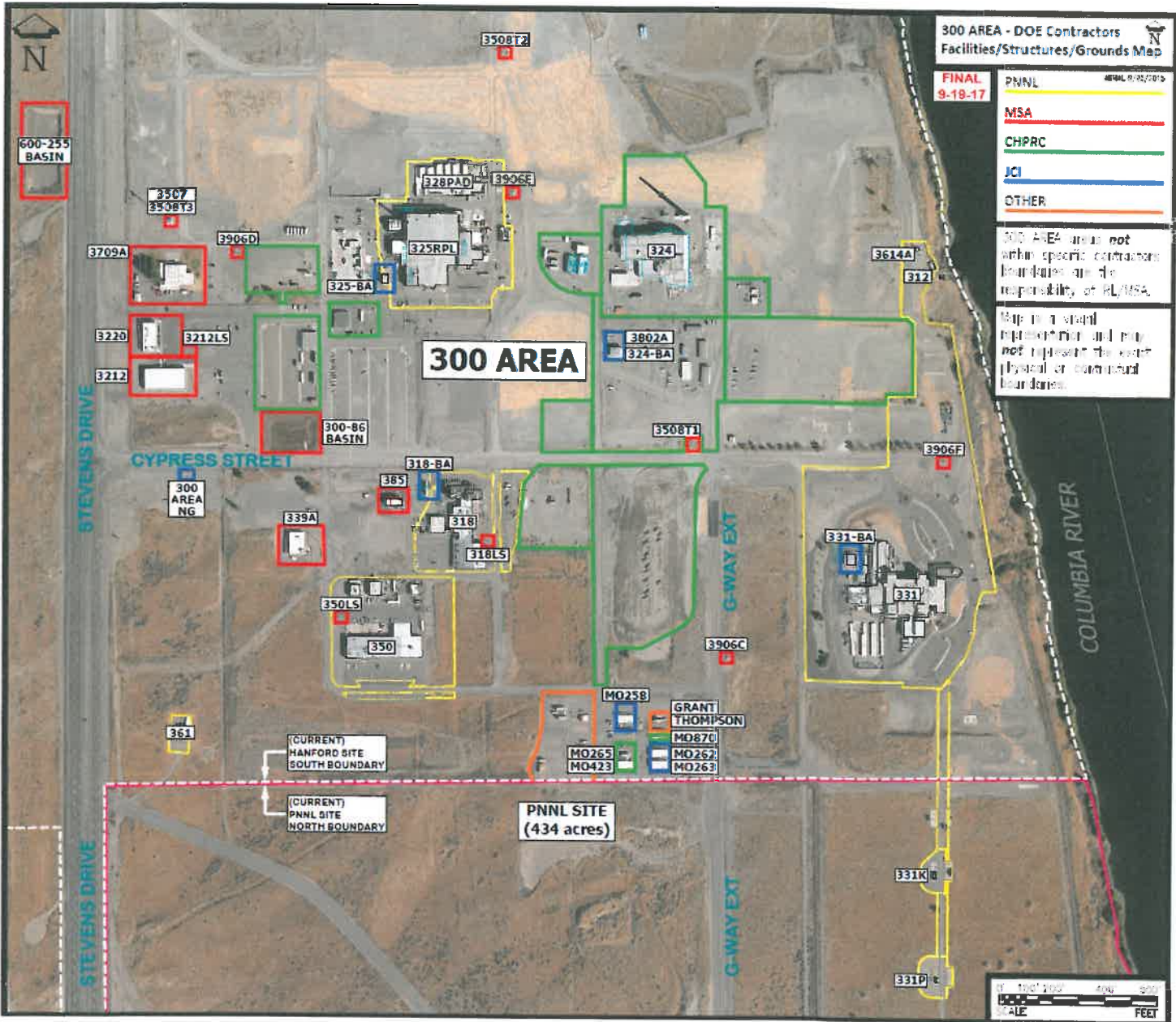
### **Outdoor Storage, Parking, Grounds Areas Associated with PNNL Facilities**

- Fence sections that form portions of the "security" barrier at RPL
- RPL East Storage Yard
- General outdoor surroundings at 325 (filter building, chiller bldg., diesel generator, pavement around bldg.)
- Fenced yard north of and adjacent to 350 surrounding 350A, 350B, 350C, 350D
- Fence surrounding 361
- Fenced property storage yard west of 331 (on former 331B site)
- Small fenced area northwest of 318 around basement access pit
- Small fenced area northeast of 318 around equipment
- Unfenced storage area between RPL and 308
- 331 areas adjacent to building & parking areas
- 350 parking area
- Sand blasting area east of 350 fenced yard
- 318 parking area
- Unfenced area surrounding the entire 331K Facility
- Unfenced area surrounding the 331P Facility
- Access road from 331 Building to 331K and 331P Facilities
- Above 331K and 331P areas are part of the area south of the 331P and 331K concrete block wall/fence – (note – this area is deemed an exclusion area for PNNL 331P and 331K operations)
- RPL North Storage Pad, (328 Pad)
- 312 Pumping Station, 3614A Electrical Building, and piping system

Above items are within the PNNL Facilities and Grounds adjacent land boundaries as reflected on Attachment 2.

## Attachment 2

### 300 Area DOE Contractors Facilities and Grounds



### Attachment 3

#### Contractor Responsibilities for 300 Area Utilities/Services

Utility/Service	Utility Provider	Responsible Prime Contractor	Performing Organization
Electrical Distribution	BPA/COR	PNNL (oversight)	COR
Electrical Maintenance (primary power)	COR	PNNL (oversight)	COR
Potable Water	COR	PNNL	PNNL
Sanitary Sewer	COR	PNNL	PNNL
Process Sewer	COR	PNNL	PNNL
Natural Gas	Cascade Natural Gas	JCI	JCI
325 Building Retention Process Sewer Tank System	PNNL	PNNL	PNNL
Steam	JCI	JCI	JCI
Telecommunications	XO	MSA	MSA
Snow Removal, Roads, Grounds	MSA	MSA	MSA
312 River Pumping Station	PNNL	PNNL	PNNL
300 Area Hanford Fire Department	MSA	MSA	MSA
Real Estate Services	MSA	MSA	MSA

## Attachment 4

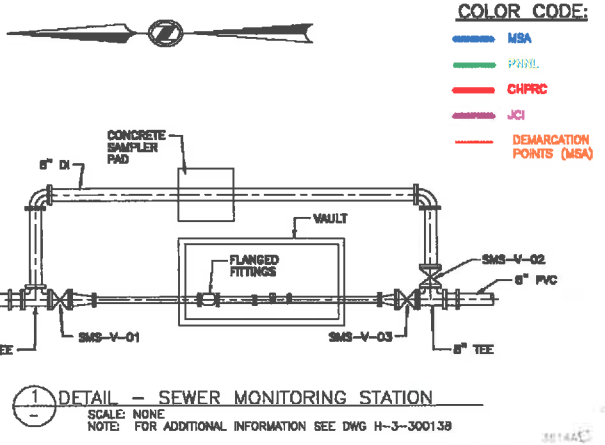
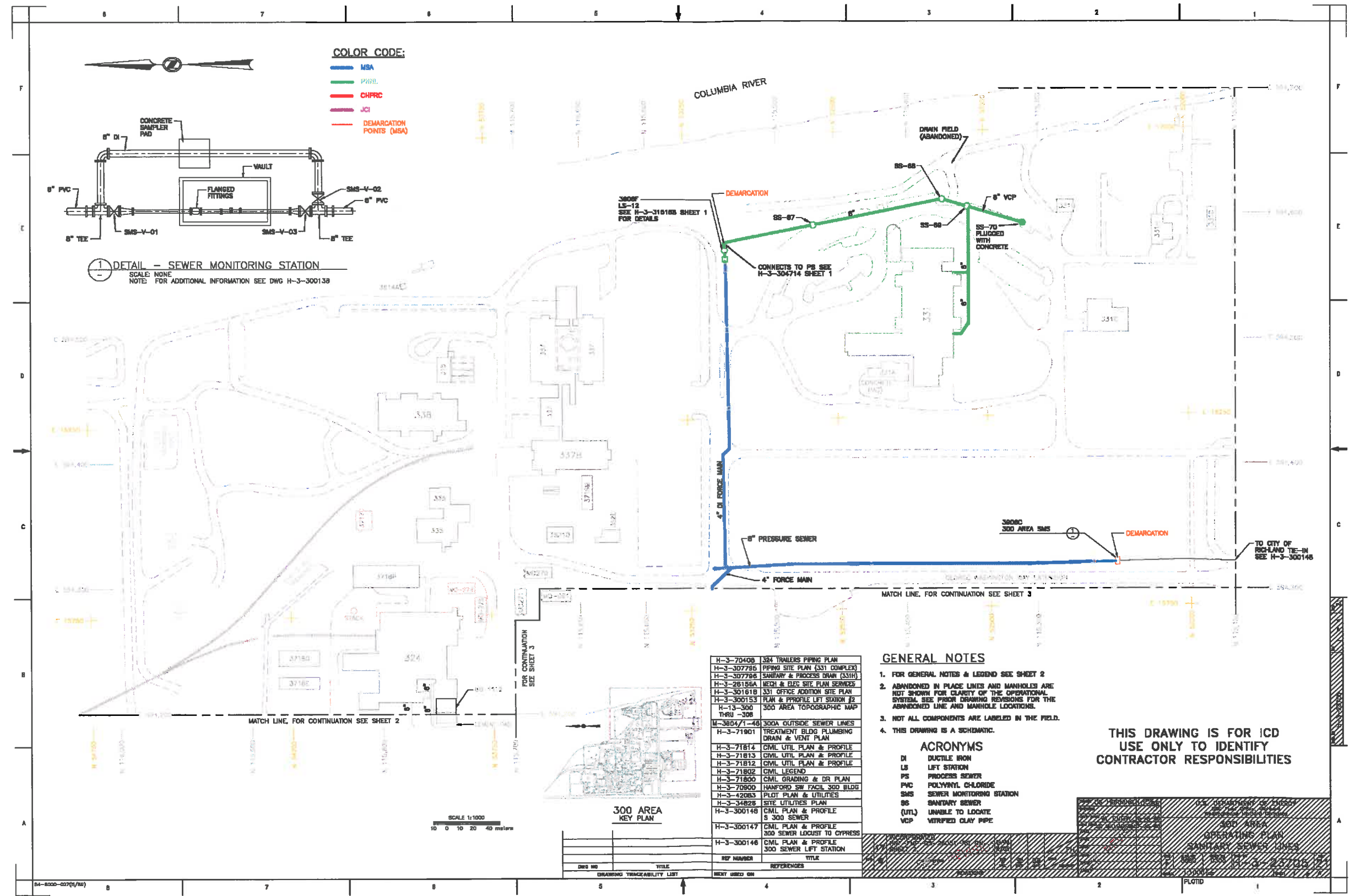
## PNNL/CHPRC/JCI/MSA Points of Contact for Utility / Services Issues

System/Condition	Contact	Phone #
Unplanned utility outage affecting PNNL facilities and structures	PNNL Control Room (Note – PNNL Control Room will contact appropriate Bldg. Mgrs.)	375-2400
Unplanned utility outage affecting 324 Building	April Wickersham (324 Operations Facility Manager)	406-465-6394 (Cell)
Planned utility outages affecting all PNNL facilities and structures except RPL (325) and fire system infrastructure, see below	Sanjay Sanan (PNNL 300 Area Building Manager)	371-6997 430-4483 (Cell)
Planned utility outages affecting RPL (325)	Paul Saueressig (PNNL 325 Building Manager)	375-5352 619-3873 (Cell)
Planned utility outages associated with entire 300 Area and not specific PNNL facilities and structures	Sanjay Sanan / Jim Bixler	371-6997 / 371-7755
Routine D4 issues affecting PNNL Operations	Sanjay Sanan	371-6997
Routine D4 issues affecting PNNL utility services and improvements	Jim Bixler	371-7755
300 Area HFD fire hydrant/other infrastructure testing, outages, and issues affecting PNNL operations, facilities, and structures	Neal Hara (PNNL Fire Protection) (Note – Hara will contact appropriate Bldg. Mgrs.)	371-7655 208-604-1533 (Cell)
324 HFD fire hydrant/other infrastructure testing, outages, and issues affecting 324 Building	April Wickersham (324 Operations Facility Manager)	406-465-6394 (Cell)
300 Area HFD fire hydrant/other infrastructure testing, outages, and issues affecting CHPRC General Purpose Facilities	Carl Marsh (CHPRC Facilities & Property Mgmt)	951-760-9079 (Cell)
PNNL Water Purveyor	Sanjay Sanan	371-3667 430-4483 (Cell)
Major utility changes, service allocation changes – PNNL Coordination	Sanjay Sanan / Jim Bixler	371-6997 / 371-7755
MSA Road Maintenance & Snow Removal	Rusty Knight	376-6654
MSA Electrical Utilities	Joe Caudill	376-1631
COR Energy Services	Clint Whitney	947-7434 531-9759 (Cell)
JCI Steam Boiler Annex's & Natural Gas Distribution	Mike Hagerty Joe Burrell (Site Manager)	373-1343 372-0243
CHPRC Emergency Preparedness	Stephen Burke	509-714-0327 (Cell)
PNNL Emergency Preparedness	Jeremy S. Beck	372-4548
MSA Emergency Alerting System	Toby Greer	376-4075
Hanford Site Emergency Operations Center (EOC)	Shift Office	376-2900 or 376-3030
MSA Real Estate Services	Clark Stolle	376-9080
MSA Rad Con	Wayne Schofield	376-6164

### Attachment 5 - 300 AREA WATER AND SEWER INFRASTRUCTURE DRAWINGS

(Note – Drawings do not reflect the services responsibility transfer to PNNL effective start of FY 2018. They will be updated and distributed in the future. Contact PNNL if any questions.)

#### 300 Area Sewer Drawing A



H-3-70406	324 TRAILERS PIPING PLAN
H-3-307795	PIPING SITE PLAN (331 COMPLEX)
H-3-307796	SANITARY & PROCESS DRAIN (331H)
H-3-28156A	MECH & ELEC SITE PLAN SERVICES
H-3-301618	331 OFFICE ADDITION SITE PLAN
H-3-300153	PLAN & PROFILE LIFT STATION #2
H-3-300	300 AREA TOPOGRAPHIC MAP THRU -308
M-360471-48	300A OUTSIDE SEWER LINES
H-3-71901	TREATMENT BLDG PLUMBING DRAIN & VENT PLAN
H-3-71614	CIML UTIL PLAN & PROFILE
H-3-71613	CIML UTIL PLAN & PROFILE
H-3-71612	CIML UTIL PLAN & PROFILE
H-3-71802	CIML LEGEND
H-3-71800	CIML GRADING & DR PLAN
H-3-70900	HANFORD SW FACIL 300 BLDG
H-3-42083	PLOT PLAN & UTILITIES
H-3-34826	SITE UTILITIES PLAN
H-3-300146	CIML PLAN & PROFILE 300 SEWER
H-3-300147	CIML PLAN & PROFILE 300 SEWER LOCUST TO CYPRESS
H-3-300146	CIML PLAN & PROFILE 300 SEWER LIFT STATION

- GENERAL NOTES**
- FOR GENERAL NOTES & LEGEND SEE SHEET 2
  - ABANDONED IN PLACE LINES AND MANHOLES ARE NOT SHOWN FOR CLARITY OF THE OPERATIONAL SYSTEM. SEE PRIOR DRAWING REVISIONS FOR THE ABANDONED LINE AND MANHOLE LOCATIONS.
  - NOT ALL COMPONENTS ARE LABELED IN THE FIELD.
  - THIS DRAWING IS A SCHEMATIC.

**ACRONYMS**

DI	DUCTILE IRON
LS	LIFT STATION
PS	PROCESS SEWER
PVC	POLYVINYL CHLORIDE
SMS	SEWER MONITORING STATION
SS	SANITARY SEWER
(UTL)	UNABLE TO LOCATE
VCP	VITRIFIED CLAY PIPE

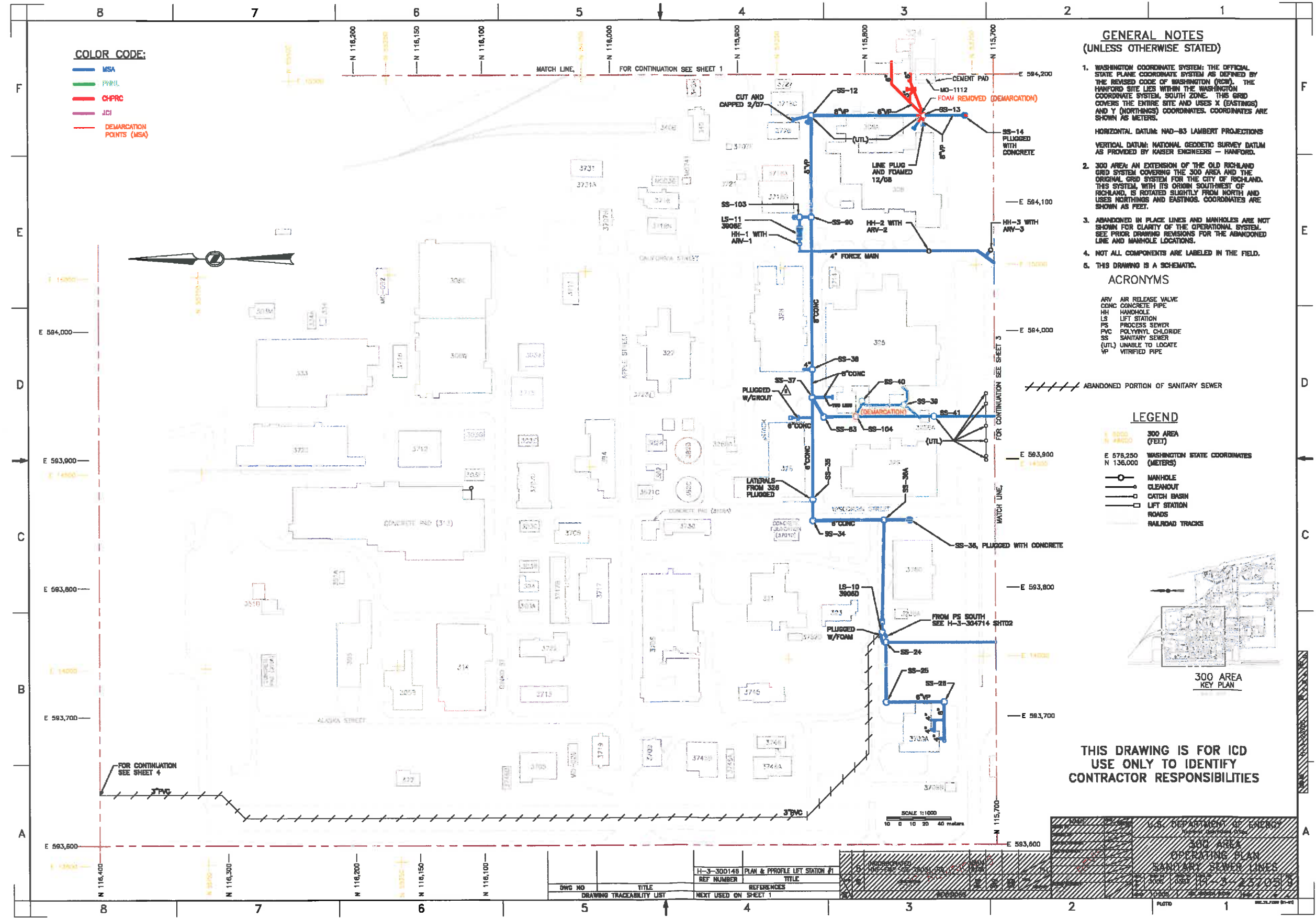
**THIS DRAWING IS FOR ICD USE ONLY TO IDENTIFY CONTRACTOR RESPONSIBILITIES**



DWG NO	TITLE	REVISED ON	REVISED BY

REF NUMBER	TITLE	REVISED ON	REVISED BY

# 300 Area Sewer Drawing B



**COLOR CODE:**  
 MSA  
 PVRIL  
 CHPRC  
 JCI  
 DEMARCATION POINTS (MSA)

**GENERAL NOTES**  
 (UNLESS OTHERWISE STATED)

- WASHINGTON COORDINATE SYSTEM: THE OFFICIAL STATE PLANE COORDINATE SYSTEM AS DEFINED BY THE REVISED CODE OF WASHINGTON (RCW). THE HANFORD SITE LIES WITHIN THE WASHINGTON COORDINATE SYSTEM, SOUTH ZONE. THIS GRID COVERS THE ENTIRE SITE AND USES X (EASTINGS) AND Y (NORTHINGS) COORDINATES. COORDINATES ARE SHOWN AS METERS.
- HORIZONTAL DATUM: NAD-83 LAMBERT PROJECTIONS
- VERTICAL DATUM: NATIONAL GEODETIC SURVEY DATUM AS PROVIDED BY KAISER ENGINEERS - HANFORD.
- 300 AREA: AN EXTENSION OF THE OLD RICHLAND GRID SYSTEM COVERING THE 300 AREA AND THE ORIGINAL GRID SYSTEM FOR THE CITY OF RICHLAND. THIS SYSTEM, WITH ITS ORIGIN SOUTHWEST OF RICHLAND, IS ROTATED SLIGHTLY FROM NORTH AND USES NORTHINGS AND EASTINGS. COORDINATES ARE SHOWN AS FEET.
- ABANDONED IN PLACE LINES AND MANHOLES ARE NOT SHOWN FOR CLARITY OF THE OPERATIONAL SYSTEM. SEE PRIOR DRAWING REVISIONS FOR THE ABANDONED LINE AND MANHOLE LOCATIONS.
- NOT ALL COMPONENTS ARE LABELED IN THE FIELD.
- THIS DRAWING IS A SCHEMATIC.

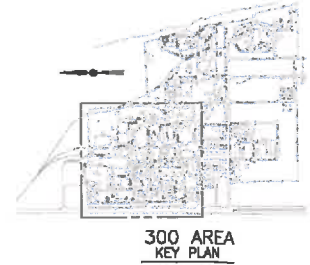
**ACRONYMS**

- ARV AIR RELEASE VALVE
- CCNC CONCRETE PIPE
- HH HANDHOLE
- LS LIFT STATION
- PS PROCESS SEWER
- PVC POLYVINYL CHLORIDE
- SS SANITARY SEWER
- (UTL) UNABLE TO LOCATE
- VP VITRIFIED PIPE

ABANDONED PORTION OF SANITARY SEWER

**LEGEND**

- 300 AREA (FEET)
- WASHINGTON STATE COORDINATES (METERS)
- MANHOLE
- CLEANOUT
- CATCH BASIN
- LIFT STATION
- ROADS
- RAILROAD TRACKS

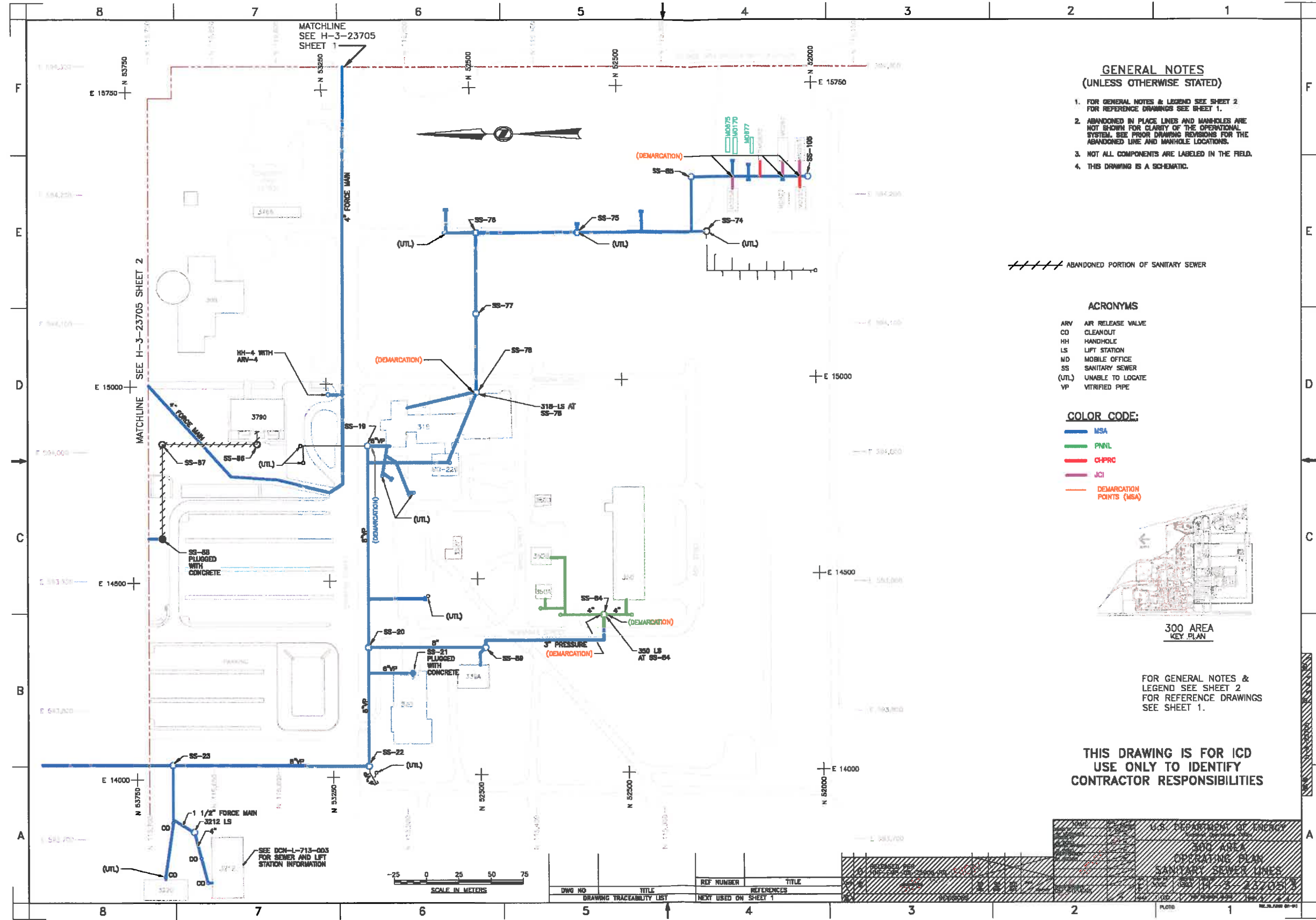


**THIS DRAWING IS FOR ICD USE ONLY TO IDENTIFY CONTRACTOR RESPONSIBILITIES**

DWG NO	TITLE	REF NUMBER	TITLE
H-3-300148	PLAN & PROFILE LIFT STATION #1		
DRAWING TRACEABILITY LIST			
		NEXT USED ON SHEET 1	

NO	DESCRIPTION	DATE
1	ISSUED FOR ICD USE ONLY TO IDENTIFY CONTRACTOR RESPONSIBILITIES	11/27/2013
2	300 AREA OPERATING PLAN SANITARY SEWER LINES	11/27/2013

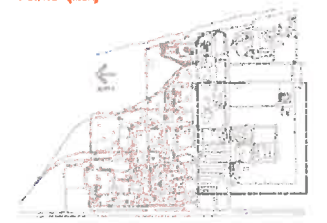
### 300 Area Sewer Drawing C



- GENERAL NOTES**  
(UNLESS OTHERWISE STATED)
1. FOR GENERAL NOTES & LEGEND SEE SHEET 2 FOR REFERENCE DRAWINGS SEE SHEET 1.
  2. ABANDONED IN PLACE LINES AND MANHOLES ARE NOT SHOWN FOR CLARITY OF THE OPERATIONAL SYSTEM. SEE PRIOR DRAWING REVISIONS FOR THE ABANDONED LINE AND MANHOLE LOCATIONS.
  3. NOT ALL COMPONENTS ARE LABELED IN THE FIELD.
  4. THIS DRAWING IS A SCHEMATIC.

- ACRONYMS**
- ARV AIR RELEASE VALVE
  - CD CLEANOUT
  - HH HANDHOLE
  - LS LIFT STATION
  - MO MOBILE OFFICE
  - SS SANITARY SEWER
  - (UTL) UNABLE TO LOCATE
  - VP VITRIFIED PIPE

- COLOR CODE:**
- MSA (Blue line)
  - PWNL (Green line)
  - CHPRC (Red line)
  - JCI (Purple line)
  - DEMARICATION POINTS (MSA) (Red dashed line)



FOR GENERAL NOTES & LEGEND SEE SHEET 2  
FOR REFERENCE DRAWINGS SEE SHEET 1.

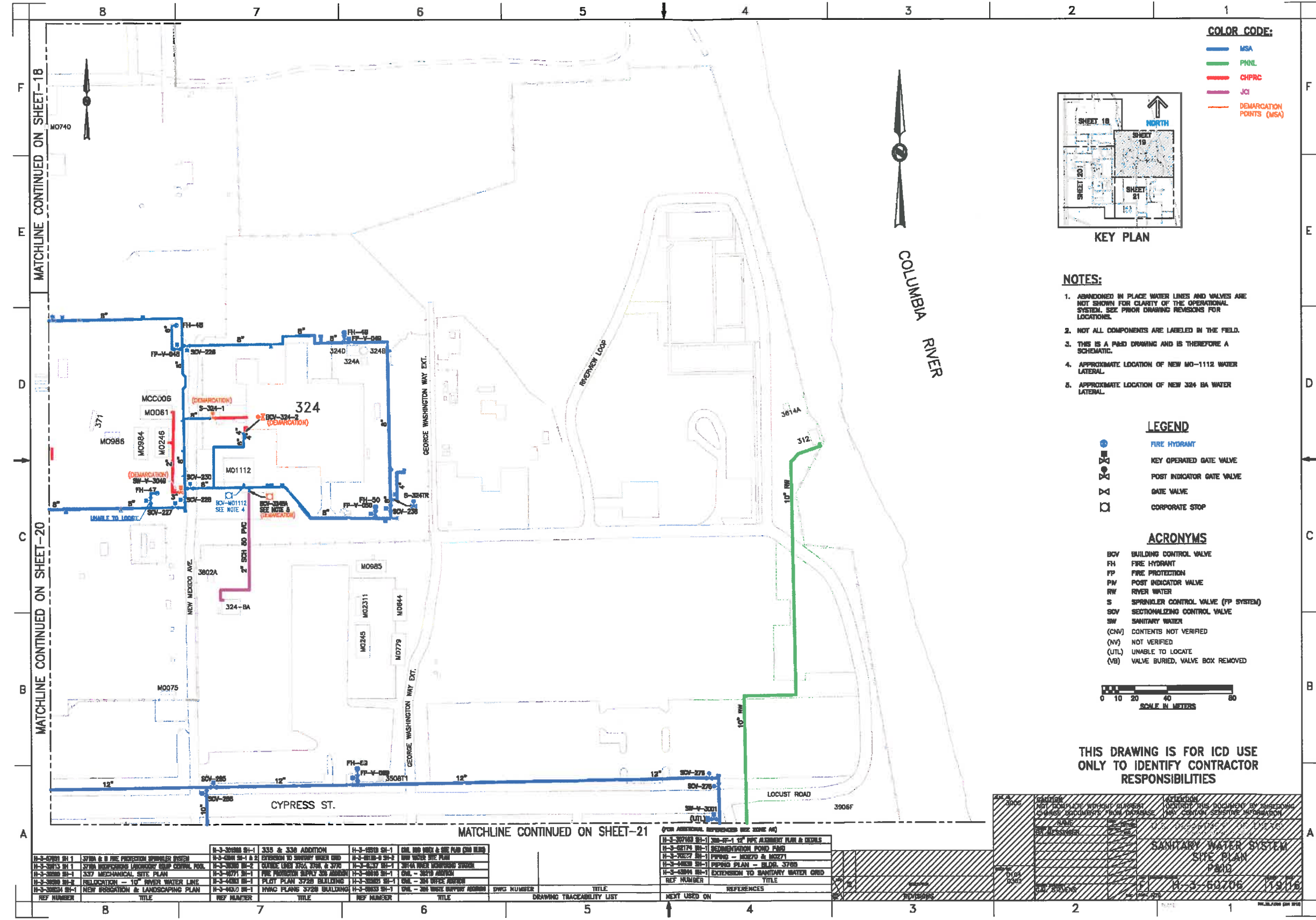
**THIS DRAWING IS FOR ICD  
USE ONLY TO IDENTIFY  
CONTRACTOR RESPONSIBILITIES**



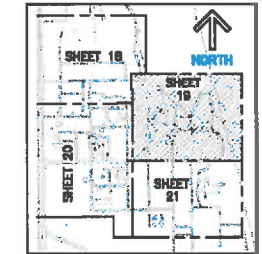
DWG NO	TITLE	REF NUMBER	TITLE
1	300 AREA OPERATING PLAN		
2	300 AREA SANITARY SEWER LINES		
3	300 AREA OPERATING PLAN		
4	300 AREA OPERATING PLAN		
5	300 AREA OPERATING PLAN		
6	300 AREA OPERATING PLAN		
7	300 AREA OPERATING PLAN		
8	300 AREA OPERATING PLAN		



### 300 Area Water Drawing B



- COLOR CODE:**
- MSA
  - PIONL
  - CHPRC
  - JCI
  - DEMARCATION POINTS (MSA)



- NOTES:**
- ABANDONED IN PLACE WATER LINES AND VALVES ARE NOT SHOWN FOR CLARITY OF THE OPERATIONAL SYSTEM. SEE PRIOR DRAWING REVISIONS FOR LOCATIONS.
  - NOT ALL COMPONENTS ARE LABELED IN THE FIELD.
  - THIS IS A P&ID DRAWING AND IS THEREFORE A SCHEMATIC.
  - APPROXIMATE LOCATION OF NEW MO-1112 WATER LATERAL.
  - APPROXIMATE LOCATION OF NEW 324 BA WATER LATERAL.

- LEGEND**
- FIRE HYDRANT
  - KEY OPERATED GATE VALVE
  - POST INDICATOR GATE VALVE
  - GATE VALVE
  - CORPORATE STOP

- ACRONYMS**
- BCV BUILDING CONTROL VALVE
  - FH FIRE HYDRANT
  - FP FIRE PROTECTION
  - PV POST INDICATOR VALVE
  - RW RIVER WATER
  - S SPRINKLER CONTROL VALVE (FP SYSTEM)
  - SCV SECTIONALIZING CONTROL VALVE
  - SW SANITARY WATER
  - (CNV) CONTENTS NOT VERIFIED
  - (NV) NOT VERIFIED
  - (UTL) UNABLE TO LOCATE
  - (VB) VALVE BURIED, VALVE BOX REMOVED



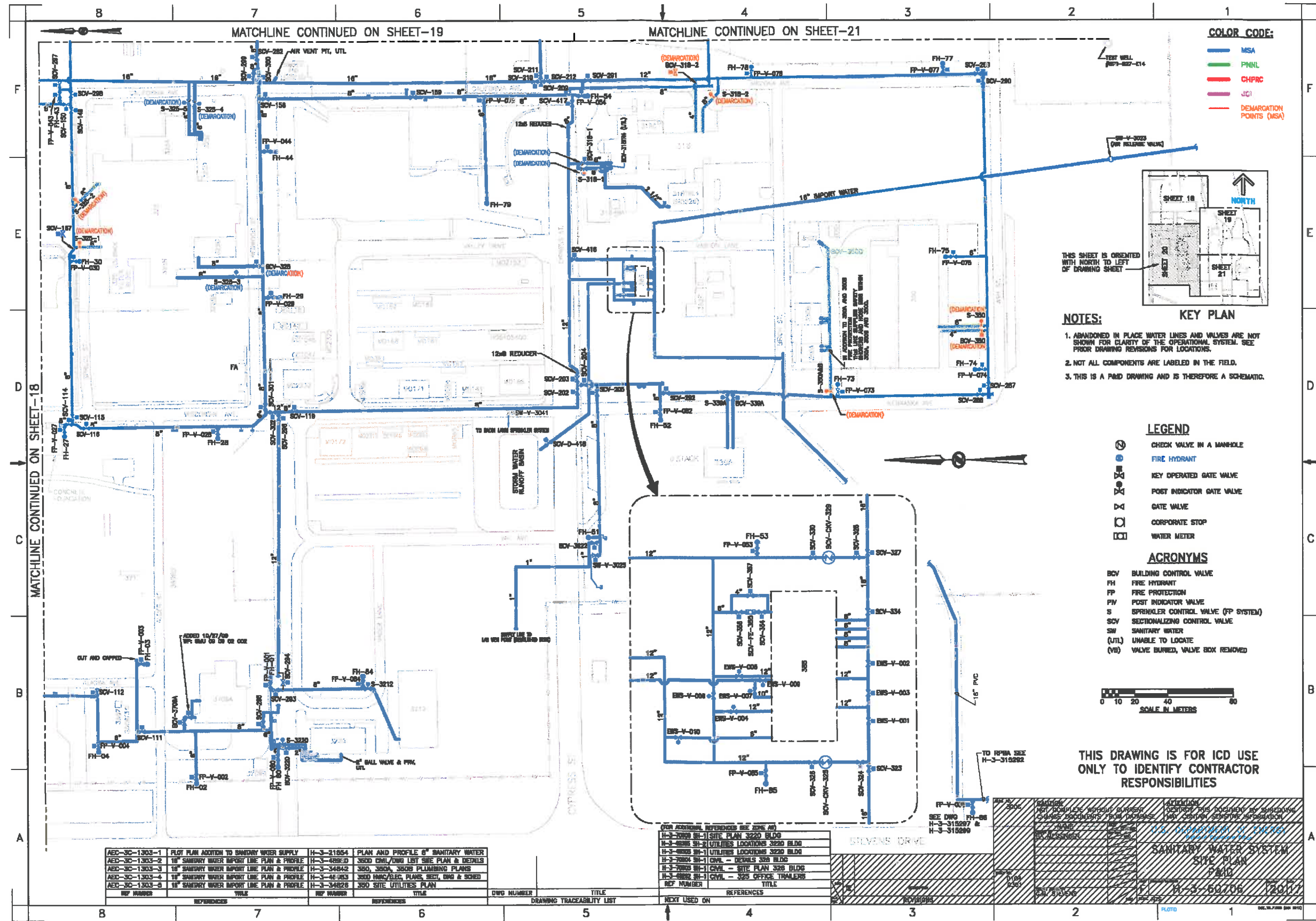
**THIS DRAWING IS FOR ICD USE ONLY TO IDENTIFY CONTRACTOR RESPONSIBILITIES**

REF NUMBER	TITLE	REF NUMBER	TITLE	REF NUMBER	TITLE	DWG NUMBER	TITLE
H-3-0810 SH-1	370A & B FIRE PROTECTION SPRINKLER SYSTEM	H-3-3098 SH-1	335 & 336 ADDITION	H-3-1819 SH-1	CNL 800 WREN & ONE PLAD CND BLDG		
H-3-3015 SH-1	370B MECHANICAL LABORATORY SHIP CONTROL POOL	H-3-4380 SH-1 & 2	EXTENSION TO SANITARY WATER GRID	H-3-0818-3 SH-2	NEW WATER TREAT PLANT		
H-3-3080 SH-1	337 MECHANICAL SITE PLAN	H-3-3680 SH-2	CURBING LINES 370A, 370B & 370C	H-3-4347 SH-1	370A WREN REMEDIATION SYSTEM		
H-3-3080 SH-2	337 MECHANICAL SITE PLAN	H-3-4071 SH-1	FIRE PROTECTION SUPPLY 336 ADDITION	H-3-0818 SH-1	CNL - 3019 ADDITION		
H-3-3080 SH-2	RELINQUISHMENT - 10" RIVER WATER LINE	H-3-4480 SH-1	PLOT PLAN 3720 BUILDING	H-3-3080 SH-1	CNL - 3019 ADDITION		
H-3-3080 SH-1	NEW BRICKWORK & LANDSCAPING PLAN	H-3-4030 SH-1	HWING PLANS 3720 BUILDING	H-3-0830 SH-1	CNL - 3019 ADDITION		

REF NUMBER	TITLE	REF NUMBER	TITLE
H-3-30760 SH-1	300-02-1 12" PIPE ALIGNMENT PLAN & DETAILS		
H-3-48174 SH-1	SEWERAGE TREATMENT POND P&ID		
H-3-30227 SH-1	PIPING - M0270 & M0271		
H-3-4480 SH-1	PIPING PLAN - BLDG. 3720		
H-3-4894 SH-1	EXTENSION TO SANITARY WATER GRID		

DATE	BY	DESCRIPTION
11/16/16	...	...
11/16/16	...	...

# 300 Area Water Drawing C



**COLOR CODE:**

- MSA
- PNHL
- CHPRC
- JCI
- DEMARICATION POINTS (MSA)

**NOTES:**

- ABANDONED IN PLACE WATER LINES AND VALVES ARE NOT SHOWN FOR CLARITY OF THE OPERATIONAL SYSTEM. SEE PRIOR DRAWING REVISIONS FOR LOCATIONS.
- NOT ALL COMPONENTS ARE LABELED IN THE FIELD.
- THIS IS A P&ID DRAWING AND IS THEREFORE A SCHEMATIC.

**LEGEND**

- ⊙ CHECK VALVE IN A MANHOLE
- ⊙ FIRE HYDRANT
- ⊙ KEY OPERATED GATE VALVE
- ⊙ POST INDICATOR GATE VALVE
- ⊙ GATE VALVE
- ⊙ CORPORATE STOP
- ⊙ WATER METER

**ACRONYMS**

- BCV BUILDING CONTROL VALVE
- FH FIRE HYDRANT
- FP FIRE PROTECTION
- FPV POST INDICATOR VALVE
- S SPRINKLER CONTROL VALVE (FP SYSTEM)
- SCV SECTIONALIZING CONTROL VALVE
- SW SANITARY WATER
- (U/L) UNABLE TO LOCATE
- (V/S) VALVE BURIED, VALVE BOX REMOVED



THIS DRAWING IS FOR ICD USE ONLY TO IDENTIFY CONTRACTOR RESPONSIBILITIES

REF NUMBER	TITLE	REF NUMBER	TITLE
AEC-SC-1303-1	PLAT PLAN ADDITION TO SANITARY WATER SUPPLY	H-3-21854	PLAN AND PROFILE OF SANITARY WATER
AEC-SC-1303-2	18" SANITARY WATER IMPORT LINE PLAN & PROFILE	H-3-48810	3200 CHL/TANK LIST SITE PLAN & DETAILS
AEC-SC-1303-3	18" SANITARY WATER IMPORT LINE PLAN & PROFILE	H-3-34842	3200, 3202A, 3203 PLUMBING PLANS
AEC-SC-1303-4	18" SANITARY WATER IMPORT LINE PLAN & PROFILE	H-3-42083	3200 MAN/VALV. PLANS, SECT. Dwg & SCHED
AEC-SC-1303-5	18" SANITARY WATER IMPORT LINE PLAN & PROFILE	H-3-34822	3200 SITE UTILITIES PLAN

DWG NUMBER	TITLE
H-3-31527	3200 CHL/TANK LIST SITE PLAN & DETAILS
H-3-31528	3200, 3202A, 3203 PLUMBING PLANS
H-3-31529	3200 MAN/VALV. PLANS, SECT. Dwg & SCHED
H-3-31530	3200 SITE UTILITIES PLAN

REF NUMBER	TITLE
H-3-2088	3200 CHL/TANK LIST SITE PLAN & DETAILS
H-3-2089	3200, 3202A, 3203 PLUMBING PLANS
H-3-2090	3200 MAN/VALV. PLANS, SECT. Dwg & SCHED
H-3-2091	3200 SITE UTILITIES PLAN

REF NUMBER	TITLE
H-3-31527	3200 CHL/TANK LIST SITE PLAN & DETAILS
H-3-31528	3200, 3202A, 3203 PLUMBING PLANS
H-3-31529	3200 MAN/VALV. PLANS, SECT. Dwg & SCHED
H-3-31530	3200 SITE UTILITIES PLAN

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1	12/17/17	...	...	...	...
2	...	...	...	...	...

