# FEDERAL TRANSIT ADMINISTRATION

# Transit Asset Inventory Development and Integration

Asset Management Methodology/ Condition Assessment Methodology Research

## **SEPTEMBER 2012**

FTA Report No. 0023 Federal Transit Administration

## PREPARED BY

Ronald G. Humphrey John C. Lewis Yuanchang Xie, PhD, PE Susan Sharp

CodeRed Business Solutions Bi-State Development Agency (St. Louis Metro)





U.S. Department of Transportation Federal Transit Administration

## COVER PHOTO

St. Louis Metro

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|--|----------------------|-----------------------------|--------------------------------|----------------|
| LENGTH   |                      |                             |                                |                |
| in   | inches               | 25.4                        | millimeters                    | mm             |
| ft   | feet                 | 0.305                       | meters                         | m              |
| yd   | yards                | 0.914                       | meters                         | m              |
| mi   | miles                | 1.61                        | kilometers                     | km             |
|  |                      | VOLUME                      |                                |                |
| fl oz  | fluid ounces         | 29.57                       | milliliters                    | mL             |
| gal  | gallons              | 3.785                       | liters                         | L              |
| ft <sup>3</sup>  | cubic feet           | 0.028                       | cubic meters                   | m <sup>3</sup> |
| yd³  | cubic yards          | 0.765                       | cubic meters                   | m <sup>3</sup> |
| NOTE: volumes greater than 1000 L shall be shown in m <sup>3</sup> |                      |                             |                                |                |
| MASS   |                      |                             |                                |                |
| oz   | ounces               | 28.35                       | grams                          | g              |
| lb   | pounds               | 0.454                       | kilograms                      | kg             |
| т  | short tons (2000 lb) | 0.907                       | megagrams<br>(or "metric ton") | Mg (or "t")    |
| TEMPERATURE (exact degrees)  |                      |                             |                                |                |
| °F   | Fahrenheit           | 5 (F-32)/9<br>or (F-32)/1.8 | Celsius                        | °C             |

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This report summarizes the results of a 13-month effort by CodeRed Business Solutions (CRBS) to consider how urban rail transit agencies can leverage data within their maintenance management systems to build asset inventories for higher-level analysis. The research goal/requirement was to provide FTA with a plan or road map for transit agencies to leverage existing asset management and maintenance data, regardless of which asset management or maintenance data collection system the agency deploys.

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CodeRed Business Solutions (CRBS), the prime contractor, teamed with St. Louis Metro (Metro), one of the nation's best mid-size transit agencies, which operates both bus and light rail transit. Ronald Humphrey of CodeRed Business Solutions was the principal investigator, supported by John Lewis, Joseph Harrison, Gail Gant, Tobey Dykeman, Rachel Bates, and Susan Sharp of Sharp & Company. This team also included Sharp & Company, and Yuanchang Xie, Ph.D., P.E., Assistant Professor, University of Massachusetts Lowell.

Metro and CRBS formed a unique partnership to perform this research project. This partnership provided CRBS with the opportunity to work with some of the most dedicated transportation professionals in the United States.

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Finally, the CRBS team would like to acknowledge the support and guidance provided by Terrell Williams of the FTA Office of Research, Demonstration and Innovation.

## ABSTRACT

During the State of Good Repair Roundtable in 2010, the Federal Transit Administration (FTA) expressed a growing concern that a significant proportion of the nation's public transportation assets are in need of capital reinvestment to continue to meet the demand of the American public. To address this need, CodeRed Business Solutions and its primary teammate, St. Louis Metro, were selected to receive a research and technology grant from FTA.

This research summarizes the results of the I3-month effort to consider how urban rail transit agencies can leverage data within their maintenance management systems to build asset inventories for higher-level analysis.

The research goal/objectives were to provide FTA with a plan or roadmap for how transit agencies can leverage existing asset management and maintenance data, regardless of which asset management or maintenance data collection system the agency employs. To achieve this goal, the team developed a process for defining recommended industry-integrated standard asset inventory structures, data elements, and hierarchical relationships. This process is described in detail in this report.

## EXECUTIVE SUMMARY

This report summarizes the results of a 13-month effort by Code Red Business Solutions (CRBS) to consider how urban rail transit agencies can leverage data within their maintenance management systems to build asset inventories for higher-level analysis. This would provide a way to optimize transit agency investments in bus/rail capital assets and provide reporting to meet current and future Federal Transit Administration (FTA) requirements. The research goal/ requirement was to provide FTA with a plan or roadmap for transit agencies to leverage existing asset management and maintenance data, regardless of which asset management or maintenance data collection system the agency deploys.

To achieve this goal, the research team developed a process for defining recommended industry-integrated standard asset inventory structures, data elements, and hierarchical relationships. This report documents that process, using a representative transit agency, St. Louis Metro (Metro). In addition, this report includes a reference document that delineates and illustrates how larger capital items can be related through the proposed hierarchical relationships to data recorded in maintenance management systems.

The research team comprised representatives from CRBS and subject matter experts from Metro. Metro personnel participated throughout all phases of the project, assisting with data collection and interpretation. A key factor to the team's success was the proactive support provided by the Director of Operations and Department of Maintenance managers at all levels within Metro. The team scheduled meetings and conducted detailed interviews with senior managers and front-line supervisory staff to review and analyze the current asset management practices. These were used to catalog and describe the categories, hierarchies, and data elements. Through one-on-one interviews and numerous meetings, various documents and reports were reviewed to provide a framework to further define categories, hierarchies, and data elements.

Metro already had a well-developed maintenance system, Maximus M-5 (also called Assetworks), and a well-developed scheduled maintenance plan and process. All Metro maintenance divisions had clearly-defined inspection plans. Most divisions have well-documented inspection policies and procedures, and these policies and procedures are regularly updated based on manufacturers' recommendations and Metro's own experience.

The maintenance management and materials management divisions at Metro coordinate scheduled maintenance activities with parts ordering activities by using M-5. This process ensures that every bus and rail car has all the necessary parts required to perform scheduled maintenance activities. The agency's ability to schedule and plan 95 percent of its maintenance activity enhances its ability to produce one of the lowest maintenance costs per mile for bus fleets in the country. The scheduled maintenance model used by Metro's bus division is critical to successful operations. As it is non-proprietary, this model is detailed extensively in this report.

Currently, the Metro assets and their maintenance history data are separated into different database systems, including Oracle, M-5, Asset Inspection and Maintenance System (AIMS, a Web-based GIS system), and paper and electronic files. This configuration makes it challenging to seamlessly integrate data from different sources and to present it in a meaningful way that would support critical decision making. We recommend that Metro consider moving the parts reordering process to Maximus M-5, eliminating the need to frequently interface with Oracle. This change will improve efficiency and reduce the time involved in producing a more seamless process to support maintenance activities. 

# Introduction

## Study Background, Objectives, and Scope

During the September 2010 State of Good Repair Roundtable, the Federal Transit Administration (FTA) expressed a growing concern that a significant proportion of the nation's public transportation assets were in need of capital reinvestment to continue to meet the demand of the American public. To address this need, FTA updated several reporting systems (Transit Economics Requirements Model [TERM] and the National Transit Database [NTD]) that would provide comprehensive visibility of rolling stock (bus and rail) and all critical fixed assets, including bridges, tunnels, and transportation facilities.

In response, transit agencies have invested in asset management systems to more effectively manage their physical assets. Ideally, these systems use quality inventory and condition data and well-defined objectives to provide a systematic process for improving resource allocation decision making. In actuality, many of these systems fall short of providing the total asset visibility required to allow planning and budgeting personnel to accurately plan for future requirements.

To begin addressing this issue, Code Red Business Solutions (CRBS) teamed with St. Louis Metro (Metro) to explore the development of asset inventories for asset management at an urban transit rail agency. Specifically, the purpose was to consider how urban rail transit agencies leverage data in their maintenance management systems to build asset inventories for higher-level analysis to optimize investments in urban rail capital assets.

## St. Louis Metro

Metro was established as the Bi-State Development Agency (BSDA) in 1949 through an interstate compact between Missouri and Illinois, ratified by the U.S. Congress and signed by President Harry S. Truman. The BSDA adopted the name Metro in 2003. The BSDA was created to serve the region on both sides of the Mississippi River and was meant to have a regional outlook not tied to any single municipality, county, or state. As such, it was given broad powers that enable it to cross local, county, and state boundaries to enhance the development of the region.

Metro provides transit services for the St. Louis Metropolitan area, which covers five counties (St. Louis, St. Charles, Madison, St. Clair, and Monroe) in Missouri and Illinois and the city of St. Louis. The services provided by Metro include:

- · MetroLink, the light rail system
- MetroBus, the bus system
- Metro Call-A-Ride, the paratransit van system

The MetroLink system operates along 46 miles of alignment between Missouri and Illinois. As shown in Figure I-I, the system has 37 stations extending from Lambert Airport/Shrewsbury in Missouri to Scott Air Force Base in Illinois. The system operates with 87 Light Rail Vehicles (LRVs) on two lines. The MetroLink system also has two LRV maintenance facilities, one in Missouri and the other in Illinois. Metro also operates the Airport, Gateway Arch, Arch Parking Facility, and River Boat.



Figure 1-1 MetroLink System Schematic

The MetroBus system has 370 buses operating 57 routes in Missouri and 17 routes in Illinois. These buses operate out of three facilities, with two in Missouri and one in Illinois. The maintenance facilities for all services are shown in Figure 1-2.



The Metro Call-A-Ride paratransit system has 120 vans, and its service is available only on the Missouri side of the Metropolitan region.

In addition to the three bus maintenance facilities and two LRV maintenance facilities, Metro has approximately 300 non-revenue vehicles, a separate

facility in Missouri that houses the bus maintenance and paratransit services, a headquarters facility, and additional parking and other facilities.

Metro was selected as a partner because it is a medium-size urban transit agency with rail, bus, and paratransit systems. Metro management was willing to share its current asset management practices and was open to finding ways to improve its systems. The cooperation of Metro managers at all levels was an essential ingredient of the success of this undertaking.

## Study Scope and Process

To explore the development of asset inventories for asset management at an urban transit rail agency, over a period of 13 months the CRBS team collected and evaluated asset/inventory data from all available data systems at Metro, working closely with Metro management to gain a more informed perspective on how data are used within the agency's asset maintenance activity. CRBS began by reviewing and mapping/modeling the current asset management practices at Metro. This included all pertinent documents required to catalog and describe the categories, hierarchies, and data elements that were used. Information was gathered through site visits and interviews with Metro representatives and through data retrieval from the agency's management information systems. Based on analysis of this data to identify differences in approach and in details, CRBS synthesized the information to produce a standard set of categories, data, and practices. The methodology established the foundation of a logical data structure that was instrumental in developing vertical and lateral data links of higher assemblies, lower assemblies, and related assemblies. This overall macro structure was presented to FTA. The output of the reviewed structure served as the Conceptual Standard Asset Management Inventory Structure.

CRBS examined how the Metro data are organized and how the agency compares to the organization of the elements in the Conceptual Standard Asset Management Inventory Structure. CRBS also captured and analyzed Metro's asset/inventory data for bus and rail vehicles and all associated equipment and facilities, as well as Maintenance of Way facilities and equipment data. These data were evaluated to determine which data elements are required to support the State of Good Repair (SGR) reporting and reliability improvements, asset warranties, and capital reinvestment requirements. The team documented and illustrated how larger capital items are related through the hierarchical relationships to data recorded in maintenance management systems and how these data can be used to infer conditions of these larger capital assets.

The CRBS team mapped the current processes and documented improvements required to achieve total asset visibility. These data were also used to develop decision support tools that would support life-cycle analysis and complement the existing management information systems and the FTA TERM model.

The methodology described in this final report lists the project steps and objectives required by an agency to use data contained in its maintenance/ management information systems in order to improve its ability to manage its critical assets. During the project kickoff meeting, FTA's Office of Research, Demonstration and Innovation requested that CRBS document and focus on the process for identifying and producing an accurate roadmap for other agencies to follow, regardless of what maintenance or management information systems are being used by an agency. The methodology shown in Table I-I provides that roadmap, enabling agencies to leverage data in their maintenance management systems and asset inventories to achieve a higher level of analysis to optimize investments in urban bus/rail capital assets and achieve total asset visibility.

#### Table 1-1 Step-by-Step Study Process

| Step I. Review current asset management practices.  |  |  |  |
|---|--|--|--|
| Objective:  | Activities:  |  |  |
| Conduct a complete assessment of current asset management<br>practices. This task requires that the organization take a<br>comprehensive look at its bus and rail operations and ensure<br>that a complete assessment of the overall asset management<br>practices employed by the agency is well documented. | Conduct interviews with all stakeholders involved with asset management.   |  |  |
| Step 2. Review and analyze all mana   | agement and maintenance information systems.   |  |  |
| Objective:  | Activities:  |  |  |
| Review all management information systems used to identify, track, and report asset management, maintenance/repair,   | <ul> <li>Review all data currently contained in the agency's management/<br/>maintenance information systems and asset management systems.</li> </ul>  |  |  |
| replacement activities and costs.   | <ul> <li>Analyze asset/inventory data for bus and rail fleets and all associated<br/>equipment and facilities.</li> </ul>  |  |  |
|   | <ul> <li>Analyze Maintenance of Way equipment and facilities data contained<br/>on paper or electronically within databases that are not included in the<br/>agency's standard information systems.</li> </ul>                     |  |  |
|   | <ul> <li>Review and evaluate to determine which data elements are required to<br/>support the State of Good Repair reporting and reliability improvements,<br/>asset warranties, and capital reinvestment requirements.</li> </ul> |  |  |
| Step 3. Catalog and des   | cribe the hierarchies (parent/child).  |  |  |
| Objective:  | Activities:  |  |  |
| Create data structures that contain all necessary elements of the transit agency that support rail and bus services.  | <ul> <li>Review lists of current assets contained in an Asset Management system<br/>or database system.</li> </ul>   |  |  |
| The structures shall be organized utilizing a parent/child  | Document the current hierarchal structure (parent/child relationship).   |  |  |
| relationship so that relevant parameters from a maintenance<br>management system can be leveraged for impact on related<br>assemblies thus providing management with a planning tool  | <ul> <li>Conduct interviews with management, engineering, and other transit<br/>professionals to discuss how to document their systems/facilities.</li> </ul>  |  |  |
|   | <ul> <li>Recommend improvements and brief senior management to obtain buy-in<br/>and approval.</li> </ul>  |  |  |
| Step 4. Conduct a comprehensive inventory of all critical assets.   |  |  |  |
| Objective:  | Activities:  |  |  |
| Perform a comprehensive inventory of all critical assets utilized by the organization to deliver bus and rail revenue   | <ul> <li>Request that senior management select a team of qualified personnel to<br/>assist in conducting this comprehensive inventory.</li> </ul>  |  |  |
| service. This step is critical to ensure that all data contained<br>in a maintenance information system is correct and reflects all<br>current assets and their location/ condition.  | <ul> <li>Document asset inventory in an information system that provides total asset visibility.</li> </ul>  |  |  |

| Step 5. Ider  | ntify all data elements.   |  |  |
|---|--|--|--|
| Objective:<br>Review the current data elements contained in all asset<br>management systems and evaluate the accuracy of those<br>asset data elements. In addition, ensure that the breakdown<br>structure is correct and all hierarchical relationships are<br>reflected correctly.  | <ul> <li>Activities:</li> <li>Review current data elements and structures.</li> <li>Perform analysis of current data elements and structures.</li> <li>Generate detailed illustration of hierarchical relationships for critical inventory assets that will be developed for key equipment and facilities to support bus and rail infrastructure.</li> <li>Make recommendations and provide support documentation for new data elements.</li> </ul>  |  |  |
| Step  | 6. Map data flow.  |  |  |
| Objective:<br>Develop a flowchart of the entire asset process from the<br>original procurement of the asset through its complete life<br>cycle and disposal.  | <ul> <li>Activities:</li> <li>Document/flowchart the complete data flow of existing and new assets (e.g., vehicles, stations, facilities and critical support structures).</li> </ul>  |  |  |
| Step 7. Review all urban  | rail/bus capital asset planning data.  |  |  |
| Objective:<br>Perform a comprehensive review of current asset planning<br>data contained in management information systems,<br>standalone spreadsheets, and asset managers' log books.<br>Evaluate how effectively current data is being utilized to<br>support decisions for replacement of critical assets. Consider<br>how maintenance data and life cycle information is being<br>utilized in the decision process. | <ul> <li>Activities:</li> <li>Collect and evaluate asset/inventory data from both the management/<br/>maintenance and asset management data systems. Review data stored<br/>on Excel spreadsheets, log books, personal files maintained by material<br/>storeroom and maintenance personnel.</li> <li>Determine how State of Good Repair is documented and reported by the<br/>agency.</li> <li>Review how maintenance, inspection and rehabilitation data is collected<br/>and influences the SGR.</li> <li>Review accuracy of current data.</li> <li>Review how maintenance and life cycle information is being used in the<br/>decision process.</li> <li>Review all current tools being used in the asset replacement decision<br/>process.</li> </ul> |  |  |
| Step 8. Deter   | mine tool requirements.  |  |  |
| Objective:<br>Determine what standalone computer software or tools<br>may assist senior management in accurately predicting the<br>replacement of critical assets thus eliminating short notice<br>funding requirements. In addition, these types of tools will<br>provide valuable life cycle costs.   | <ul> <li>Activities:</li> <li>Review current tools being utilized by personnel.</li> <li>Review existing tools employed to support the capital budgeting and asset replacement process.</li> </ul>   |  |  |
| Step 9. Determine what additional enhancements are required.  |  |  |  |
| Objective:<br>Determine what additional enhancements/ improvements<br>could be made to the overall asset management process.  | <ul> <li>Activities:</li> <li>Gain senior management buy-in and approval.</li> <li>Provide new asset breakdown structure for all assets.</li> <li>Input new structure and all supporting data into the agency's primary<br/>Transit Asset Management (TAM) System.</li> </ul>  |  |  |

Review all data to ensure accuracy.

SECTION

# Current Asset Management Practices

## Background

Metro operates 87 light rail vehicles (LRVs) on two lines that include 37 rail stations along 46 miles of track alignment. In addition, Metro operates 370 buses that service 57 routes operating in Missouri and 17 routes operating in Illinois. Metro also operates 120 paratransit vehicles and 300 non-revenue vehicles.

Metro's approach to management of its rolling stock assets was the same as most other transit agencies until 2002. Like its peers, Metro was struggling to produce enough revenue service vehicles to meet the daily demand in the St. Louis metropolitan area. This struggle was rooted in a maintenance philosophy that had existed since the 1960s. This philosophy led to out-of-control costs, high customer complaints, and inconsistent fleet practices.

Under the old philosophy, vehicle maintenance operated all major components such as engines, transmissions and differentials, air compressor, and air conditioner components until they failed. Vehicle body and appearance items were addressed when a vehicle was sent to the central maintenance shop due to major engine failure or accident damage. This antiquated and outdated philosophy also created situations where money was spent on vehicles one to two years prior to the vehicle being retired from service, leading to excessive expenditures on vehicles near the end of their life cycle.

## New Maintenance Philosophy

Metro adopted a new maintenance philosophy in 2002 that has become a standard of excellence for transit organizations in the U.S. With new leadership assigned to the Light Rail Vehicle (LRV) and Bus Maintenance divisions, Metro began to improve service reliability and lower customer complaints.

Metro's new philosophy started with the creation of a Centralized Maintenance Department. This department included LRVs, buses, paratransit vans, and nonrevenue vehicles. Metro's new leadership created improvement teams and gained buy-in and cooperation at all levels of management and supervision. Once the Centralized Maintenance Department was formed, managers spent the first few months analyzing the current situation and determined that there were no plans for improvement, no cost controls affecting life cycle and capital planning, and no overall vision that could be articulated throughout the organization at all levels. The key to Metro's success was the establishment of the following goals and performance metrics to enhance customer experience and improve service quality. These led to and supported the vision of the maintenance organization, enabling the organization's improvement of asset maintainability:

- Vehicle Appearance
  - Ensuring that all vehicles are maintained to a particular standard that is appealing to passengers and general public.
- · Vehicle Reliability
  - Performing analysis and predicting failures to ensure the elimination of vehicle breakdowns.
- Vehicle/Operations Safety
  - Instituting a new series of train operator training classes to reduce the number of accidents occurring along the right-of-way.
  - Instituting maintenance training classes and established maintenance standards that were monitored and tracked by supervision.
- Control of Cost
  - Investing at midlife of an asset to ensure that the asset remains in a state of good repair during its life cycle.
  - Maximizing investment of the asset.
  - Performing life-cycle analysis to ensure that the asset investment was maximized and the serviceable condition of the asset was maintained throughout its useful life.
- Predetermine Needs (Plan)
  - Labor played a major role in this new philosophy, allowing maintenance managers to plan effectively for the number of mechanics and the type of mechanics required to maintain the asset at its optimal performance.
  - Supply and parts replacement planning was key to ensuring that the mechanics had the right item at the right time at the right place to return LRVs, buses and vans back to the new required maintenance standard for revenue service.

## The Metro Plan

Metro created a plan that achieved departmental consensus on pre-programmed maintenance activities. This plan set intervals for inspections, adjustments, and replacement maintenance activities. Metro started by focusing its attention on the suggested audits and maintenance intervals recommended by the original equipment manufacturers (OEMs). In addition, Metro developed standard work procedures for pre-planned and routine maintenance activities.

Next, Metro focused on the mechanics performing a complete assessment of expertise and training requirements for completion of all maintenance activities. In addition, Metro worked with the Materials Management department to develop a bill of materials for parts replacement and developed kitting procedures to support all designated maintenance intervals and all scheduled maintenance activities for both bus and LRVs.

## Results

The results of the steps taken by Metro to improve overall vehicle reliability, availability, and the management of its rolling stock assets can only be described as an industry best practice (BP). The results of its actions are demonstrated in the reduction of vehicle maintenance expenses, improvement of vehicle curb appeal, and quality of the passenger experience. In addition, being able to predict vehicle reliability throughout the vehicle's life cycle allows management to plan effectively for vehicle/asset replacement.

Another significant benefit derived from Metro's new vision and innovative asset management plan for rolling stock assets was the significant improvement of maintenance productivity without increase in costs and maximization of the investment of the asset.

Figures 2-1 through 2-4 demonstrate the results and benefits of the actions taken by senior leadership at Metro.



## Figure 2-1 Bus Maintenance Cost

per Mile for 15 Years Before Plan vs. Plan



## LRV Maintenance Program

Metro has a well-documented vehicle maintenance plan for MetroLink LRVs.<sup>1</sup> This maintenance plan has three major components: 1) daily pre-trip inspection, 2) mileage-based preventive maintenance, and 3) modular overhaul program. As part of the pre-trip inspection efforts, the mileage of each LRV is recorded on a daily basis and used to determine the maintenance schedule of LRVs. The preventive maintenance program is continuously improved based on the fleet operating performance following Metro's Standard Operating Procedure SOP 109.01 procedure. As shown in Figure 2-5, the Metro LRV Maintenance Department also has a series of standards and training courses to ensure that only qualified personnel conduct various LRV maintenance activities. A performance measurement system has been set up to monitor the effectiveness of the various LRV preventive maintenance programs.



<sup>&</sup>lt;sup>1</sup> Thiessen et al., Vehicle Maintenance Plan for MetroLink Light Rail Vehicles, Bi-State Development Agency, Metro, June 2010.

## **Daily Pre-Trip Inspections**

Daily pre-trip inspections ensure the operability of each LRV before it leaves the yard. The pre-trip inspection checklist includes the following four main categories:

- Interior: This includes the cleaning of the passenger and operator areas. During the winter, a disinfectant is used to clean the interior of the LRVs to prevent the potential spread of the flu.
- Exterior: Automated drive-through car wash equipment cleans the exterior of the LRVs. The checklist also includes certain parts of the LRVs that cannot be adequately cleaned by the automated equipment.
- LRV Top Cleaning: The automated drive-through car wash equipment cannot adequately clean the LRV roof. Two LRVs are checked each night to ensure that the carbon dust built up due to the wearing of pantograph shoes gets cleaned up.
- General Functions and Duties: The cleaning personnel report any visible defects, damages, and potentially unsafe conditions.

#### Mileage-Based Preventive Maintenance Program

Based on the manufacturer's recommendations and Metro's own experience, a comprehensive mileage-based preventive maintenance program was developed. The preventive maintenance activities are scheduled at 5k, 15k, 30k, 50k, 100k and 150k miles. All inspection results are recorded in the Maximus M-5 maintenance system. The items to be inspected for scheduled preventive maintenance are outlined in Table 2-1.

| Table 2-1  | Miles | Items to be Inspected  |
|--|-------|--|
| LRV Mileage- 5k<br>Based Preventive<br>Maintenance Program |       | Focuses on overall vehicle integrity, including under floor equipment mounting, passenger safety attributes with specific emphasis on the door systems, mechanical wear items such as pantograph carbons, renewal of all filtration elements, extensive functional checks of specific systems. |
|  | I5k   | More comprehensive, includes all items in the 5k inspection. Also includes detailed inspections of many other components, such as power relay (contactors), carbon brushes for all motors, and the sensitivity of cab signal system.   |
|  | 30k   | Proactive inspection that incorporates most lubrication activities for vehicle.  |
|  | 50k   | All wheels are re-profiled and wheel diameters matched. Floor level of LRVs is checked and adjusted. Additional lubrication activities are conducted.  |
|  | 100k  | Performed approximately every 14 months to inspect vehicle systems that require maintenance at greater than 1-year intervals. Lubrication and critical oil changes are also performed at this interval.  |
|  | 150k  | Only for new SD460 series LRVs, focuses on gearbox and coupling lubrication.   |

The LRV maintenance division uses M-5 to track the conditions and maintenance history of all vehicles. The information in M-5 is also used to predict when and how many parts need to be repaired or replaced. Based on the M-5 data and the resources available, acquisition requests are then sent to the

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Materials Management office. When preparing the requisition requests, the LRV maintenance staff also take into account predictable unscheduled maintenance activities. This can significantly reduce the amount of time it takes to wait for the parts to arrive and minimize the chance for service disruptions. There are certain unscheduled activities that are very difficult to predict. Also, some parts fail at a very rare frequency, and it is difficult to model their failure trends. In this case, requisition requests are submitted whenever failures are reported.

A contractor performs several LRV maintenance activities. Metro has some undocumented procedures to make sure that the work done by contractors meets Metro standards.

The LRV maintenance division follows certain procedures for allocating funds between maintenance and the renewal of rolling stocks, although they are not documented. At Metro, the LRVs remain in service as long as they work appropriately. Currently, there is no documented procedure to determine when to replace LRVs, other than the FTA requirement suggesting the useful life for LRVs should be at least 25 years. The oldest LRV owned by Metro is 18 years old.

## Modular Overhaul (MO) Program

Metro initiated an innovative Modular Overhaul (MO) program in October 1996, which is different from the traditional midlife overhaul program. The MO program is designed to minimize the down time for LRVs due to scheduled maintenance activities. With the MO program, the LRV components that need to be repaired or replaced are pre-assembled in the maintenance facility. The maintenance facility is virtually being used as a manufacturing facility in this case. LRVs only need to be brought into the maintenance facility when the components are ready. Without requiring the LRVs to remain in the maintenance facility for an extended period of time, this MO program has saved considerable time and space and significantly improved maintenance efficiency.

Starting with the overhauls of wheels and vehicle pneumatic and friction brake systems, many other subsystems have been included in the MO program. Table 2-2 shows a list of existing Metro modular overhaul components.

| ID | Items                              | ID | ltems                                 |
|----|------------------------------------|----|---------------------------------------|
| I  | Main Contactor                     | 9  | Truck Wheel                           |
| 2  | Ack/Aux Contactor                  | 10 | Couplers                              |
| 3  | Air – Compressor & Drier           | Ш  | Body Interior – Seat Inserts          |
| 4  | FB Air Valves – All                | 12 | Operator Cab – Seat Operator (Recaro) |
| 5  | FB Calipers (PT)                   | 13 | Pantograph – Transtech/Schunk         |
| 6  | Brakes – BCU (PT/CT)               | 14 | Gearbox                               |
| 7  | S-HVAC – HVAC System - Transitaire | 15 | Traction Motors                       |
| 8  | TK-HVAC – HVAC System - Thermoking | 16 | Carbody Exterior                      |

Table 2-2Modular Overhaul

Components

## Performance Monitoring

The performance of LRV maintenance is evaluated on a monthly basis and reported to the Metro President quarterly. The performance is evaluated based on the following criteria: 1) on-time performance of inspection; 2) mean distance between failures (MDBF); 3) worker compensation injuries; and 4) customer complaints about revenue vehicles.

## MetroBus, Van, and Non-Revenue Vehicle Maintenance Program

As shown in Figure 1-2, MetroBus has three garages (Brentwood and DeBaliviere in Missouri and East St. Louis facility in Illinois) for indoor bus parking and fueling. It also has a heavy repair facility (Main Shop in Figure 1-2) in St. Louis, which provides engine, transmission and body repairs for the various fleets. The Call-A-Ride paratransit van operation and non-revenue repair shops are based in the heavy repair facility. The buses and paratransit vans are made by a few major manufacturers. The uniformity of the fleets helps to enhance Metro's ability to develop effective maintenance plans for buses and vans.

The Metro vehicle (e.g., bus, van and non-revenue vehicles) maintenance team has a detailed maintenance plan,<sup>2</sup> in which the maintenance objectives are clearly defined. The Metro Vehicle Maintenance Department's objectives are to maximize vehicle reliability, vehicle operating efficiency, and labor productivity. The overall bus, van, and non-revenue maintenance practice is outlined in Figure 2-6 and is further explained in the following sections.

<sup>&</sup>lt;sup>2</sup> Thiessen et al., Metro VMD Team Vehicle Management Plan, Bi-State Development Agency, Metro, July 2011.



Figure 2-6 Overall Bus, Van, and Non-revenue Vehicle Maintenance Practice

# Preventive Maintenance Inspection and Predictive Maintenance

Metro recognizes the importance of preventive maintenance inspections and predictive maintenance, which allow its Vehicle Maintenance Department to act proactively on scheduled repairs instead of frequently reacting to running or unscheduled repairs. Predictive maintenance, preventive maintenance inspection, running or unscheduled repair, scheduled repair and road call are defined in Table 2-3.

Definitions

| Terms  | Definitions   |
|--|---|
| Preventive<br>Maintenance<br>Inspection<br>(PMI) | A planned inspection of a vehicle performed at set intervals to ensure<br>its mechanical integrity. It typically consists of inspecting, adjusting, and<br>lubricating systems and components as defined in the OEM (original equipment<br>manufacturer) manual or developed through best practices at Metro St. Louis. |
| Predictive<br>Maintenance<br>(PM)                | A comprehensive and proactive maintenance schedule performed at a set<br>interval. It is coordinated with PMI but includes component replacement and<br>visual enhancement to the vehicle. It corresponds to the Modular Overhaul<br>program for LRV.   |
| Scheduled<br>Repair                              | A planned repair action such as component replacement, campaigns, and deferred repair actions.  |
| Running/<br>Unscheduled<br>Repair                | Unplanned repairs or service performed to get the vehicle back to service.<br>Examples include road calls, driver write-ups, and other unplanned work.  |
| Road Call  | Any mechanical failure that disrupts the revenue service—for instance, failure<br>of the air conditioning system. Accidents, fare box faults, and flat tires are<br>considered unscheduled repairs.   |

All revenue vehicles at Metro are maintained under a dual system of Preventive Maintenance Inspection (PMI) and Predictive Maintenance (PM). The PMI and PM schedules are developed based on OEM recommendations and the best practice at Metro. All inspections and maintenance work are conducted within ±10 percent of the scheduled intervals, and all inspection and maintenance results are recorded in the M-5 asset management system. As shown in Figure 2-6, the PMI and PM programs are complemented by daily pre-trip inspections and operator defect reports. Metro has developed a checklist to facilitate daily pre-trip inspections for operators. At the end of the day, each operator also turns in a "grief card" to either the yard dispatcher or maintenance personnel.

In addition to the regular mechanic check, all buses receive a wheelchair lift (WCL) inspection every 10,000 miles. All buses also receive a WCL inspection annually. Paratransit vans receive a WCL inspection every 3,000 miles concurrent with the preventive maintenance inspection. All WCL inspections are performed based on the OEM recommendations. Vehicle mileage information is captured during the fueling process and recorded in M-5, which automatically generates inspection requests by vehicle number. Based on these inspection requests, maintenance superintendents can schedule PMI activities.

#### Work Scheduling

Metro has a clearly-defined work scheduling procedure. Given manageable items such as time, materials, tools, equipment, and labor, the scheduling procedure is designed to maximize the productivity and number of available operational vehicles and minimize the cost. The general work scheduling process employed is shown in Figure 2-7. In addition to this process, a general procedure is also developed to ensure maximum productivity, which is described in Figure 2-8.



## Performance Monitoring

Similar to the LRV maintenance program, the following four measurements are used for revenue bus and van inspections and performance monitoring: 1) on-time performance of inspection, 2) Mean Distance Between Failures (MDBF), 3) worker's compensation injuries, and 4) customer complaints about revenue equipment. The maintenance performance is measured on a monthly basis and reported to the President quarterly. To reflect operational considerations, the standards for performance indicators are adjusted annually.

#### Work Safety

In addition to the safety and reliability of vehicle operations, the Metro Vehicle Maintenance Department places great emphasis on work safety in the maintenance facilities, especially when the maintenance activities involve lifting, power tools, compressed air, cleaning agents, welding, etc. Detailed safety countermeasures are described in the maintenance manual.<sup>3</sup> The maintenance superintendents are required to constantly remind employees of work safety.

## **Quality Control**

Closely related to the safety and reliability of vehicle operations is the quality of the inspection and repair work. In the Vehicle Maintenance Department, there is a set of standards to ensure that repair and service actions are done properly with high quality. Also, maintenance supervisors are responsible for physically checking their assigned employees' work. It is required that each maintenance supervisor inspect not less than 25 percent of their assigned employees' work and 100 percent of all rework.

#### Training

Metro has a Maintenance Training Department that frequently conducts trainings to improve the skills of maintenance workers and to instruct workers when new equipment and technologies are introduced. The maintenance superintendents are responsible for identifying the training needs annually. Individual training results are recorded in the M-5 asset management system.

## **Equipment and Tools**

Metro recognizes the importance of tools and equipment for vehicle maintenance. It has established a program for replacing/expanding/upgrading maintenance tools and equipment.

## Work Order System

Metro has a well-developed automatic work order system to facilitate its vehicle maintenance activities, including jobs such as a brake realignment or preventive

<sup>&</sup>lt;sup>3</sup> Metro St. Louis, Rail Right-of-Way (ROW), Appendix D, Rail Defect Codes.

maintenance inspection. The work order system is capable of handling all repair activities. All repairs that take more than a half hour or require parts worth more than \$50 are captured by a work order. Figure 2-9 illustrates how a work order is generated and used to address driver defect reports.



Each maintenance supervisor is required to keep a daily log sheet for deferred or open maintenance activities. Each item on the log sheet corresponds to an open work order. The log sheet is used by the maintenance supervisor to schedule work in the shop. The work order form is also used to keep track of the time each mechanic spent for improving labor accountability purposes.

## **Critical Infrastructure**

Although a substantial amount of work had been completed during this FTAfunded project, CRBS and Metro senior management identified the Maintenance of Way (MOW) maintenance areas of MetroLink Rail Maintenance Facilities, Rail Stations, Operations Control Center (OCC), Crossing Houses/Cases, Overhead Catenary System (OCS), Communication Systems, Track System, and Structures as areas requiring additional support to enhance Metro's ability to manage its critical assets and meet the organization's state of good repair goals. Remaining tasks required for Rail Facilities, Rail Stations, Signal Houses/Grade Crossings, and Traction Power Substations include support to design and input Maximus M-5 data into the Metro asset management system. Development of the comprehensive inventory and hierarchical breakdown structure as well as design and input of M-5 data into Metro's asset management system is required for the OCC, OCS, Communication System, Track System, and MetroLink Structures.

# SECTION 3

# Current Asset Management Data System

Based on the CRBS team review, Metro has 7,510 capital assets totaling \$1.1 billion. Metro's asset data is documented in several different systems within the agency:

- Oracle database system
- Maximus M-5 system
- Asset Inspection and Maintenance System (AIMS)
- Other paper and electronic files

There could be many different ways of summarizing or categorizing the asset data for Metro. The asset data structure outlined in Figure 3-I is intuitive and easy to describe, as it also reflects the organizational structure of Metro. Following this asset data structure, this chapter summarizes how transit asset information is being managed and how different types of assets are being maintained at Metro.



As shown in Figure 3-1, the Oracle system includes all fixed assets and parts/ inventory data. The M-5 system contains vehicle inventory, vehicle maintenance, and some facility maintenance information. The GIS database or AIMS is used for managing rail right-of-way (ROW) structure maintenance information. The rest of the asset data is in paper or electronic file format.

Most of the fixed assets data in the Oracle system are captured at the system level, and no details are provided regarding the condition of major and subcomponents. One of the objectives of this project was to perform a complete breakdown of these assets at the component/sub-component level, to allow Metro to conduct accurate life cycle analysis of these assets. Metro has been very successful in using the M-5 asset management system for rolling stock assets (e.g., buses and LRVs) management.<sup>4</sup> Based on this system, Metro has been able to implement a predictive maintenance plan for buses, which keeps MetroBus vehicles in operating conditions for an average of 15 years and 750,000 miles instead of the typical life span of 12 years and 500,000 miles. A similar program has also been established for LRV maintenance. The Vehicle Maintenance Department at Metro was recognized in 2009 as one of the best in the world and has also been featured in the BUSRide Maintenance magazine.<sup>5</sup>

## **Oracle Database System**

Metro has been using the Oracle financial system since 2005 and is currently upgrading to Version 12. Both the fixed assets and materials management (inventory) data are stored in the Oracle system. The following two sections detail the specific fixed assets and inventory data included in the Oracle system.

#### Overview

At Metro, all capital purchases with an asset life of more than one year and a cost greater than \$5,000 are considered depreciable capital assets. Major improvements to existing plants and equipment that extend the lives of related assets are also capitalized. The fixed assets data are stored in the Oracle system and managed by the fixed assets accountant. Metro conducts a physical inventory of all fixed assets every two years as required by state and local regulations. The most recent physical inventory was completed in 2010. This work was conducted mainly by the Director of Accounting & Budget, Manager of Accounting, Fixed Assets Accountant, and the Grant Accountant.

<sup>&</sup>lt;sup>4</sup> William, Metro's Chief Operating Officer receives Federal Transit Administration award. Available online at: http://www.metrostlouis.org/NewsProjects/NewsDetails. aspx?ID=84, accessed on September 28, 2011.

<sup>&</sup>lt;sup>5</sup> Hubbard, Metro St. Louis employs predictive monitoring to foresee component failures. Available online at: http://busridemaintenance.com/2011/03/technology-acts-as-the-crystal-ball/, accessed on September 28, 2011.

## Type of Data

The Oracle database system used by Metro is not specifically designed for transit asset management purposes and for managing the asset maintenance history information. It uses a generic table structure shown in Table 3-1 for storing the information for different types of fixed assets. These assets (e.g., buses, LRVs, facilities, and equipment) have different features that would be better described using a customized table structure for each of them.

| Field ID | Field Name      | Field ID | Field Name  |
|----------|-----------------|----------|-------------|
| 1        | Inv Flag        | 15       | Vendor Name |
| 2        | Company         | 16       | Condition   |
| 3        | Location        | 17       | AwardI      |
| 4        | Tag Number      | 18       | Distl       |
| 5        | Asset Number    | 19       | Award2      |
| 6        | Asset Type      | 20       | Dist2       |
| 7        | Project         | 21       | Award3      |
| 8        | Description     | 22       | Dist3       |
| 9        | Date In Service | 23       | Award4      |
| 10       | Cost            | 24       | Dist4       |
| П        | NBV             | 25       | Award5      |
| 12       | Fa Category     | 26       | Dist5       |
| 13       | Serial Number   | 27       | Award6      |
| 14       | Model Number    | 28       | Dist6       |

The Oracle system includes fixed assets data for several different divisions within Metro, including the Airport, Gateway Arch, MetroLink (Cross County, St. Clair, Illinois, and Missouri Original), MetroBus, Arch Parking Facility, Paratransit, and River Boats. Since the Airport, Gateway Arch, and Arch Parking Facility, and River Boats are not directly related to transit state of good repair, they are excluded from this review. Table 3-2 summarizes the fixed assets data included in the Oracle system.

## Table 3-1

Table Structure for Fixed Assets in Oracle Database

| Category Code | Type of Asset  | Life (Years) | Memo  |  |
|---------------|--|--------------|---|--|
| EQ.COMM       | Communication systems  | 3–7          | Broken down by stations   |  |
| EQ.DP         | Computers  | 3            | No breakdowns   |  |
| EQ.OT05       | Other equipment (lower measurer bills make stal)                               | 5            | No breakdowns   |  |
| EQ.OT10       | Other equipment (lawn mower, bike rack, etc.)                                  | 10           | No breakdowns   |  |
| EQ.REV        | Revenue equipment (fare box,   | 10           | No breakdowns; WORD, Excel, Adobe PDF<br>files stored/attached in Oracle system to provide<br>detailed information for each order               |  |
| EQ.SHOP       | Equipment in different shops   | 10           | No breakdowns   |  |
| EXP.NONE      | Expenses. This can include some equipment or tools that miss cost information. | 1            | No breakdowns   |  |
| FF.NONE       | Furniture  | 10           | This category was tracked before; now not being tracked in Oracle system  |  |
| INTA.NONE     | Intangible expenses (e.g., software)   | 3            | No breakdowns   |  |
| LAND.NONE     | Land purchased   | 1            | No breakdowns   |  |
| PPTY.IMPR     | Property improvements, including constructions, etc.                           | 15           | No breakdowns   |  |
| RV.10YRBUS    |  | 10           |   |  |
| RV.12YRBUS    | Revenue buses  | 12           | Broken down into vehicles   |  |
| RV.15YRBUS    |  | 15           |   |  |
| RV.VANS       | Revenue vans   | 4            | Broken down into vehicles   |  |
| RVLR          | Revenue light-rail vehicles  | 25           |   |  |
| RV.REBLT-ENG  | Revenue buses with engine rebuilt  | 6            |   |  |
| RV.REBLT-TRAN | Revenue buses with transmission rebuilt  | 2            |   |  |
| SV.AUTO       | Service vehicles – automobiles   | 5            |   |  |
| SV.TRUCK      | Service vehicles – trucks  | 5–10         |   |  |
| LRB&T         | Bridges  | 30           | Broken down into segments   |  |
| LRCAN SYS     | Light-rail catenary system   | 20           | No breakdowns   |  |
| LRGR CROSS    | Light-rail grade crossing  | 12           | Broken down into grade crossings  |  |
| LRSIG & CON   | Light-rail signal and control  | 25           | Broke down into segments, similar to bridges;<br>there are Adobe PDF files attached to the Oracle<br>system to show the details of each segment |  |
| LRSTATIONS    | Light-rail stations  | 30           | Broken down into stations   |  |
| LRTRAC POWER  | Light-rail power substations   | 25           | Broken down into substations  |  |
| LRTRACKWORK   | Light-rail track   | 30           | No breakdowns into subcomponents  |  |
| BLDGPF        | Yard buildings   | 25           | No breakdowns   |  |
| BLDGYS        | Parking garages  | 30           |   |  |
| BLDG.IMPR     | Improvements to all types of buildings   | 15           |   |  |
| BLDG.IMPRLH   | -  | 20           |   |  |
| BLDG.NONE     | Bus, maintenance shop, other buildings, and headquarter                        | 25           |   |  |

## Table 3-2 Fixed Assets Data in Oracle Database

#### Policies and Procedures

Metro's fixed assets policies and procedures are based primarily on the following three documents:

- Bi-State Development Agency Fixed Assets' Policies and Procedures, published on August 6, 2002 and revised on November 1, 2005
- FTA Grants Management Requirements (C 5010.1D)
- Metro Process Memo Fixed Assets, approved on June 7, 2010

In the latest Metro Process Memo for fixed assets, approved on November I, 2005, the policies and procedures for the additions, disposals, depreciations, repairs, and maintenance of fixed assets are described in detail. Figure 3-2 summarizes the policies and procedures for fixed assets additions. Based on the Bi-State Development Agency document, the depreciations of fixed assets are calculated using the straight-line method. In most cases, an asset's useful life is determined based on manufacturer recommendations and FTA guidelines. For a fixed asset without an expected useful life, the agency defines one. Before a fixed asset can be disposed of, a disposal form has to be signed by each department's Cost Center manager and approved by the Director of Program Development & Grants. The funding source of the grant for purchasing that asset is also notified.



Figure 3-2 Policies and Procedures for Fixed Assets Additions

Senior project managers in the Metro Engineering and Construction Department, Program Development and Grants, and the Fixed Assets Accountant monitor major construction projects that are in progress. The Fixed Assets Accountant prepares a Construction in Progress (CIP) Summary Report and distributes it to upper management monthly. The Engineering Cost Control, Grants and Accounting, and Fixed Assets Accountant hold periodic meetings to discuss CIP issues. The Fixed Assets Accountant is responsible for reviewing all CIP transactions kept in the Oracle system to ensure projects are correctly included or excluded from CIP. Metro follows FTA regulations to define maintenance and capital improvements. Repairs and maintenance improvements that do not meet the capital improvements criteria, such as the replacement of light bulbs in the Debaliviere maintenance facility, are funded through the operating budget.

Metro also implements the following monitoring and application controls:

- Property and depreciation accounts are monitored by the Fixed Assets Accountant and reviewed by Manager of General Accounting.
- Items are capitalized based on capitalization policies.
- Chief Financial Officer and Director of Program Development & Grants approve all capital expenditures.
- Director of Program Development & Grants approves all disposals.

#### Materials Management Data

Inventory and parts information is also in the Oracle system. However, the Fixed Assets Accountant does not have control of the inventory data, which is managed by the Materials Management office. The Materials Management office is part of the Procurement Department. Different divisions of Metro, particularly the bus and LRV maintenance divisions, send their order plans to the Materials Management office, which reviews these plans and purchases the requested parts. Currently, the non-revenue vehicles' spare parts are not in the Oracle system.

As shown in Figure 3-3, different Metro divisions submit their purchase plans to the Materials Management office. Purchase plans from the bus maintenance division consist of parts kits. Plans from the LRV division consist of units. Units and parts kits represent sets of predefined parts. Each kit/unit contains all the parts needed for a specific scheduled maintenance for bus or LRV. For each kit in the bus order plans, technical specifications, such as year and engine model of the bus, are also provided. This helps Materials Management office staff identify the right parts for that kit. Combining small parts into units or kits makes it much easier to communicate part and cost information between the Materials Management office and the Metro vehicle (rolling stock) maintenance divisions. Other divisions, including facility, track, and signal maintenance, submit a detailed list with names and quantities of specific parts to be ordered.


Figure 3-3 Materials Management Office Work Flow

Both the bus and LRV maintenance divisions use Maximus M-5 to generate order plans. There is an automated interface between M-5 and Oracle systems to facilitate the transmission of order plans. However, the process of translating order plans into parts is not automated and is time-consuming. The bus division sends its order plans six months in advance to the Materials Management office, and the LRV division submits its plans 18 months ahead. Every month, the bus and LRV divisions send an update of submitted plans to the Materials Management office. They also have a weekly meeting with the Materials Management office staff. The Materials Management office usually has the parts kits and units built 30–40 days in advance for bus and LRV divisions. The facility maintenance division also uses M-5 to keep track of its maintenance activities and to generate order requests.

Only bus and LRV divisions have order plans; the rest of the maintenance divisions do not currently use M-5. Plans are underway to transition the rest of the division in 2012. Since the maintenance activities for other divisions are difficult to predict, they do not have order plans and submit order requests whenever needed. The track and signal divisions use materials transaction forms to keep track of the cost through its cost centers.

The Materials Management office has a distribution center for storing received materials. Each maintenance division also has a storage room. The Materials Management office monitors how many materials go out to these storage rooms and then replenishes them using the Oracle system's min-max subsystem daily. For items that are unavailable in the storage rooms and are immediately needed, the maintenance divisions can purchase them using ProCard without going through the Materials Management office. This is only allowed for items costing less than \$2,500.

The Oracle system has a forecasting program that prepares Material Requisition Plans (MRPs). It takes historical part ordering information as input and predicts the number of parts that will be required in the future. This program is datadriven and has three different formulas. In general, it is highly accurate, and the Materials Management office is very satisfied with it.

If a requested item costs more than \$2,500, the Materials Management office creates a number for it in the Oracle system and orders it. After an item is requested three times, it is put into inventory as a stock item. It also is included in the forecasting program in Oracle and added as an active item with MRP requirement. For each stock item, its inventory level depends on the usage, lead time, and warranty. In the past, Metro had a huge amount of inventory, worth approximately \$12 million. The current inventory level is close to \$7 million. Metro also contracts with local vendors that carry automotive parts readily available in the local market in order to minimize the inventory level. In addition, both bus and LRV maintenance departments have a designated person for tracking warranty, to help control maintenance costs.

### Maximus M-5 System

The Maximus M-5 vehicle maintenance system was implemented at Metro in 1999 as M-4 and upgraded to the Web-based M-5 version in 2005. The system tracks 370 buses, 120 vans, 87 LRVs, 6 facilities, and approximately 300 other vehicles that support equipment. Since 2002, the agency's maintenance productivity has increased 100 percent. Without M-5, Metro would have had great difficulty improving the agency vehicle reliability and reducing overall life cycle costs of its rail car and bus fleets. For buses, the agency has gone from an average breakdown after 6,000 miles to 20,000 miles between delays. In addition, Metro has been very successful in improving the reliability and integrating all of the preventive maintenance scheduling, predictive maintenance forecasting, parts data, and other maintenance performance metrics. In 2002, the agency established a preventive maintenance program for all vehicles. Key elements of this program include:

 Establishment of a set of standard operating procedures for maintaining vehicles, with schedules for key inspection and maintenance activities based on a combination of time and mileage intervals

- Development of maintenance plans describing Metro's schedules for maintaining existing assets consistent with its standards and a capital acquisition plan for the purchase of new assets
- Implementation of the M-5 program to manage the fleet; the system is currently being implemented for managing facilities, ordering parts, and supporting other maintenance-related activities

Metro keeps track of maintenance requirements and needs for 30, 60, or 90 days into the future. It is one of the few transit agencies to implement an 18-month maintenance work outlook program.

M-5 also has added a fully-integrated, automated fueling system option called FuelFocus. This hardware and software system is unique because it manages fuel and fluid dispensing in the same database as the maintenance management application, rather than in two different programs.

#### Overview

Maximus M-5 software provides an intuitive, familiar Web-based user interface that Metro's senior management and bus and rail maintenance users find extremely helpful in reducing overall maintenance costs while improving the reliability of both the rail and bus fleets. The software has assisted with Metro's plan to adopt a new maintenance strategy that focuses on preventive maintenance rather than the run-to-fail philosophy practiced in the past.

At a practical level, having detailed predictive maintenance data made possible by M-5 is key to running a cost-effective maintenance operation. The improved fleet condition, original equipment maintenance recommendations, and years of seamless operational effectiveness have enabled Metro to implement predictable component replacement instead of "time of failure" replacement. This enables Metro to combine some positions and eliminate others in the maintenance department. Better data, analysis, and control allow Metro to change inspection schedules to be more cost effective and efficient.

Metro has a planned maintenance schedule for its railcars, bus, and van fleets from acquisition to retirement. This was designed to ensure that the highest maintenance dollars were spent at midlife, resulting in the greatest return on maintenance dollars invested. Metro also made another critical change, which was to schedule parts replacement before a part failure actually occurred. This strict predictive maintenance program and the planned preventive maintenance program were both enabled by the use of M-5.

#### Type of Data

Maximus M-5 is focused on equipment classification, utilization, availability, assignment, accounting, life-cycle tracking, and basic equipment information. Life cycle management of equipment is a desired goal for users and Metro. It provides Metro with the ability to manage each stage in the life of a piece of equipment/

asset, from the organization's plans to purchase it through budgeting and until it is disposed of or replaced.

The basic steps of life cycle management are:

- Classification
- Acquisition activities
- In-service activities
- Maintenance of equipment information
- Disposal/retirement activities

There are numerous pieces of information that impact whether an organization can successfully manage equipment throughout its known life. Cost, condition, usefulness, and classifications, as well as the need for the equipment, are all part of the picture. This pertinent information is needed in order to know that Metro has the right equipment in the right place at the right time to deliver revenue service to the public.

M-5 also provides Metro with the ability to attach files, images, and links to a work order, unit record, parts records, etc. All of Metro's inspections consist of electronic documents that are attached to standard jobs that a mechanic fills out electronically. The mechanic then attaches the inspection form file to the work order, thus eliminating all paper files. Additionally, Metro attaches all title information, licensing information, sale/disposal information, recalls, and any other pertinent information to units within the M-5 application.

#### **Facilities Data**

The M-5 system has already been used to keep track of some Metro facility maintenance information. These facilities include Ewing Yard, the main shop, all bus facilities, and Metro headquarters. These facilities are mainly for Metro internal use and not for Metro customers/riders.

In the M-5 system, each facility is broken down into critical components, such as Heating, Ventilation, and Air Conditioning (HVAC). These major components are inspected on a regular basis (e.g., monthly or weekly). Some of the inspection results are scanned and attached to the M-5 asset management system; the rest are in paper file format due to the shortage of staff. However, given enough resources, these paper files can be scanned and attached to the M-5 system. Based on the inspection requirements (e.g., weekly or monthly) specified in the M-5 system, the system automatically generates scheduled inspection requests or work orders. In addition to the scheduled inspection requests, there are other, unscheduled repair work requests. These requests are also input into M-5, and a work order is then generated for each of them. In the M-5 system, basic tables have been set up for the 29th Street Yard and MetroLink platforms. However, the maintenance data for these facilities has not been input into these tables. Also, the data structures for some rail and ROW assets have been set up in the M-5 system. Theoretically, M-5 can be used for tracking the maintenance history of rail and ROW assets as well.

Similar to the practice of the bus maintenance department, the M-5 system is used to keep track of the time Metro employees spent on each facility work order. The M-5 system can automatically record the time each employee clocks in and out for a particular facility work order. This is very helpful for increasing labor accountability.

#### AIMS for Right-of-Way (ROW) Structure Assets

Metro has developed a Web-based Asset Inspection and Maintenance System (AIMS) for MetroLink infrastructures. This tool was developed over the past two years and provides MetroLink with the ability to identify, inspect, and maintain all critical assets required for safe and reliable operations using a system that brings together all the relevant information that affects any particular asset.

Metro has established a detailed asset inspection and maintenance standard that covers all MetroLink critical structure assets. The scope of this standard includes all *fixed structures* that support or carry loads. Figure 3-4 shows the structures inspected by the Metro ROW structure maintenance division. This standard derives from the American Public Transportation Association's (APTA) *Standard for Rail Transit Structure Inspection and Maintenance* (Ist Edition, 2004), the American Association of State Highway and Transportation Officials' (AASHTO) *Manual for Condition Evaluation of Bridges* (2nd Edition) as required by current Federal Highway Administration (FHWA) regulations for highway bridges, and inspection and maintenance-of-Way Association (AREMA). These structures are inspected on a regular basis ranging from two to five years. A summary report is provided with ratings and recommended repairs for each inspected structure.



Figure 3-4 Right-of-Way (ROW) Structures

#### Asset Condition Monitoring

The Geographical Information System tool AIMS used for MetroLink's structural inspections and asset management is based on commercial software developed by the Environmental Systems Research Institute (ESRI). Metro has been successfully using the ESRI software for more than 10 years for a variety of

service planning activities. The AIMS software tool is based on ESRI's ArcGIS Server. This innovative inspection tool combines the power of GIS location capability with detailed databases that contain inspection reports complete with the operational condition of the asset and detailed photographs of its current condition. This combination provides a clear view of every major asset and its major components. It allows for all of the information related to a particular asset to be assembled and viewed across departments needing access to the information. This includes current asset conditions, maintenance history, operational agreements (easements, snow removal, limits of responsibility), record drawings, emergency operational risks (seismic, flood/scour, vehicle impact, and barge impact), major utility crossings (gas, water, and sewer), estimated remaining useful life, and inspection intervals.

This type of total asset visibility allows different departments to gather current information without going through a gatekeeper or other departments that could delay a time-sensitive response. This is particularly important in the cases of an emergency that occurs along the alignment. With complete access to all pertinent records of a particular asset, quick and competent decisions can be made.

This system is particularly useful for identifying assets that are not in a state of good repair, documenting the deficiencies and justifying rehabilitation/ replacement decisions. As shown in Figure 3-5 and Figure 3-6, the Web-based nature of the system provides FTA and state safety agencies with the ability to view reports as well as detailed photographs to get a clear representation of not only the higher-level asset conditions, but also the very detailed subsystem conditions such as cracks in structural steel, deterioration and corrosion problems affecting bridges, stray current corrosion, aging masonry tunnel conditions, and passenger rail platforms.

#### Figure 3-5

MetroLink Complete System Map with Asset Locations



#### Figure 3-6

Asset Database Condition Assessment at Sub-system Level

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## Paper and Electronic Files

Both ROW Facility and Rail System Maintenance divisions primarily use paper and electronic files (e.g., Word, Excel, and PDF) to keep track of inspection results and maintenance history. These two divisions have very detailed inspection and maintenance plans.

#### **ROW Maintenance**

Figure 3-7 shows the ROW maintenance schedule. Note that the rail structure, yard, shop, and office maintenance and inspection are part of the ROW maintenance. As previously discussed, at Metro, the rail structure maintenance and inspection results are kept in the AIMS system. The maintenance and inspection results for yards, shops, and offices are kept in the M-5 system. The rest of the ROW maintenance data is in the form of Microsoft Word documents, Excel spreadsheets, and PDF files.



Figure 3-7 Right-of-Way Maintenance Plan

Detailed maintenance schedules and sample forms for bus and rail facilities can be found in the ROW Facilities Maintenance Plan FY 2012.<sup>6</sup> For rail ROW maintenance and inspections, Metro also has a set of standards<sup>7</sup> and manuals.<sup>8,9,10</sup> The inspection plan, standards, and manuals are based on APTA standards, industry standards, and manufacturers' recommendations.

#### Rail System Maintenance

Rail system maintenance and inspections have three major components: 1) signal and train control, 2) traction and power, and 3) communication system. The detailed maintenance and inspection plans for each major component are provided in the following Metro documents:

- MetroLink Communications System Maintenance Plan (June 30, 2010)
- Traction Power System Maintenance Plan (August, 2008)
- Signal Maintenance Plan FY 09 Working Version (September, 2009)

Figure 3-8 shows the maintenance plan for these three components. Unlike buses and LRVs, the failure of rail systems such as signal and control devices is very difficult to predict. Therefore, the rail maintenance division does not have a fixed schedule to replace those components. However, the rail maintenance division does have a very detailed inspection schedule for its various components.

- <sup>7</sup> Metro St. Louis, Rail Right-Of-Way (ROW), Appendix D, Rail Defect Codes.
- <sup>8</sup> Metro St. Louis, Rail Right-Of-Way (ROW), Appendix C, Continuous Welded Rail (CWR) Manual.

<sup>&</sup>lt;sup>6</sup> Metro St. Louis, ROW Facilities Maintenance Plan FY 2012.

<sup>&</sup>lt;sup>9</sup> Metro St. Louis, MetroLink Track and Rail Right-Of-Way (ROW) Inspection Manual, Section 100.

<sup>&</sup>lt;sup>10</sup> Metro St. Louis, MetroLink Track and Rail Right-Of-Way (ROW) Maintenance Standard Manual, Section 200.



Figure 3-8 Rail System Maintenance Plan

# SECTION

# Findings

# Analysis

After reviewing current asset management practices, reviewing and working with Metro's maintenance/information management systems, and examining the data contained in those systems, our team began to perform an analysis to determine how well assets were being maintained and what condition those assets were in. In addition, the team reviewed urban rail capital asset planning data to determine how asset management data were being used to determine asset replacement. The team also reviewed sample data to evaluate the effectiveness of Metro's asset replacement model.

The analysis began with a series of multifaceted interviews with senior management, middle management, and employees. These interviews produced dependable and reliable data that provided a complete and detailed view of how assets are managed, maintained, and replaced at Metro. These data elements provided the team with a complete picture of critical assets at every level of the agency.

While conducting interviews throughout the agency, the team mapped the flow of information as it applies to reliability, maintainability, and condition of critical assets supporting both bus and rail at Metro. In addition, the team reviewed documentation records, both electronic and paper, to determine how assets were being managed, maintained, and planned for replacement throughout their life cycle.

Finally, the analysis and evaluation took a look at how asset data were being stored, how asset conditions were being documented, and how hierarchical data were being captured for each asset. In addition, the team evaluated the data structure and reviewed all elements, relevant data parameters, and lateral data links to higher assemblies, lower assemblies, and related assemblies.

The team also evaluated Metro's decision support capability and its effectiveness in assisting with asset replacement. Figure 4-1 illustrates this process.



Figure 4-1 Analysis Process

## **Developing Project Priorities**

Metro has a thorough Capital Budget Request process for construction/ rehabilitation, new equipment/replacement, and major computer software procurement/development. The prioritization of a request is a two-tiered process based on the project's priority and its impact on the agency's strategic planning goals and objectives for the three-year budget cycle that is being developed. The primary tier is the priority assigned to the project. The second tier is the project's anticipated impact on the daily operation. The project ranking is a static rating based on the project type. The impact of the project is presented in a composite score of several independent criteria that will allow points based on the project's impact towards meeting the agency's strategic planning and objectives.

After the initial scoring by the Program Development and Grants Department, senior management conducts a separate project scoring for each project. The combined scores from staff and senior management determine the project's prioritization within the capital budget process. The capital request projects have to be included within the Missouri Department of Transportation (MODOT) Technology Innovation Plan (TIP) and Small Infrastructure Project (SIP) before a grant can be submitted to FTA for approval.

## Defining Hierarchies between Critical Assets and Data Components

The assets/components reviewed during the surveys included vehicles, HVAC systems, tunnel ventilation systems, pumping stations, Motor Control Center (MCC), station mezzanines (pedestrian bridges), parking lots, automatic transfer switches, emergency generators, and grade/pedestrian crossings. Table 4-I lists the categories and asset types reviewed. As each asset and component was surveyed, a determination was made with Metro as to the condition of that asset/component and noted. Inspection reports were also reviewed to substantiate the findings. Metro maintains a Performance Tracking Sheet to monitor scheduled monthly inspections. A standard monthly inspection form is kept on file for inspection forms to connect them to the history maintenance asset condition reporting database.

| Tab      | le  | 4-1   |  |
|----------|-----|-------|--|
| Category | and | Asset |  |

Types Reviewed

| Category       | Asset Type                 |
|----------------|----------------------------|
|                | Buses                      |
| Vahialaa       | Light Rail Vehicles (LRVs) |
| venicies       | Non-Revenue                |
|                | Paratransit Vans           |
|                | Track                      |
| Eived Cuideway | Tunnels                    |
| Fixed Guideway | Elevated Structures        |
|                | Right-of-Way               |
|                | Administration             |
| En allinia a   | Maintenance                |
| Facilities     | Storage/Warehouses         |
|                | Parking Garages            |
|                | Station Structures         |
| Stations       | Bus Shelters               |
|                | Rail Platforms             |
|                | Signage & Graphics         |
|                | Train Control              |
| Systems        | Traction Power             |
|                | Communications             |
|                | Signals                    |
|                | Ventilation                |

A SmartDraw diagram was developed to identify each asset and its components, as well as to illustrate the hierarchical relationship. This diagram was used to develop a logical data structure with vertical and lateral links that would include photos, values, and other relevant information. It provided a complete hierarchical structure for the critical assets and their components and sub-components that could be input and tracked by management staff. This flowchart, in essence, would provide a complete and accurate record reflecting the value and condition of the critical assets throughout their life cycle.

This approach was taken to provide management with a detailed illustration of hierarchical relationships for critical asset inventory that support bus and rail infrastructure. It aligns with the forthcoming FTA reporting requirements. The end product enabled the team to populate Metro's M-5 and Oracle databases with asset condition values, failures, and maintenance costs information. These key values are required to calculate real life-cycle cost information to determine when critical assets should be planned for replacement. This approach also provides transit organizations with the ability to document and populate the new National Transit Database (NTD) standards being developed by FTA.

#### Step-by-Step Procedures

Implementing an asset management approach requires information resources that support asset management policies and decisions. The ideal asset management system provides data and decision support for each step in the asset management process, including functionality for:

- Storing a complete asset inventory
- · Recording condition and performance data for the inventory
- · Identifying deficiencies of existing assets
- Providing a decision support capability for predicting future conditions and need
- Tracking data on work accomplishments, including maintenance actions and capital projects
- Supporting monitoring an d reporting

The CRBS team reviewed and mapped the current asset management practices at Metro. The results of this review provided the team with the essential information to catalog and describe asset categories, hierarchical relationships, and data elements required to support a state of good repair.

The team gathered asset information through the processes of visits/interviews with Metro representatives and through data retrieval from management information systems Maximus M-5 and Oracle. In addition, asset data were retrieved from standalone databases (Excel) and handwritten log books.

After the team performed an analysis of these data, with Metro's concurrence, it decided to perform a comprehensive inventory of all critical assets. Although conducting a comprehensive inventory is extremely time-consuming and difficult, the team decided it was critical to ensure that all data captured were correct. This method also provided the team with the ability to get photographs and the exact location and condition of each asset.

The team developed the following tasks to ensure that critical assets were captured:

- · Review list of assets contained in the Asset Management system.
- Work with Metro engineering/maintenance staff to document all systems and facilities at the transit agency.
- Conduct a comprehensive inventory.
- Document the current hierarchical structure (parent/child).
- Illustrate in detail the hierarchical relationships for critical inventory assets (bus and rail).
- Completely document all steps taken during the process.

Documenting the complete process was an integral part of this research project. Using the step-by-step procedures outlined above will provide transit agencies with a roadmap for developing their own hierarchical relationships of critical assets.

#### Software Tools for Hierarchy Development

To achieve this hierarchical breakdown structure, the team employed software called SmartDraw<sup>®</sup>. SmartDraw provides the unique ability to capture data and place it in a visual format, allowing users to visually display information. CRBS developed several applications with this tool that allowed the team to display critical asset data in multiple formats.

# Examples of Hierarchical Structures Created with SmartDraw

Rail transit signal systems are complex combinations of electrical, mechanical, and electro-mechanical elements with components that may be considered to be subsystems. For purposes of this report, the term "system" represents the highest level of complexity, and the subsystems are referred to as components. In many cases, a component can and will be a simpler system.

When it comes to representing the hierarchies, it may be convenient to adopt categories. The train control system, for example, can be categorized into Automatic Train Protection (ATP), Automatic Train Supervision (ATS), and Automatic Train Operation (ATO). If the system primarily provides ATP with minimal ATS and little to no ATO, only one category is needed. These issues should be clarified before beginning the cataloging process. It requires identifying the particular terminology of the transit agency prior to conducting a comprehensive inventory.

A Train Control system has many subsystems/components distributed near or along the ROW that are located in enclosed areas such as signal houses, signal cases, relay rooms, and the operations control center (OCC). Many components are purchased, delivered, and installed as a single complex entity. These are the components to be considered and designated as elements of the Train Control system. CRBS determined an efficient yet accurate way of forming the hierarchical relationships.

A baseline was determined and implemented as the foundation for all signaling locations. This typical system enabled creating a representation of the train control system that could be documented without recording every signaling asset before the structure was developed. To be in alignment with other asset structures that will be developed, the systems identified as typical were based on an architectural base.

For system elements located on the rails or adjacent to the rails for control of switch points, the architectural element may be related to the special track

work. A visit to the agency and a survey are necessary to determine the fundamental elements of the typical system. CRBS identified how the system is recorded by maintenance staff and other bookkeeping systems, such as capital planning and materials management office.

The following presents some of the specific hierarchies developed for Metro.

#### Signal Houses

The engineering team comprised CRBS and Metro personnel who were tasked to conduct a comprehensive review and map/model the current asset management practices involved with rail systems maintenance at Metro. The completed models included all pertinent documents required to catalog and describe the categories, hierarchies, and data elements that support signal control, traction power substations, and facilities. Asset information was gathered through visits and interviews with Metro representatives. In addition, asset data were retrieved during a comprehensive inventory of signal control and traction power substations and facilities. This comprehensive inventory provided the team with an accurate record of all assets along the 46-mile rail infrastructure.

CRBS developed a logical data structure, which contained all necessary elements of a typical transit agency including useful and relevant data parameters with vertical and lateral data links to higher assemblies, lower assemblies and related assemblies.

Figure 4-2 shows the hierarchical relationship breakdown of those components at a typical signal house.

#### SECTION 4: FINDINGS



Figure 4-2 Signal House Components

When viewed in SmartDraw, clicking on the "Signal House" block brings up the Computer Aided Design (CAD) drawing of the Signal House, as shown in Figure 4-3.





Figure 4-3 CAD Drawing of a Signal House

Spreadsheets of inventories can be obtained by clicking on elements in the hierarchical diagram or on the CAD drawing. For example, clicking on "Rack 3" brings up the spreadsheet and photos (if available) for that signal house, as shown in Figure 4-4.

| Signal Control Asset Inventory Counts: N. Hanley |              |                        |       |  |  |
|--|--------------|------------------------|-------|--|--|
| Rack 3   |              |                        |       |  |  |
| COMPONENT  | MANUFACTURER | PART NUMBER            | COUNT |  |  |
| Vital Relay                                      | GRS          | A62-122 (56001-921-07) | 2     |  |  |
| 520 Receiver Module (2970 Feq.)                  | EPC          | 150-088019-080 Rev. F  | 1     |  |  |
| 520 Receiver Module (4410 Feq.)                  | EPC          | 150-088019-080 Rev. B  | 1     |  |  |
| 520 Receiver Module (3510 Feq.)                  | EPC          | 150-088019-080 Rev. B  | 1     |  |  |
| 520 Receiver Module (3870 Feq.)                  | EPC          | 150-088019-080 Rev. B  | 1     |  |  |
| 510 Amplifier Module                             | EPC          | 150-088019-050 Rev. B  | 7     |  |  |
| 530 CAB Coupler (2340 Feq.)                      | EPC          | 150-088019-051 Rev. B  | 4     |  |  |
| 540 Train Detection Coupler (2970 Feq.)          | EPC          | 150-088019-060 Rev. B  | 1     |  |  |
| 540 Train Detection Coupler (3510Feq.)           | EPC          | 150-088019-060 Rev. B  | 1     |  |  |
| 540 Train Detection Coupler (4410 Feq.)          | EPC          | 150-088019-060 Rev. B  | 1     |  |  |





(b)

Figure 4-4 Typical Signal Control Asset Inventory Counts (a) and Rack 3 Photo (b)

#### Other Components

This same approach was used to develop the hierarchical relationships for many of the category and asset types. It could be used for all of them. Figures 4-5, 4-6, and 4-7 are examples of hierarchical components for several other asset types. As with signal houses, clicking on the boxes brings up a spreadsheet of the inventory items and photographs. Appendix A provides hierarchical components for all assets inventoried as part of this project.



Figure 4-5 Light Rail Vehicle (LRV) Hierarchical Components



Figure 4-6 Typical Rail Station Hierarchical Components

#### SECTION 4: FINDINGS



Figure 4-7 Typical Rail Maintenance Facility Hierarchical Components

Figure 4-8 describes how assets were documented in various systems at Metro at the beginning of the research project.



Figure 4-8 Asset Documentation at Project Outset

The key point this chart reveals is that asset data are being stored in three separate, stove-piped systems. At the beginning of the project, the systems did not communicate with each other, inhibiting total asset visibility. Oracle, used by Metro's asset accountant, did not reflect any hierarchical data as it applied to the asset within the Oracle database. Asset condition data were being captured for structures supporting MetroLink; however, these data was all compiled in paper records filed as PDF documents.

At project start, Maximus M-5 was the asset management system producing work orders and documenting all maintenance actions for both rail and bus rolling stock assets. M-5 was also being used to document all work performed on bus facilities. This situation had been previously identified by Metro; however, the agency had not addressed the issue due to resource constraints.

The transit asset inventory development and integration research project provided the critical resources required to address Maintenance of Way assets and their input into M-5. To accomplish this task, the team had to perform a comprehensive inventory of Maintenance of Way assets to ensure that all data entered into M-5 reflected the assets' hierarchical relationship and condition.

This major philosophy change was accepted and supported by Maintenance of Way senior management and the Senior Vice President of Transit Operations. The loading and documentation of the hundreds of critical assets within the Maintenance of Way division will take an additional year to accomplish.

The process of setting up a senior management review panel was critical to the overall success of the project. This panel, comprising Metro senior management and CRBS Senior Engineers, reached consensus of all major changes to Metro asset management documentation practices and procedures. This panel also provided validation, buy-in, and cooperation at all levels within Metro. This major paradigm shift provided Metro with clear and concise data that could be used to make critical decisions of prioritizing its asset rehabilitation and replacement programs.

SECTION 5

# Recommendations

# Recommendations Specific to Metro

The following recommendations are based on the CRBS research and analysis of Metro's asset/inventory data elements for bus, rail, signaling, traction power substations, and facilities, as well as all associated financial and maintenance software tools that are currently being used to support the State of Good Repair (SGR) reporting and reliability improvements, asset warranties, and capital reinvestment requirements. As part of this research, the CRBS team documented and illustrated how larger capital items are related through the hierarchical relationships of data elements recorded in maintenance and financial management systems and how these data can be used to deduce conditions of these larger capital assets. Based on observations and thorough review of procedures within the budgeting and maintenance departments, CRBS highly recommends that Metro takes full advantage of the Maximus M-5 system as its main SGR database.

Metro has already realized significant cost savings by using its M-5 system to capture failure trends, inspection records, warranty information, and vehicle life cycles for both bus and rail fleets. CRBS has concluded that the M-5 TAM is the best system for Metro to achieve total asset visibility, asset condition, asset planning, and life cycle costs for its vehicles and physical infrastructure. The software tool has the necessary data elements needed to develop the standard asset management inventory structures.

To significantly improve accountability and efficiency and to end confusion/ reconciliation within the agency, CRBS recommends that parts ordering reside within M-5 and no longer be generated with the financial software (Oracle). Oracle is a great tool for financial matters such as payroll and contracted services, but here it impedes rather than facilitates the process. Information on parts ordered that staff are currently searching for by using Oracle would be readily accessible within a program that is used every day to report failures and repairs on those exact parts/components. Also, from the Metro Information Technology department's perspective, it would be easier to manage one main system of data instead of two separate ones. The M-5 system has the capability to track costs, collect detailed information, and produce essential reports. Using the M-5 system for parts ordering and as the main source of data would streamline the procurement process and improve productivity, in spite of requiring parts information to be manually entered accurately to create precise and proper work order information. To assist in the development of hierarchical relationships, CRBS recommends that Metro continue to use a tool such as SmartDraw to conduct a comprehensive inventory of those critical assets that were not included within the research project. The completion of conducting Metro's comprehensive inventories/photographs of critical assets was not required to meet the scope of work identified in the original FTA project work plan. However, the CRBS team made a decision to conduct comprehensive inventories of key physical infrastructures to ensure that all asset data that were loaded into the Maximus M-5 system were thoroughly identified and documented correctly. The data documented during the research project are currently being used to support lifecycle analysis and augment the existing management information systems. Metro should establish a core team to conduct condition assessments of their critical assets every 3–5 years to ensure that the static SmartDraw data coincide with the Capital Request Budget process.

# **General Recommendations**

CRBS recommends that Metro's Bus Life Cycle Cost model be adopted by the transit industry as a best practice. It has significantly reduced Metro's cost per vehicle mile and road call breakdowns. Metro continues to recognize the importance of preventive maintenance inspections and predictive maintenance, which has allowed vehicle maintenance staff to act proactively on scheduled repairs rather than constantly reacting to running or unscheduled repairs. Metro has clearly defined maintenance staff work schedules and procedures within its model. This has enabled it to manage items such as time, materials, tools, equipment, and labor. PMI scheduling maximizes employee productivity/ accountability, and number of available operational vehicles while minimizing costs.

CRBS also recommends that Metro continue to develop its Web-based Asset Inspection and Maintenance System for all MetroLink structures and physical infrastructure. This tool has been under development during the past two years and has provided MetroLink with the capability to identify, inspect, and maintain critical assets such as bridges and tunnels as required by federal/state laws to ensure a safe and reliable operation.

Public transit organizations induct, configure, maintain, modify, and dispose of a wide variety of assets—visible assets (buses, railcars, stations, etc.) and critical infrastructure (track, switches, power substations, tunnels, etc.). The recent passage of MAP-21 increases the scope of asset and service management challenges facing agencies. To meet the new requirements of FTA, all transit agencies will be required to have and maintain a detailed asset management plan and a method to report the condition of all assets supporting the delivery of transportation services to the public.

The ability to track hundreds of thousands of assets through a synchronized business process and to provide accurate, readily-available engineering data will

be a significant step toward achieving cost-effective management goals. Good, accurate data on assets will lead to solid transit asset management programs, which, in turn, will lead to sound and timely investment decisions, prioritization, and planning. The resulting effect is a state of good repair, a reliable and predictable operation, and enhanced life of assets.

Most transit agencies have methods to document work performed on rolling stock assets (buses and railcars). However, documentation of infrastructure for most agencies provides a unique challenge. Metro is no different. Data for the Maintenance of Way Division were stored in log books, paper, Microsoft Excel spreadsheets, and a Microsoft Access database. Asset condition and hierarchal data were not being captured, and asset inventory data were incomplete at best.

In the process of conducting its research, CRBS examined two software tools that can be of use in meeting these requirements.

#### SmartDraw Software

The benefits of using SmartDraw to conduct a comprehensive inventory/ photographs as well as to develop hierarchical relationships are numerous. It is simple to use, and it lays out information in a diagram type that can be easily understood by any level of employee. Customizing SmartDraw per the request of a Metro department would be a simple task to initiate after receiving an outline list of requirements. Many transit agencies have their own set of procedures/ processes for using their data that may not involve entry into a software tool. However, with SmartDraw, the transition to digital forms of critical asset data would be a smoother process and be accepted much more easily within an organization because the information can be presented in a flowchart/ hierarchical format. SmartDraw provides a complete hierarchical structure for the critical assets and their components and sub-components that allow the data to be input and tracked by management staff. The flowchart, in essence, provides a complete and accurate record reflecting the value and current condition assessment of the critical assets throughout their life cycle.

For this project, SmartDraw provided the team with a tool to visually display its thoughts within flowcharts or mind maps as the team began the process of developing the hierarchical relationships of each asset. Many of these mind maps and flowcharts are displayed throughout this final report.

As the team began using SmartDraw, other capabilities became apparent that could assist in the overall process of conducting a comprehensive inventory of the MetroLink infrastructure. CRBS developed a series of Excel spreadsheets to collect pertinent information about the infrastructure that Metro management staff recommended. These spreadsheets provided the team with a way to collect manufacturer information, location, installation date, asset inventory, and the condition of those assets within one document. Overall, CRBS used primarily a mix of SmartDraw and Excel spreadsheets to document this project; this is highly beneficial because an Excel document can be imported into Oracle or Maximus M-5.

While conducting the comprehensive inventory of MetroLink's infrastructure, the team decided to capture pictures of each asset. This provided a visual record of the asset as well as the exact location of that asset and, in some cases, also assisted with determining a particular asset's condition. SmartDraw provided the team with the opportunity to link all data, photographs, video clips, and asset condition into one record. This software provided Metro senior management with a powerful tool that can generate a detailed snapshot of a critical asset to answer questions about the condition and inventory. Metro's management also discovered that SmartDraw can serve as a training tool for new employees assigned to maintain the infrastructure.

The majority of the information documented by many agencies is typically in an Excel spreadsheet format which is then imported into major tools such as Maximus M-5 or Oracle. However, many agencies have not updated their documented asset information for some time. The team used SmartDraw to build what an agency would need in the process of starting to build a comprehensive inventory to the point where it will have all that is needed to move forward in the future with simple-to-read, accurate, and up-to-date information. These three things are the backbone of building a Transit Asset Management System that will quickly benefit an agency.

SmartDraw provides an agency something that many software tools are not designed or programmed to do, especially for the price. SmartDraw provides an agency with the capability of customizing the configuration of its critical assets and associated inventories. This customization not only provides an agency a way to build an inventory of its assets that is understandable, it creates a great foundation for the short- and long-term planning needed for asset management growth. The ability to fully understand an entire critical asset and know where the components/sub components of that asset are is a very powerful tool to sustain a state of good repair and operate a transit system reliably and efficiently. In our opinion, the simplicity and customization of SmartDraw are unmatched.

One of the major features that SmartDraw offers that provides a seamless integration with other software tools is that information stored within the Excel files is typically uploaded onto a server that provides the user access to change one file for a specific asset, instead of many files that would need to be searched through to find the most updated version. This will provide an agency with a great foundation for building a reliable Asset Management System that will be well documented and structured accurately.

#### Windchill Software

During the final stage of the research project, the team discovered a more comprehensive tool that could be deployed to support medium to large agencies that already have mature existing enterprise asset management systems such as Maximus M-5 or Maximo. This tool was developed by Parametric Technology Corporation (PTC), a solutions provider well known for supporting the Department of Defense. PTC's tool, known as "Windchill," was demonstrated to the research team using rail car and bus data from Washington Metro and ROW maintenance assets such as signals and stations from St. Louis Metro.

Windchill provides organizations with the capability to move data from their existing Enterprise Asset Management (EAM) systems into a tool that will provide a decision support capability for the organization. Windchill acts as the single source of truth for all asset-related data and thus offers enterprise-level integrations to Enterprise Resource Planning (ERP) and EAM systems. These integrations allow Windchill to assume master control over processes and ensure that standard business processes are created and followed. Decisions and actions logged in disparate transactional systems (e.g., engineering, reliability, supply chain management, inventory management, service, operations, warranty entitlement) are consolidated and become accessible for necessary data consumption. This feedback loop enables performance-based metrics to support decisions at every level of the enterprise.

#### Step-by-Step Process

The step-by-step process described in Table 5-1 lists the project steps, objectives, and activities required by an agency to use the existing data contained in its maintenance/management information systems to improve its ability to manage its critical assets. These steps provide transit agencies with a roadmap to leverage data in their maintenance management systems to build asset inventories to achieve a higher level of analysis to optimize investments in urban bus/rail capital assets. Table 5-1 provides the steps necessary to use data in an agency's current maintenance/information management systems to improve overall asset management.

Table 5-1

Project/Step Objectives

| Step | Name   | Objectives/Activities   |
|------|--|---|
| 1    | Review current<br>asset management<br>practices.                   | <ul> <li>Conduct interviews with all stakeholders involved with Asset<br/>Management.</li> <li>Review all written policies, documentation, and regulations that<br/>provide guidance to personnel regarding critical assets.</li> <li>Flowchart the complete current process.</li> <li>Recommend improvements and brief senior management to<br/>obtain buy-in and approval.</li> </ul>   |
| 2    | Review and<br>analyze all<br>management<br>information<br>systems. | <ul> <li>Review all data currently contained in data systems.</li> <li>Analyze asset/inventory data for bus and rail vehicles and all associated equipment and facilities.</li> <li>Analyze equipment and facilities data contained in databases that are not part of the standard information systems.</li> <li>These systems should be reviewed and evaluated to determine which data elements are required to support the State of Good Repair reporting and reliability improvements, asset warranties, and capital reinvestment requirements.</li> </ul> |

| Step | Name   | Objectives/Activities  |  |  |  |  |
|------|--|--|--|--|--|--|
| 3    | Catalog and<br>describe<br>hierarchies<br>(parent/child).          | <ul> <li>Review list of current assets contained in the Asset Management systems.</li> <li>Document the current hierarchal structure (parent/child relationship).</li> <li>Work with engineering staff and other transit professionals to discuss and document systems/facilities.</li> <li>Generate detailed illustration of hierarchical relationships for critical inventory assets such as key equipment and facilities that support bus and rail infrastructure.</li> </ul> |  |  |  |  |
| 4    | Conduct a<br>comprehensive<br>inventory of all<br>critical assets. | • Request that senior management select a team of qualified personnel to conduct this comprehensive inventory. This team should include engineering and maintenance personnel with the expertise to identify and assess the condition of assets. The team should also include individuals capable of collecting the data electronically in an Excel spreadsheet or on an electronic device.  |  |  |  |  |
| 5    | ldentify all data<br>elements.                                     | <ul> <li>Review current data elements and structures.</li> <li>Perform analysis of current data elements and structures.</li> <li>Develop detailed illustration of hierarchical relationships for critical inventory assets for key equipment and facilities that support bus and rail infrastructure.</li> <li>Make recommendations and provide support documentation for new data elements.</li> </ul>   |  |  |  |  |
| 6    | Map data flow.   | • Document/flowchart the complete data flow of existing and new assets (e.g., rail car, bus stations and critical support structures).   |  |  |  |  |
| 7    | Review all urban<br>rail/bus capital<br>asset planning<br>data.    | <ul> <li>Collect and evaluate asset/inventory data from management/<br/>maintenance data systems. In addition, retrieve data stored in<br/>Excel spreadsheets, log books, and personal files maintained by<br/>material storeroom and maintenance personnel.</li> </ul>  |  |  |  |  |
| 8    | Determine tool requirements.                                       | <ul> <li>Review current tools.</li> <li>Search for already-developed/existing tools that can be<br/>employed to support the capital budgeting and asset<br/>replacement process.</li> </ul>  |  |  |  |  |
| 9    | Determine<br>what additional<br>enhancements are<br>required.      | <ul> <li>Determine required enhancements.</li> <li>Provide new asset breakdown structure for all assets.</li> <li>Input new structure of all supporting data into all asset and maintenance management systems.</li> <li>Gain senior management support and approval.</li> </ul>   |  |  |  |  |

#### Asset Management System for Bus and Railcars

In recent years, Metro has been very successful in improving the state of good repair of its system, particularly with respect to its buses and LRVs. In 2002, the agency established a preventive maintenance program for its vehicles. Key elements of this program include:

• Establishment of a set of standards for maintaining vehicles, with schedules for key inspections and maintenance activities based on a combination of time and mileage intervals.

- Development of maintenance plans describing Metro's schedules for maintaining existing assets consistent with its standards and a capital acquisition plan for the purchase of new assets.
- Implementation of the M-5 program to manage the fleet; the system is currently being implemented for managing facilities, ordering parts, and supporting other maintenance-related activities.

SECTION 6

# **Best Practices**

# Transformation of Metro's Vehicle Maintenance Department

In 2001, it was determined that Metro's bus performance was substandard for several reasons:

- Budgets were out of control and could not be justified to upper management.
- Performance was lackluster and unreliable, with frequent breakdowns of vehicles that were dirty and in poor condition.
- Significant resources were being expended on equipment near the end of its designed life cycle.
- Vehicles held for minor repairs became long-term hold vehicles that were stripped of parts to keep the rest of the fleet operating.

Bus purchases had been made when funding was available, without regard to maintenance implications. As a result, vehicle systems broke down at the same time, overstraining maintenance personnel and disrupting inventory control as service area directors competed for resources.

While routine maintenance was performed on a regular, scheduled basis, other repairs were done as needed. Inventory was not necessarily available in a timely manner, slowing repairs and maintenance and creating an unreliable fleet. Customer complaints increased, and the mean distance between failures (MDBF) hovered at merely 4,000 miles.

To turn this around, in 2002 Metro conducted a critical review of its bus maintenance program. Metro's senior managers were tasked with two imperatives: control costs and improve reliability.

#### Determining Bus Fleet Maintenance Intervals

Metro separated its bus fleet into sub fleets by model and year. Each principal was assigned a fleet to research and determine the OEM-recommended maintenance intervals. Once research was completed, personnel came back as a group and discussed their findings as well as solicited individual input based upon experience. Detailed questions were asked, such as, "At what point do airbags tend to fail?" and "How long does it typically take for an alternator or starter to fail?" They also developed a list of every component/item that caused road calls and, customer or driver complaints. That included coolant hoses, hydraulic lines, valves, switches, relays, and motors. Anything and everything that might fail or otherwise cause a road call was listed.

The team determined that, in many cases, the OEM recommends that maintenance be performed on a preset interval of one year or 50,000 miles, whichever comes first. That interval fit well within Metro's operating profile since their vehicles were averaging 50,000 miles per year. For some components, it applied the warranty provided by the OEM. As an example, alternators are scheduled to be replaced at 200K miles.

The team reviewed the OEM recommended maintenance actions and decided that Metro could design its maintenance program around the 50,000-mile cycle. Senior management asked if they could extend the life of a bus to 15 years. After careful consideration, they decided that goal was feasible.

#### **Comprehensive Maintenance Plan**

The team then constructed a comprehensive maintenance plan that included component replacements, adjustments, fluid changes, or appearance and comfort items around that cycle for the life of a bus. Items addressed included components of the vehicle that are not specifically addressed by the OEM but become maintenance issues nonetheless, such as paint, body work, and replacement of driver/passenger seats.

Major component replacements are planned during the midlife of the vehicle. Major inspection points, where expenditures are highest, are at 200k, 300k, 400k, and 500k miles. Maintenance intensity and expenditures trail off starting at 600k miles. Some abbreviated major inspections are performed every 50k miles until the vehicle is retired.

Antifreeze change out (green), minor maintenance items, and engine tune-ups are scheduled every 50k miles. Alternators, starter motors, and driver seats are replaced at the 200k, 400k and 600k mileage intervals. Allison transmissions are rebuilt every 200k miles, and Voith transmissions are rebuilt every 300k miles. Buses are scheduled to be repainted once during their useful life between 6 and 8 years of age. In the end, everything the team could think of was put into the plan for replacement, adjustment, or to be checked.

Regular preventive maintenance is conducted on a 10k-mile cycle. 10k-mile inspections are synchronized with the major planned inspection at 50k miles.

#### Predictable Maintenance and Replacement

The team then developed comprehensive inspection forms for every planned maintenance point by sub fleet. Detailed inspection forms that include tolerances, specifications, instructions, and places to record information were created and imbedded into the M-5 Vehicle Maintenance Database (VMD) module. Every inspection has a detailed bill of materials that corresponds to the work expected to be completed at that point.

The M-5 Asset Management System uses vehicle history information to forecast inspection due dates for the next 18 months as well as to track and record inspection on-time performance. Inspection forecast by sub-fleet is provided to the materials management office. In addition, 30-, 60-, and 90-day reports with specific bus numbers are provided to the parts department every month. The Materials Management office uses that information to assure that parts are available at the time the inspection is scheduled.

Kits for the corresponding inspection activities are available at the time when work is scheduled. Mechanics are budgeted and available to perform the work. Waiting for parts or out-of-service vehicles has been eliminated.

The Vehicle Maintenance Department tracks progress and adherence. Since inception, 100 percent of inspections scheduled are completed during the fiscal year. Also, on-time performance for 10K mile inspections has been consistently over 99 percent.

The program that was developed in 2002 has matured. The VMD team holds periodic meetings to discuss progress, make adjustments, or add items that were overlooked. In addition, as a new vehicle progresses through the system, meetings are held to discuss changes or additions that are necessary because of different configurations or new technologies.

Budgets are developed around the maintenance plan to ensure that the fleet is being well maintained. Expected inspection schedules for the fiscal year are budgeted and provided to department managers. With relatively fixed costs for inspections, forecasting future maintenance needs is very predictable.

In an effort to further refine its system, Metro decided to pursue a vehicle replacement plan that evened out its maintenance workloads. With a maintenance plan that takes vehicle life to 15 years, it budgets to replace I/15th of the fleet every year. This high-level planning allows Metro to deliver a 20-year bus replacement plan to the Grants department.

Regular replacement of vehicles has evened out the resources needed for every aspect of Metro's business plan. With a 370-vehicle bus fleet, Metro programs the replacement of 27 vehicles every year. By doing this, in the seventh year of that sub fleet, it will be necessary to paint just over two buses per month. Taking this concept to its logical conclusion, Metro will need to rebuild the same number of transmissions, driver seats, or any other component every month. This predictability has made it very easy to plan for and staff mechanics as well as materials.

Metro developed similar programs for their LRV and Call-A-Ride van fleets.

## Lessons Learned

The results of Metro's program have been very positive. Maintenance costs have remained constant in the face of rising commodity and labor costs. The agency has also realized enormous efficiencies in labor by having a trained mechanic with the part in hand available when planned activities are scheduled. In addition, the improved efficiencies in labor have eliminated road calls. Metro's current MDBF for its fleets is buses—21,382 miles, vans—49,997 miles, and LRVs—40,808 miles.

Metro continues to realize efficiencies in labor and parts availability by scheduling overhauls of major components/systems and not waiting until they fail. For example, Metro can overhaul an Allison transmission for about \$5,000 if it is removed and overhauled on a schedule, or it could pay \$20,000 or more to overhaul that same transmission if it continues to run it until a failure occurs that damages mort parts and requires unscheduled resources. Metro's parts inventory for the bus fleet has been reduced by \$5 million due to its tightly-held scheduling process and part usage.

Changing the culture was not easy. Metro offers the following information about the issues that arose during its journey:

It was very difficult for managers and front-line personnel to envision the move from breakdown maintenance to planned activities. Metro struggled to convince a supervisor or superintendent to replace the alternator on a bus on a planned basis while having another bus dead on the wall because it was waiting for an alternator. Resistance was significant.

To overcome this, Metro developed a core support team of "believers" within maintenance, a small team of individuals who were committed to the program and were willing to pursue it. They argued and supported the program into existence.

Metro transitioned to the new program in phases. Management decided that anything that was purchased in 2000 or newer would be brought up to a state of good repair and maintained fully under the new program. Vehicles from 1992 to 1997 were incorporated into the program with some modifications. As new vehicles were purchased, they were incorporated into the program from cradle to grave.

Metro enhanced its mechanic training by rewriting its entire program, creating training that was specific to the new maintenance program.

The key to its success, Metro staff pursued the goal relentlessly. Since its inception, Metro staff have recognized that their planned maintenance program is one of the agency's best accomplishments. Vehicle reliability is among the best in the nation, costs are under control, and customer complaints are almost nonexistent.
## Comprehensive Inventory of Assets

A thorough review of the data contained in Maximus M-5 as well as Oracle by the team prompted a decision to conduct a comprehensive inventory. The team understood that conducting such an inventory would be extremely timeconsuming and require a massive investment of resources from both CRBS and Metro personnel. However, it was imperative that all information captured during the project reflected Metro's current asset configuration, location, and condition. After conducting the comprehensive inventory of MetroLink's Right-of Way, the team was asked to provide input to assist Metro in the population of the new NTD format. Because of CRBS's hierarchical breakdown structure and inventory, this requirement was easy to accomplish. The team quickly recognized that this format closely resembled what FTA is requiring for the new format. Therefore, the accomplishment of a comprehensive inventory by all transit agencies could yield the benefits of managing physical infrastructure and fleets within constrained budgets and prepare all organizations for the forthcoming FTA requirements.

# 

### Conclusions

The research described in this report provides an example of how urban rail transit agencies can leverage existing data that may be contained in their maintenance/management information systems. These data could be used to build asset inventories for higher-level analysis as a way to optimize an agency's investments in bus and rail capital assets. In addition, this report provides a roadmap to accomplish this task by identifying critical assets and using the data collected from Metro to develop an asset management plan.

This report provides the process and examples of how the CRBS team developed a reference document defining recommended industry-integrated standard asset inventory structures, data elements, and hierarchical relationships. In addition, this report reveals how the team documented and illustrated how larger capital items are related through the proposed hierarchical relationships of data recorded in maintenance management systems. Transit agencies can employ the research results and best practices identified in this report to improve their overall asset management capability, identify failure trends, monitor corrective/ preventive maintenance, and document asset condition.

The improvement in total asset visibility is driven by the capability to capture complete data for each asset and critically review its condition. This process includes the analysis of the asset and costs associated with repairing or modifying it to influence the decision of planning for its replacement. The methods used by the research team are not meant to be the only way an agency can approach asset management; rather, they provide a structure that has been demonstrated successfully at Metro.

The research team developed a framework to conduct a comprehensive inventory and store data into SmartDraw, a product that visually displays the asset and associated data. In addition, this report provides a framework that could be used by any agency, regardless of its size, to conduct a comprehensive inventory and perform a hierarchical breakdown of each of its major assets.

SmartDraw provides an agency with simplicity that many software tools do not have, especially for the price. Furthermore, SmartDraw allows users to build an inventory customized for their infrastructure with diagrams and spreadsheets. This customization not only provides an agency a way to build an inventory of their assets they understand, but creates a great foundation for the long-term plan of documenting assets expansion and asset condition.

The user-friendly software facilitates a better understanding of an entire system/ components and breakdowns of these critical assets to determine capital project prioritization. SmartDraw is a very powerful tool, in particular for replacement/ rehabilitation projects that focus on the current condition of an asset in comparison to its useful life.

Finally, the key to the success of this project was the cooperation at all levels of management at Metro. The ability to interview all management staff as well as front-line employees to determine how assets were being managed, repaired, modified, and evaluated was crucial to determining what worked well and what did not. This report provides a step-by-step process to accomplish a comprehensive inventory of assets, along with examples of how to develop hierarchical structures that depict the parent-child relationships of those assets and how that data could be displayed in a simple but concise manner. In addition, this report outlines tools that could be used to collect asset data and display that data to improve the management of assets and forecast their useful life cycle.

#### ACRONYMS

| AASHTO | American Association of State Highway and Transportation Officials |
|--------|--|
| AC     | Alternating Current  |
| ADA    | Americans with Disabilities Act                                    |
| AIMS   | Asset Inspection and Maintenance System                            |
| ΑΡΤΑ   | American Public Transportation Association                         |
| ArcGIS | Core Geographic Information System Server                          |
| AREMA  | American Railway Engineering and Maintenance of Way Association    |
| ATO    | Automatic Train Operation  |
| ATP    | Automatic Train Protection   |
| ATS    | Automatic Train Supervision  |
| BP     | Best Practice  |
| BSDA   | Bi-State Development Agency  |
| CAD    | Computer Aided Design  |
| CCTV   | Close Circuit Television   |
| CIP    | Construction in Progress   |
| CMO    | Chief Mechanical Officer   |
| CRBS   | Code Red Business Solutions  |
| CWR    | Continuous Welded Rail   |
| EAM    | Enterprise Asset Management  |
| ERP    | Enterprise Resource Planning                                       |
| ESRI   | Environmental System Research Institute                            |
| FHWA   | Federal Highway Administration                                     |
| FTA    | Federal Transit Administration                                     |
| GIS    | Geographic Information Systems                                     |
| HVAC   | Heat Ventilation Air Conditioning                                  |
| IT     | Information Technology   |
| LCD    | Liquid Crystal Display   |
| LRV    | Light Rail Vehicle   |
| MCC    | Metro Control Center   |
| MDBF   | Mean Distance Between Failure                                      |
| MO     | Modular Overhaul   |
| MODOT  | Missouri Department of Transportation                              |
| MOW    | Maintenance of Way   |
| MRP    | Material Requisition Plans   |
| NTD    | National Transit Database  |
| OCC    | Operations Control Center  |
| OCS    | Overhead Catenary System   |
| OEM    | Original Equipment Manufacturer                                    |
| OGA    | Oracle Grants Accounting   |
| PDF    | Portable Document Format   |
| PM     | Predictive Maintenance   |
| PMI    | Preventive Maintenance Inspection                                  |
| ROI    | Return On Investment   |
| ROW    | Right-of-Way   |
| SCADA  | Supervisory Control and Data Acquisition                           |
| SGR    | State of Good Repair   |

| SIP  | Small Infrastructure Project          |
|------|---------------------------------------|
| SOP  | Standard Operating Procedure          |
| TAM  | Transit Asset Management              |
| TERM | Transit Economics Requirements Model  |
| TIP  | Technology Innovation Plan            |
| TPSS | Traction and Power Substation Systems |
| TVCS | Tunnel Ventilation Control System     |
|      |                                       |

- UPS Uninterruptible Power Supply
- VHLC Vital Harmon Logic Controller
- VMD Metro's Vehicle Maintenance Department
- VMD M-5 Vehicle Maintenance Database
- WCL Wheelchair Lift
- XFMR Transformer

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Metro St. Louis. Rail Right-of-Way (ROW), Appendix D, Rail Defect Codes.

Metro St. Louis. ROW Facilities Maintenance Plan FY 2012

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## **Inventory of Assets**

#### Sub-Station: IL #1, MO #2, 4-12



#### Front Street & Broadway, East St. Louis, IL 62201



| Sub-Station: IL #1, MO #2, 4-12 Asset Inventory  |  |  |   |  |  |  |
|--|--|--|---|--|--|--|
| Image  | Inventory  |  |   |  |  |  |
|  |  | Transformer  |   |  |  |  |
| 1113   | COMPONENT  | MANUFACTURER   | PART NUMBER   | COUNT  |  |  |
|  | Lighting Arrestors   |  |   | 3  |  |  |
|  | Phase Stab   |  |   | 3  |  |  |
|  | Oil Drain Valve  |  |   | 1  |  |  |
|  | Connector Surge Arrestor   |  | M392270   | 3  |  |  |
|  |  | Voltage Breaker Siemen   | M201025 (1)   |  |  |  |
|  | COMPONENT  | MANUFACTURFR   | PART NUMBER   | COUNT  |  |  |
| March 1997 Barrier Control of Con |  |  |   |  |  |  |
|  |  |  |   |  |  |  |
| <b>*</b> t   | Static Trip (rms-ts-tz)  | Siemens  | C398755   | 2  |  |  |
|  | Static Trip (rms-ts-tz)<br>Motors  | Siemens  | C398755   | 2  |  |  |
| T I STACE  | Static Trip (rms-ts-tz)<br>Motors<br>Actuators                             | Siemens  | C398755   | 2  |  |  |
|  | Static Trip (rms-ts-tz)<br>Motors<br>Actuators                             | Siemens  | C398755   | 2  |  |  |
|  | Static Trip (rms-ts-tz)<br>Motors<br>Actuators<br>27DC Control Power Relay | Siemens<br>Agostat   | C398755   | 2  |  |  |
|  | IL #1, MO #2, 4-12 Asset Inventory Image                                   | Image       Inventory         Image       Image         Image       Im | Inage       Inventory         Image       Image         Image       Inventory         Image       Image         Image       Image | IL #1, MO #2, 4-12 Asset Inventory         Image       Inventory         Transformer         COMPONENT       MANUFACTURER       PART NUMBER         Lighting Arrestors       Image       Image       Image         Oil Drain Valve       Image       Image       Image       Image       Image         Image <t< td=""></t<> |  |  |

| AP | PE | ND | IX | А |
|----|----|----|----|---|
|    |    |    |    |   |

| Sub-Station: IL #1, MO #2, 4-12 Asset Inventory |                       |   |                                 |                   |             |       |   |
|---|-----------------------|---|---------------------------------|-------------------|-------------|-------|---|
| ltem  | Image                 |   | Inventory                       |                   |             |       |   |
| Rectifier                                       |                       |   | Rectifier (ABB)                 |                   |             |       |   |
|   |                       |   | COMPONENT                       | MANUFACTURER      | PART NUMBER | COUNT | ł |
|   |                       |   | Diode Fuse 700V/ 1400A          | Ferraz            | M393023     | 36    | ł |
|   | and the second second | -   | Diode Heat sink                 |                   | M393525     |       | 1 |
|   |                       | CONTRACTOR OF THE OWNER   | fuses                           |                   |             |       | 1 |
|   | 100000                | NE GRANTIN FOR LE   | switch                          |                   |             |       | 1 |
|   | Contraction of the    | Resident Prov   | transducers DC                  | Compton           | CM398655    | 1     | 1 |
|   |                       |   | transistors (cap)               |                   |             |       | 1 |
|   |                       | Children  | fluorescent light               |                   |             |       | 1 |
|   |                       |   | filters                         |                   |             |       | l |
|   |                       |   | Enunciator                      |                   |             |       | l |
|   | Contract The          |   | 64 relay                        |                   |             |       | l |
|   |                       |   | relay ground protective         | ABB               | C395935     | 1     | ł |
|   | 1000                  | G Statute D   | hot enclosure                   | ABB               |             |       | ł |
|   |                       | Real Property and the second se | reverse current relay           | ABB               |             |       | ł |
|   |                       |   | lock out relay                  | Electroswitch     |             | 2     | l |
|   |                       |   |                                 |                   | M397360     |       | ł |
|   | and the second second |   | relay time delay                | Agastat           | M395956     | 1     | l |
|   |                       | and the second se | resistor 5K ohm                 | Ohmite            | M396101     | 4     | ł |
|   |                       |   | Relay control                   | MSD inc           | M395921     | 1     | l |
|   |                       |   | Relay Aux.                      | MSD inc           | M395910     | 1     | l |
|   |                       |   | Relay Aux / Lockout 86X         | MSD inc           | M395911     | 1     | l |
|   |                       |   | Relay control 120V              | MSD inc           | M395920     | 1     | l |
|   |                       |   | Contactor DC 240V 3 pole        | ABB               | M392340     | 1     | ł |
|   |                       |   | Clamp Tri-Start 5000 Assembly   | ABB               | M392020     | 36    | l |
|   |                       |   | Fuse SND 62C 65A 34.5KB         | SEC               | M393028     | 3     | ł |
|   |                       |   | Card Flasher Audible Enunciator | Ameritech         | M391771     | 20    | i |
|   |                       |   | Card Single point sequence      | Ameritech         | M391781     | 30    | i |
|   |                       |   | Diode 1830am 2500V CCTR         | ABB* or Westcode* | M392500     | 24    | i |

|             | , - , , |  |   |   |  |  |
|-------------|---------|--|---|---|--|--|
| ltem        | Image   | Inventory  |   |   |  |  |
| DC Breaker  |         |  | DC Breaker  |   |  |  |
|             |         | COMPONENT  | MANUFACTURER  | PART NUMBER   | COUNT                                  |  |
|             | 2       | Control Relay  |   |   |  |  |
|             |         |  |   | M395962/M39596  |  |  |
|             |         | Relay Timing   | Agastats  | 3   | 3                                      |  |
|             |         |  | Schwartz engineering                                  |   |  |  |
|             |         | over current relay type 76   | smc   | M395952   | 2                                      |  |
|             |         | fuses  |   |   |  |  |
|             |         | load measuring devices   |   |   |  |  |
|             |         | Volt Meter   |   |   |  |  |
|             |         |  |   |   |  |  |
|             |         | Relay control  | MSD inc   | M395921   | 1                                      |  |
|             |         | Relay Aux.   | MSD inc   | M395910   | 1                                      |  |
|             |         | Limiter Multiplier/ Voltage  | Crompton  | M394250   | 1                                      |  |
|             |         | Indicator Assembly   |   | M393690   | 1 ea.                                  |  |
|             |         | Nut Hex 1/2 by 13 Silicon Bronze   |   |   | F.0                                    |  |
|             |         |  |   |   | 50                                     |  |
|             |         | Bellow Assembly  | ABB*  | M390660   | 1 ea.                                  |  |
|             |         | Bellow Assembly  | ABB*  | M390660   | 1 ea.                                  |  |
| House Walls |         | Bellow Assembly  | ABB*  | M390660   | 1 ea.                                  |  |
| House Walls |         | COMPONENT  | ABB* House Walls MANUFACTURER                         | PART NUMBER C   | 00000000000000000000000000000000000000 |  |
| House Walls |         | Bellow Assembly       COMPONENT       Brk Test Box   | ABB* House Walls MANUFACTURER                         | PART NUMBER C   | 0UNT                                   |  |
| House Walls |         | COMPONENT       Brk Test Box       A.P.T.  | ABB* House Walls MANUFACTURER                         | PART NUMBER C   | 0UNT                                   |  |
| House Walls |         | COMPONENT       Brk Test Box       A.P.T.       A.P.T Sec  | ABB* House Walls MANUFACTURER                         | PART NUMBER C   | 0UNT                                   |  |
| House Walls |         | COMPONENT       Brk Test Box       A.P.T.       A.P.T Sec       Thermostat   | ABB* House Walls MANUFACTURER Dayton                  | PART NUMBER C   | 0UNT                                   |  |
| House Walls |         | COMPONENT       Brk Test Box       A.P.T.       A.P.T Sec       Thermostat       100amp hours Batteries  | ABB* House Walls MANUFACTURER Dayton Exide            | PART NUMBER C   | 0UNT                                   |  |
| House Walls |         | COMPONENT       Brk Test Box       A.P.T.       A.P.T Sec       Thermostat       100amp hours Batteries       15amp Charger*   | ABB* House Walls MANUFACTURER Dayton Exide GNB        | M390660           PART NUMBER         C           C         C         C           C         C         C         C           C         C         C         C           C         C         C         C         C           C         C         C         C         C         C     < | 0UNT<br>19<br>1                        |  |
| House Walls |         | Bellow Assembly         Bellow Assembly         COMPONENT         Brk Test Box         A.P.T.         A.P.T Sec         Thermostat         100amp hours Batteries         15amp Charger*         5K Heater | ABB* House Walls MANUFACTURER Dayton Exide GNB NuTone | M390660  PART NUMBER  C391930   | 0UNT<br>19<br>1<br>1                   |  |

| Sub-Station: IL #1, MO #2, 4-12 Asset Inventory |                 |   |                           |             |       |  |  |  |
|---|-----------------|---|---------------------------|-------------|-------|--|--|--|
| ltem  | Image Inventory |   |                           |             |       |  |  |  |
| M.O.D. 89C                                      |                 |   | M.O.D. 89C                |             |       |  |  |  |
|   |                 | COMPONENT                                 | MANUFACTURER              | PART NUMBER | COUNT |  |  |  |
|   |                 | switch breaker                            |                           | M398001     | 1     |  |  |  |
|   | are and         | <b>Operator Motor Positive Disconnect</b> | NMC Positive Power Switch | M394802     | 1     |  |  |  |
|   |                 | actuator                                  |                           |             |       |  |  |  |
|   |                 | Relay Control 110V                        |                           | M395926     | 0     |  |  |  |
|   |                 |   |                           |             |       |  |  |  |

#### Sub-Station: IL #2-6



#### 219 North 5th Street, East St. Louis, IL 62201

| Sub-Station | : IL #2-6 Asset Inventory   |                                     |                   |             |       |
|-------------|---|-------------------------------------|-------------------|-------------|-------|
| ltem        | Image   | Inventory                           |                   |             |       |
| AC          |   | AC High Voltage Breaker M391035 (1) |                   |             |       |
| Breaker     |   | COMPONENT                           | MANUFACTURER      | PART NUMBER | COUNT |
| Dicakci     |   | Fuse Current Limiting AC 6A 600V    |                   | M393007     | 2     |
|             |   | Relay Under Volt/Phase Sequence     | ABB               | M395970     | 1     |
|             |   | Fuse Control Trans 38KV1E           | Bussmann          | M393052     | 2     |
|             |   | Motor Spring Charging               | Siemens           | M394520     | 2     |
|             |   | Relay Lock Out                      | Electroswitch     | M395946     | 1     |
|             |   | Contacts Primary 38KV               |                   | M392426     | 0     |
|             |   | Relay Over Current Time             | Bazzler           | M395937     | 0     |
|             |   | Coil Closing 38KV                   |                   | M392256     | 2     |
|             |   | Coil Trip 38KV Vacuum               |                   | M392262     | 2     |
|             | A   | Motor Spring Charging 38KV          |                   | M394522     | 2     |
|             | Citize .  | Bottles Vacuum 38KV                 | Siemens           | M390804     | 2     |
|             |   | Volt Meter AC 0-43KV                |                   | M399115     | 0     |
|             | and the second se | AMP Meter AC 0-50A                  |                   | M390184     | 1     |
| l           |   | Contacts Secondary 38KV CI          |                   | M392425     | 2     |
| Rectifier   |   | Rec                                 | ctifier (Impulse) |             |       |
|             |   | COMPONENT                           | MANUFACTURER      | PART NUMBER | COUNT |
|             |   | Relay Lock Out                      | Electroswitch     | M395946     | 1     |
|             |   | Fuse Current Limiting AC 6A 600V    |                   | M393007     | 2     |
|             |   | Relay Under Volt/Phase Sequence     | ABB               | M395970     | 1     |
|             |   | Fuse Control Trans 38KV1E           | Bussmann          | M393052     | 2     |
|             |   | Motor Spring Charging               | Siemens           | M394520     | 2     |
|             |   | Relay Lock Out                      | Electroswitch     | M395946     | 1     |
|             |   | Contacts Primary 38KV               |                   | M392426     | 0     |
|             |   | Relay Over Current Time             | Bazzler           | M395937     | 0     |
|             |   | Coil Closing 38KV                   |                   | M392256     | 2     |
|             |   | Coil Trip 38KV Vacuum               |                   | M392262     | 2     |
|             |   | Motor Spring Charging 38KV          |                   | M394522     | 2     |
|             |   | Bottles Vacuum 38KV                 | Siemens           | M390804     | 2     |
|             |   | Volt Meter AC 0-43KV                |                   | M399115     | 0     |
|             | 1923 (000) 2100   | AMP Meter AC 0-50A                  |                   | M390184     | 1     |

| Sub-Station | : IL #2-6 Asset Inventory  |  |                      |                            |       |
|-------------|--|--|----------------------|----------------------------|-------|
| ltem        | Image  | Inventory                              |                      |                            |       |
| DC          |  | COMPONENT<br>Control Belay             | MANUFACTURER         | PART NUMBER                | COUNT |
| Breaker     | in most carrier  | Relay Timing                           | Agastats             | M395962/M395963<br>M395952 | 3     |
|             |  | fuses                                  |                      |                            |       |
|             |  | Bolt Meter                             |                      |                            |       |
|             |  | Contactor Main Fixed                   | Impulse              | M392350                    | 4     |
|             |  | Relay control                          | MSD inc              | M395921                    | 1     |
|             |  | Relay Aux.                             | MSD inc              | M395910                    | 1     |
|             |  | Limiter Multiplier/ Voltage            | Crompton             | M394250                    | 1     |
|             |  | Indicator Assembly                     |                      | M393690                    | 1 ea. |
|             |  | Nut Hex 1/2 by 13 Silicon Bronze       |                      |                            | 50    |
|             |  | Bellow Assembly                        | ABB*                 | M390660                    | 1 ea. |
|             |  | Contact Arcing Fix DC Circuit          | Impulse              | M392274                    | 3     |
|             | A THREE PARTY AND A THREE PART | DC Breaker Lamp Indicator Red          | ·                    | M394110                    | 0     |
|             | Statistics and statistics and statistics and statistics  | Lamp LED 9M White                      |                      | M394112                    | 0     |
|             | P  | Lamp LED 9M Green                      |                      | M394114                    | 0     |
|             |  | Lens Blue                              |                      | M394150                    | 10    |
|             |  | Lens Clear LED                         |                      | M394152                    | 9     |
|             |  | Lens Green LED                         |                      | M394154                    | 10    |
|             |  | Lens Red LED                           |                      | M394156                    | 8     |
|             |  | Bulb 28V                               | Miniture Light Bulbs | M391055                    | 9     |
|             |  | Reclosure Auto HV                      |                      | M395452                    | 1     |
|             |  | Enclosure Relay 82/83                  |                      | M392590                    | 1     |
|             |  | Resistor Load Measuring                |                      | M396150                    | 0     |
|             |  | Contact Arcing Moving DC               |                      | M392276                    | 3     |
|             |  | Contacts Secondary 38KV CI             |                      | M392425                    | 2     |
|             |  | Enclosure Relay Type 76                |                      | M392588                    | 2     |
|             |  | Motor Spring Charging                  |                      | M394524                    | 10    |
|             |  | Volt Meter DC                          |                      | M399120                    | 1     |
|             |  | Volt Meter 1000VDC                     |                      | M399127                    | 2     |
|             |  | Amp Meter Pluse/Minus                  | Caronptom            | M390195                    | 1     |
|             |  | Amp Meter DC Switch Board              | Caronptom            | M390197                    | 1     |
|             |  | Relay High Voltage Part of 27th Device | Impulse              | M395972                    | 2     |
|             |  | Relay Low Voltage Part of 27th Device  | Impulse              | M395973                    | 2     |
|             |  | Relay Over Current DC Type 76          |                      | C395952                    | 0     |
|             |  | Coil Trip For DC Breaker               | Ansaldo              | M392264                    | 10    |
|             |  | Relay Control 110V                     |                      | M395926                    | 0     |
|             |  | Contactor Aux. A                       |                      | M392284                    | 3     |
|             |  | Contactor Aux. B                       |                      | M392286                    | 3     |
|             |  | Relay Reclosing DC Type 82             |                      | C395955                    | 0     |

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| Sub-Station:  | : IL #2-6 Asset Inventory |   |  |                                   |                                      |                        |
|---------------|---------------------------|---|--|-----------------------------------|--------------------------------------|------------------------|
| ltem          | Image                     | Inventory   |  |                                   |                                      |                        |
| House         |                           | н   | louse Walls                                  |                                   |                                      | 1                      |
| Walls         |                           | COMPONENT   | MANUFACTURER                                 | PART NUMBER                       | COUNT                                |                        |
| vvalis        |                           | Brk Test Box  |  |                                   |                                      |                        |
|               |                           | A.P.T.  |  |                                   |                                      |                        |
|               | 10 10                     | A.P.T Sec   |  |                                   |                                      | -                      |
|               |                           | Thermostat  | Dayton                                       |                                   |                                      |                        |
|               |                           | 100amp hours Batteries  | Exide  |                                   | 19                                   |                        |
|               |                           | 15amp Charger*  | Exide  | M391935                           | 1                                    |                        |
|               |                           | Wall Fan  | NuTone                                       |                                   | 1                                    |                        |
|               |                           | Fan battery Exhaust Wall Mount  |  | M392840                           | 1                                    |                        |
|               |                           | Board Aux. Relay  | Circuit Assembly                             | M390765                           | 2                                    |                        |
|               |                           | Board Main Control Battery Charger  | AT10   | M390775                           | 0                                    |                        |
|               |                           |   |  |                                   |                                      |                        |
| M.O.D.        |                           |   | M.O.D. 89C                                   |                                   |                                      |                        |
| M.O.D.        |                           | COMPONENT   | M.O.D. 89C<br>MANUFACTU                      | RER PART                          | NUMBER                               | COUNT                  |
| M.O.D.<br>89C |                           | COMPONENT<br>switch breaker   | M.O.D. 89C<br>MANUFACTU                      | RER PART                          | <b>NUMBER</b><br>398001              | COUNT<br>1             |
| M.O.D.<br>89C |                           | COMPONENT<br>switch breaker<br>Operator Motor Positive Disconnect                                   | M.O.D. 89C<br>MANUFACTU<br>NMC Positive Powe | RER PART<br>M<br>er Switch M      | <b>NUMBER</b><br>398001<br>394802    | <b>COUNT</b><br>1<br>1 |
| M.O.D.<br>89C |                           | COMPONENT<br>switch breaker<br>Operator Motor Positive Disconnect<br>actuator                       | M.O.D. 89C<br>MANUFACTU<br>NMC Positive Powe | RER PART<br>M<br>er Switch M      | <b>NUMBER</b><br>398001<br>394802    | <b>COUNT</b> 1 1       |
| M.O.D.<br>89C |                           | COMPONENT<br>switch breaker<br>Operator Motor Positive Disconnect<br>actuator<br>Relay Control 110V | M.O.D. 89C<br>MANUFACTU<br>NMC Positive Powe | RER PART<br>M<br>er Switch M<br>M | NUMBER<br>398001<br>394802<br>395926 | COUNT<br>1<br>1<br>0   |

#### Sub-Station: IL #7-14



2209 Dutch Hollow Road, Belleville, IL 62223

| Sub-Station: IL # | 7-14 Asset Inventory |                                  |                    |             |       |
|-------------------|----------------------|----------------------------------|--------------------|-------------|-------|
| ltem              | Image                | Inventory                        |                    |             |       |
| AC Breaker        |                      | AC High Voltage B                | Breaker Siemens M3 | 91035 (1)   |       |
|                   |                      | COMPONENT                        | MANUFACTURER       | PART NUMBER | COUNT |
|                   |                      | Fuse Current Limiting AC 6A 600V |                    | M393007     | 2     |
|                   |                      | Relay Under Volt/Phase Sequence  | ABB                | M395970     | 1     |
|                   |                      | Fuse Control Trans 38KV1E        | Bussmann           | M393052     | 2     |
|                   |                      | Motor Spring Charging            | Siemens            | M394520     | 2     |
|                   |                      | Relay Lock Out                   | Electroswitch      | M395946     | 1     |
|                   |                      | Contacts Primary 38KV            |                    | M392426     | 0     |
|                   | - 97                 | Relay Over Current Time          | Bazzler            | M395937     | 0     |
|                   |                      | Coil Closing 38KV                |                    | M392256     | 2     |
|                   |                      | Coil Trip 38KV Vaccum            |                    | M392262     | 2     |
|                   |                      | Motor Spring Charging 38KV       |                    | M394522     | 2     |
|                   |                      | Bottles Vaccum 38KV              | Siemens            | M390804     | 2     |
|                   |                      | Volt Meter AC 0-43KV             |                    | M399115     | 0     |
|                   |                      | AMP Meter AC 0-50A               |                    | M390184     | 1     |
|                   |                      | Contacts Secondary 38KV CI       |                    | M392425     | 2     |
| Rectifier         |                      | Rec                              | tifier (Impulse)   |             |       |
|                   | 51                   | COMPONENT                        | MANUFACTURER       | PART NUMBER | COUNT |
|                   | - 3                  | Fuse Current Limiting AC 6A 600V |                    | M393007     | 2     |
|                   |                      | Fuse 20A 600V                    |                    |             | 10    |
|                   |                      | Fuse AC 3A 600V                  |                    |             | 0     |
|                   |                      | Fuse 10A 600V                    |                    |             | 2     |
|                   |                      | Protection Thermal 110C          | Thermik            | M395372     | 22    |
|                   | THE REAL PROPERTY OF | Protection Thermal 120C          | Thermik            | M395374     | 26    |
|                   |                      | Sensor Hall Effect               |                    | M397060     | 1     |
|                   |                      | AMP Meter DC                     | Simpson            | M390196     | 2     |
|                   |                      | Reclosure Auto                   |                    | M395450     | 0     |
|                   |                      | Relay Lock Out                   | Electroswitch      | M395946     | 1     |
|                   |                      |                                  |                    |             |       |

| Sub-Station: IL | . #7-14 Asset Inven | itory  |  |                          |                 |       |
|-----------------|---------------------|--------|--|--------------------------|-----------------|-------|
| ltem            | Image               |        | Inventory                              |                          |                 |       |
| DC Breaker      | INSIDE              |        | COMPONENT                              | MANUFACTURER             | PART NUMBER     | COUNT |
| Debreaker       | EGATING             |        | Control Relay                          |                          |                 |       |
|                 | RAINAGE             | Real P | Relay Timing                           | Agastats                 | M395962/M395963 | 3     |
|                 | MOC                 |        | over current relay type 76             | schwartz engineering smc | M395952         | 2     |
|                 |                     | 2020   | fuses                                  |                          |                 |       |
|                 |                     |        | load measuring devices                 |                          |                 |       |
|                 |                     |        | Bolt Meter                             |                          |                 |       |
|                 |                     |        | Contactor Main Fixed                   | Impulse                  | M392350         | 4     |
|                 |                     |        | Relay control                          | MSD inc                  | M395921         | 1     |
|                 |                     |        | Relay Aux.                             | MSD inc                  | M395910         | 1     |
|                 | EGATIXE.            |        | Limiter Mulitplier/ Voltage            | Crompton                 | M394250         | 1     |
|                 | SCONXE              |        | Indicator Assmebly                     |                          | M393690         | 1 ea. |
|                 | SWITTE              |        | Nut Hex 1/2 by 13 Silicon Bronze       |                          |                 | 50    |
|                 | A CONTRACTOR        |        | Bellow Assembly                        | ABB*                     | M390660         | 1 ea. |
|                 |                     | 17/    | Contact Arcing Fix DC Circuit          | Impulse                  | M392274         | 3     |
|                 |                     |        | DC Breaker Lamp Indicator Red          |                          | M394110         | 0     |
|                 |                     |        | Lamp LED 9M White                      |                          | M394112         | 0     |
|                 |                     | 151    | Lamp LED 9M Green                      |                          | M394114         | 0     |
|                 |                     |        | Lens Blue                              |                          | M394150         | 10    |
|                 |                     |        | Lens Clear LED                         |                          | M394152         | 9     |
|                 |                     |        | Lens Green LED                         |                          | M394154         | 10    |
|                 |                     |        | Lens Red LED                           |                          | M394156         | 8     |
|                 |                     |        | Bulb 28V                               | Miniture Light Bulbs     | M391055         | 9     |
|                 |                     |        | Reclosure Auto HV                      |                          | M395452         | 1     |
|                 |                     |        | Enclosure Relay 82/83                  |                          | M392590         | 1     |
|                 |                     |        | Resistor Load Measuring                |                          | M396150         | 0     |
|                 |                     |        | Contact Arcing Moving DC               |                          | M392276         | 3     |
|                 |                     |        | Contacts Secondary 38KV Cl             |                          | M392425         | 2     |
|                 |                     |        | Enclosure Relay Type 76                |                          | M392588         | 2     |
|                 |                     |        | Motor Spring Charging                  |                          | M394524         | 10    |
|                 |                     |        | Volt Meter DC                          |                          | M399120         | 1     |
|                 |                     |        | Volt Meter 1000VDC                     |                          | M399127         | 2     |
|                 |                     |        | Amp Meter Pluse/Minus                  | Caronptom                | M390195         | 1     |
|                 |                     |        | Amp Meter DC Switch Board              | Caronptom                | M390197         | 1     |
|                 |                     |        | Relay High Voltage Part of 27th Device | Impulse                  | M395972         | 2     |
|                 |                     |        | Relay Low Voltage Part of 27th Device  | Impulse                  | M395973         | 2     |
|                 |                     |        | Coil Trip For DC Prochar               | Anacida                  | L395952         | 0     |
|                 |                     |        | Coll Trip For DC Breaker               | Ansaldo                  | IVI392264       | 10    |
|                 |                     |        | Contactor Arm A                        |                          | IVI395926       | 0     |
|                 |                     |        | Contactor Aux. A                       |                          | IVI392284       | 5     |
|                 |                     |        | Contactor Aux. B                       |                          | MI39228b        | 3     |
|                 | 1                   |        | Relay Reclosing DC Type 82             |                          | C395955         | 0     |

| Sub-Station: IL # | 7-14 Asset Inventory  |                                   |                  |             |             |       |
|-------------------|---|-----------------------------------|------------------|-------------|-------------|-------|
| ltem              | Image   | Inventory                         |                  |             |             |       |
| House Walls       |   |                                   | House Walls      |             |             |       |
| House Walls       |   | COMPONENT                         | MANUFACTURER     | PART NUMB   | ER COUNT    |       |
|                   |   | Brk Test Box                      |                  |             |             |       |
|                   |   | A.P.T.                            |                  |             |             |       |
|                   |   | A.P.T Sec                         |                  |             |             |       |
|                   |   | Thermostat                        | Dayton           |             |             |       |
|                   |   | 100amp hours Batteries            | Exide            |             | 19          |       |
|                   |   | 15amp Charger*                    | Exide            | M391935     | 1           |       |
|                   |   | Wall Fan                          | NuTone           |             | 1           |       |
|                   |   | Fan battery Exhaust Wall Mount    |                  | M392840     | 1           |       |
|                   |   |                                   |                  |             |             |       |
| M.O.D. 89C        |   | M.O.D. 89C                        |                  |             |             |       |
|                   |   | COMPONENT                         | MANUFAG          | TURER       | PART NUMBER | COUNT |
|                   |   | switch breaker                    |                  | <b>c</b>    | M398001     | 1     |
|                   |   | Operator Motor Positive Disconnec | t NMC Positive P | ower Switch | M394802     | 1     |
|                   |   | Actuator<br>Relay Control 110V    |                  |             | MODEODE     | 0     |
|                   | The second se |                                   |                  |             | 101595920   | 0     |
|                   |   |                                   |                  |             |             |       |

#### Sub-Station: MO #1



| 13.8 KV<br>WLT Switch | Rectifier<br>Transformer |
|-----------------------|--------------------------|
|                       |                          |

| Sub-Stati | on: MO #1 Asset Inventory |                          |                    |             |       |  |
|-----------|---------------------------|--------------------------|--------------------|-------------|-------|--|
| Item      | Image                     | Inventory                |                    |             |       |  |
| AC        |                           | AC                       | Lower Voltage Brea | ker         |       |  |
| Breaker   |                           | COMPONENT                | MANUFACTURER       | PART NUMBER | COUNT |  |
|           |                           | Over Current Relays      | Westinghouse       | C395961     | 4     |  |
|           | A STANCE                  | Static Trip (rms-ts-tz)  | Siemens            | C398755     | 2     |  |
|           |                           | Motors                   |                    |             |       |  |
|           |                           | Actuators                |                    |             |       |  |
|           |                           | 27DC Control Power Belay | Agostat            |             |       |  |
|           | THE REAL OF               | 27De control rower heldy | Agostat            |             |       |  |
|           |                           |                          |                    |             |       |  |

|  | A | Ρ | Ρ | E | Ν | D | IX | А |
|--|---|---|---|---|---|---|----|---|
|--|---|---|---|---|---|---|----|---|

| Sub-Station: MO #1 Asset Inventory |        |                                 |                   |             |       |  |  |  |  |
|------------------------------------|--------|---------------------------------|-------------------|-------------|-------|--|--|--|--|
| ltem                               | Image  | Inventory                       |                   |             |       |  |  |  |  |
| Rectifier                          |        |                                 | Rectifier (ABB)   |             |       |  |  |  |  |
|                                    |        | COMPONENT                       | MANUFACTURER      | PART NUMBER | COUNT |  |  |  |  |
|                                    |        | Diode Fuse 700V/ 1400A          | Ferraz            | M393023     | 36    |  |  |  |  |
|                                    |        | Diode Heat sink                 |                   | M393525     |       |  |  |  |  |
|                                    |        | fuses                           |                   |             |       |  |  |  |  |
|                                    |        | switch                          |                   |             |       |  |  |  |  |
|                                    |        | transducers DC                  | Compton           | CM398655    | 1     |  |  |  |  |
|                                    |        | transistors (cap)               |                   |             |       |  |  |  |  |
|                                    |        | fluorescent light               |                   |             |       |  |  |  |  |
|                                    |        | filters                         |                   |             |       |  |  |  |  |
|                                    |        | Enunciator                      |                   |             |       |  |  |  |  |
|                                    |        | 64 relay                        |                   |             |       |  |  |  |  |
|                                    |        | relay ground protective         | ABB               | C395935     | 1     |  |  |  |  |
|                                    |        | hot enclosure                   | ABB               |             |       |  |  |  |  |
|                                    | Land 1 | reverse current relay           | ABB               |             |       |  |  |  |  |
|                                    |        | lock out relay                  | Electro switch    |             | 2     |  |  |  |  |
|                                    |        | solenoid closing coil           |                   | M397360     |       |  |  |  |  |
|                                    |        | relay time delay                | Agastat           | M395956     | 1     |  |  |  |  |
|                                    |        | resisitor 5K ohm                | Ohmite            | M396101     | 4     |  |  |  |  |
|                                    |        | Relay control                   | MSD inc           | M395921     | 1     |  |  |  |  |
|                                    |        | Relay Aux.                      | MSD inc           | M395910     | 1     |  |  |  |  |
|                                    |        | Relay Aux / Lockout 86X         | MSD inc           | M395911     | 1     |  |  |  |  |
|                                    |        | Relay control 120V              | MSD inc           | M395920     | 1     |  |  |  |  |
|                                    |        | Contactor DC 240V 3 pole        | ABB               | M392340     | 1     |  |  |  |  |
|                                    |        | Clamp Tri-Start 5000 Assembly   | ABB               | M392020     | 36    |  |  |  |  |
|                                    |        | Fuse SND 62C 65A 34.5KB         | SEC               | M393028     | 3     |  |  |  |  |
|                                    |        | Card Flasher Audible Enunciator | Ameritech         | M391771     | 20    |  |  |  |  |
|                                    |        | Card Single point sequence      | Ameritech         | M391781     | 30    |  |  |  |  |
|                                    |        | Diode 1830am 2500V CCTR         | ABB* or Westcode* | M392500     | 24    |  |  |  |  |

| Sub-Station: MO #1 Asset Inventory |  |                               |                      |             |         |       |  |
|------------------------------------|--|-------------------------------|----------------------|-------------|---------|-------|--|
| Item                               | Image  | Inventory                     |                      |             |         |       |  |
| DC                                 |  | DC Breaker                    |                      |             |         |       |  |
| Breaker                            |  | COMPONENT MANUFACTURER        |                      | PART NU     | MBER    | COUNT |  |
|                                    |  | Control Relay                 |                      |             |         |       |  |
|                                    |  | Relay Timing                  | Agastats             | M395962/M   | 1395963 | 3     |  |
|                                    |  |                               | Schwartz engineering | Ig          |         |       |  |
|                                    |  | over current relay type 76    | smc                  | M3959       | 52      | 2     |  |
|                                    |  | fuses                         |                      |             |         |       |  |
|                                    |  | load measuring devices        |                      |             |         |       |  |
|                                    |  | Bolt Meter                    |                      |             |         |       |  |
|                                    |  | Relay control                 | MSD inc              | M3959       | 21      | 1     |  |
|                                    |  | Relay Aux.                    | MSD inc              | M3959       | 10      | 1     |  |
|                                    |  | Limiter Multiplier/ Voltage   | Crompton             | M3942       | 50      | 1     |  |
|                                    |  | Indicator Assembly            |                      | M3936       | 90      | 1 ea. |  |
|                                    | the second se  | Nut Hex 1/2 by 13 Silicon     |                      |             |         |       |  |
|                                    |  | Bronze                        |                      |             |         | 50    |  |
|                                    |  | Bellow Assembly               | ABB*                 | M3906       | 60      | 1 ea. |  |
|                                    |  |                               |                      |             |         | 1     |  |
| House                              |  |                               | House Walls          |             |         |       |  |
| Sides                              |  | COMPONENT                     | MANUFACTURER         | PART NUMBER | COUNT   |       |  |
|                                    |  | Brk Test Box                  |                      |             |         |       |  |
|                                    |  |                               |                      |             |         |       |  |
|                                    |  | Thermostat                    | Davton               |             |         |       |  |
|                                    | Contraction of the second of t | 100amp hours Batteries        | Exide                |             | 19      |       |  |
|                                    |  | 15amp Charger*                | Exide                | M391935     | 1       |       |  |
|                                    |  | Wall Fan                      | NuTone               |             | 1       |       |  |
|                                    |  | Fan battery Exhaust Wall Moun | t                    | M392840     | 1       | ]     |  |
|                                    |  |                               |                      |             |         |       |  |

| Sub-Stati | on: MO #1 Asset Inventory             |                |              |             |       |
|-----------|---------------------------------------|----------------|--------------|-------------|-------|
| Item      | Image                                 | Inventory      |              |             |       |
| M.O.D.    |                                       |                | M.O.D. 89    | с           |       |
| 890       |                                       | COMPONENT      | MANUFACTURER | PART NUMBER | COUNT |
|           |                                       | switch breaker |              | M398001     | 1     |
|           | S S S S S S S S S S S S S S S S S S S | fuses          |              |             |       |
|           |                                       | actuator       |              |             |       |
|           |                                       |                |              |             |       |

#### Sub-Station: M0 #3



#### 326 S. 21st Street St. Louis, MO 63103

| Sub-Statio | Sub-Station: MO #3 Asset Inventory |                          |                         |             |       |  |  |  |  |  |  |
|------------|------------------------------------|--------------------------|-------------------------|-------------|-------|--|--|--|--|--|--|
| Item       | Image                              | Inventory                |                         |             |       |  |  |  |  |  |  |
| AC         | UNITAL<br>FTS AD AT 1986           |                          | AC High Voltage Breaker |             |       |  |  |  |  |  |  |
| Breaker    |                                    | COMPONENT                | MANUFACTURER            | PART NUMBER | COUNT |  |  |  |  |  |  |
|            |                                    | Fuse                     | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Control Fuse             | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Power Fuse               | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Dummy Fuse               | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Semiconductor Fuse       | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Curve                    |                         |             |       |  |  |  |  |  |  |
|            |                                    | Fuse Operation Indicator | Bussmann                |             |       |  |  |  |  |  |  |
|            |                                    | Current Limiting Fuse    | General Electric        |             |       |  |  |  |  |  |  |
|            | -                                  | Curves                   |                         |             |       |  |  |  |  |  |  |
|            |                                    | Fuse                     | Ferraz                  |             |       |  |  |  |  |  |  |
|            |                                    | Current Limiting Fuse    | Ferraz                  |             |       |  |  |  |  |  |  |

| Sub-Statio | ub-Station: MO #3 Asset Inventory |                          |                                |             |       |  |  |  |  |
|------------|-----------------------------------|--------------------------|--------------------------------|-------------|-------|--|--|--|--|
| ltem       | Image                             | Inventory                | nventory                       |             |       |  |  |  |  |
| Rectifier  |                                   |                          | Rectifier (Controlled Power)   | -           |       |  |  |  |  |
|            |                                   | COMPONENT                | MANUFACTURER                   | PART NUMBER | COUNT |  |  |  |  |
|            |                                   | Surge Arrester           | Ohio Brass                     |             |       |  |  |  |  |
|            | Santan Santan San e               | Surge Arrester           | Swartz (SMC)                   |             |       |  |  |  |  |
|            |                                   | Diode Fuse Monitor       | VG Controls                    |             |       |  |  |  |  |
|            |                                   | Silicon Rectifier Diode  | Dynex Semiconductor            |             |       |  |  |  |  |
|            |                                   | Diode                    | Fagor                          |             |       |  |  |  |  |
|            |                                   | Diode                    | International Rectifier        |             |       |  |  |  |  |
|            |                                   | Silicon Rectifier Diode  | Microsemi Corp.                |             |       |  |  |  |  |
|            |                                   | Zener Diode              | Motorola                       |             |       |  |  |  |  |
|            |                                   | Diode Clamp              | lconopower                     |             |       |  |  |  |  |
|            |                                   | Load Measuring Resistor  | Telema, Byrne & Schaefer, Inc. |             |       |  |  |  |  |
|            |                                   | Resistor                 | Ohmite                         |             |       |  |  |  |  |
|            |                                   | Mounting Feet            |                                |             |       |  |  |  |  |
|            |                                   | Resistor                 | Huntington                     |             |       |  |  |  |  |
|            |                                   | Mounting Feet            |                                |             |       |  |  |  |  |
|            |                                   | Metal Oxide Varistor     | Harris (Little fuse)           |             |       |  |  |  |  |
|            |                                   | Fuse                     | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Control Fuse             | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Power Fuse               | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Dummy Fuse               | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Semiconductor Fuse       | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Curve                    |                                |             |       |  |  |  |  |
|            |                                   | Fuse Operation Indicator | Bussmann                       |             |       |  |  |  |  |
|            |                                   | Current Limiting Fuse    | General Electric               |             |       |  |  |  |  |
|            |                                   | Curves                   |                                |             |       |  |  |  |  |
|            |                                   | Fuse                     | Ferraz                         |             |       |  |  |  |  |
|            |                                   | Current Limiting Fuse    | Ferraz                         |             |       |  |  |  |  |

FEDERAL TRANSIT ADMINISTRATION 90

| Inventory  |   |  |  |
|--|---|--|--|
|  |   |  |  |
| Molded Case Circuit BreakerCurveGround ProvisionKey Interlock MountingKey Interlock MountingCurrent TransformerVoltage TransformerControl Power TransformerInterphase TransformerDC Current TransducerDC Current TransducerDC Current TransducerUndervoltage RelayTiming RelayRelay Extender BoardUndervoltage RelayDC Voltage RelayStructure Ground RelayStructure Ground RelayFuseControl Fuse | MANUFACTURER<br>Cutler-Hammer<br>ABB<br>ITI<br>Sadtem<br>Magnetic Technologies<br>Magnetic Technologies<br>Swartz (SMC)<br>Swartz (SMC)<br>Scientific Columbus<br>ABB<br>Agastat<br>Basler<br>E-Max<br>Electroswitch<br>PPECO<br>Swartz (SMC)<br>Swartz (SMC)<br>Swartz (SMC)<br>Swartz (SMC)<br>Swartz (SMC)<br>Swartz (SMC)<br>Swartz (SMC)   |  | COUNT  |
| Power Fuse<br>Dummy Fuse<br>Semiconductor Fuse   | Bussmann<br>Bussmann<br>Bussmann  |  |  |
| Curve<br>Fuse Operation Indicator<br>Current Limiting Fuse<br>Curves<br>Fuse   | Bussmann<br>General Electric<br>Ferraz  |  |  |
|  | Ground ProvisionKey Interlock MountingKey InterlockContactorCurrent TransformerVoltage TransformerControl Power TransformerDC Current TransducerDC Current TransducerUndervoltage RelayTiming RelayRelay Extender BoardUndervoltage RelayDC Voltage RelayDC Voltage RelayDC Voltage RelayDC Voltage RelayDC Voltage RelayDC Nultifunctional RelayDC Reverse Current RelayStructure Ground RelayFuseDummy FuseSemiconductor FuseDummy FuseSemiconductor FuseCurveFuse Operation IndicatorCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurvesFuseCurrent Limiting FuseCurrent Limiting FuseCurrent Limiting Fuse | Ground ProvisionKey InterlockContactorABBCurrent TransformerIIIVoltage TransformerMagnetic TechnologiesInterphase TransformerMagnetic TechnologiesDC Current TransducerSwartz (SMC)DC Current TransducerScientific ColumbusUndervoltage RelayABBTiming RelayAgastatRelay Extender BoardUndervoltage RelayElectroswitchDC Voltage RelayElectroswitchDC Multifunctional RelayPECODC Reverse Current RelaySwartz (SMC)Structure Ground RelaySusmannDummy FuseBussmannCurrent Limiting FuseGeneral ElectricCurrent Limiting FuseFuseFuseFuseFerrazCurrent Limiting FuseFerrazCurrent Limiting FuseFerraz | With the Housian in |

| Sub-Station: MO #3 Asset Inventory |                           |                                 |              |             |       |  |  |  |  |
|------------------------------------|---------------------------|---------------------------------|--------------|-------------|-------|--|--|--|--|
| ltem                               | Image                     | Inventory                       |              |             |       |  |  |  |  |
| House                              |                           |                                 | House Walls  |             |       |  |  |  |  |
| Walls                              | 9                         | COMPONENT                       | MANUFACTURER | PART NUMBER | COUNT |  |  |  |  |
|                                    |                           | Battery Assembly                | GNB          |             |       |  |  |  |  |
|                                    |                           | MSDS                            |              |             |       |  |  |  |  |
|                                    |                           | MSDS                            |              |             |       |  |  |  |  |
|                                    |                           | Battery Charger                 | Hindle Power |             |       |  |  |  |  |
|                                    |                           | Errata Sheet-Rectifier Assembly |              |             |       |  |  |  |  |
|                                    |                           | Auxiliary Relay Alarm Card      |              |             |       |  |  |  |  |
|                                    |                           | Temperature Probe               |              |             |       |  |  |  |  |
|                                    | Contraction of the second | Temp. Compensation Field Instr. |              |             |       |  |  |  |  |

| Sub-Statio | Sub-Station: MO #3 Asset Inventory   |   |                      |             |       |  |  |  |
|------------|--|---|----------------------|-------------|-------|--|--|--|
| ltem       | Image  | Inventory   |                      |             |       |  |  |  |
| M.O.D.     |  | M.O.D. 89C  |                      |             |       |  |  |  |
| 89C        |  | COMPONENT   | MANUFACTURER         | PART NUMBER | COUNT |  |  |  |
|            |  | Load Interrupter Switch                                 | Cutler-Hammer        |             |       |  |  |  |
|            | - I - the state  | Bolted Pressure Switch                                  | Filnor               |             |       |  |  |  |
|            |  | Disconnect Switch                                       | Filnor               |             |       |  |  |  |
|            |  | Gear Motor Drive  | Filnor (Bison Gear)  |             |       |  |  |  |
|            |  | Safety Switch   | General Electric     |             |       |  |  |  |
|            |  | Breaker Control, Selector, Ammeter & Voltmeter Switches | ITI                  |             |       |  |  |  |
|            | and a state of the | Test Switch & Test Plug                                 | ITI                  |             |       |  |  |  |
|            |  | Limit Switch  | Square D             |             |       |  |  |  |
|            |  | Limit Switch  | Siemens              |             |       |  |  |  |
|            |  | Toggle Switch   | Hubbell              |             |       |  |  |  |
|            |  | Pushbutton  | Cutler-Hammer        |             |       |  |  |  |
|            |  | Contact Block   |                      |             |       |  |  |  |
|            |  | Shroud  |                      |             |       |  |  |  |
|            |  | Enclosure & Cover                                       |                      |             |       |  |  |  |
|            |  | Indicating Light  | General Electric     |             |       |  |  |  |
|            |  | Lead/Lag Controller                                     | Eubank Manufacturing |             |       |  |  |  |
|            |  | Strip Heater  | Heatrex              |             |       |  |  |  |
|            |  | Strip Heater  | Watlow               |             |       |  |  |  |
|            |  | Thermostat  | Dayton               |             |       |  |  |  |
|            |  | Thermostat  | Therm-O-Disc         |             |       |  |  |  |
|            |  | Exhaust Fan   | Broan/Nutone         |             |       |  |  |  |

#### Sub-Station: MO #21-15



#### 7201 Lansdowne Avenue, St. Louis, MO 63119

| Sub-Station: MO #21-25 Asset Inventory |                       |                          |                  |             |       |  |
|--|-----------------------|--------------------------|------------------|-------------|-------|--|
| ltem                                   | Image                 | Inventory                |                  |             |       |  |
| AC                                     | UII/I<br>PTS-R2-M1286 | AC High Voltage Breaker  |                  |             |       |  |
| Breaker                                |                       | COMPONENT                | MANUFACTURER     | PART NUMBER | COUNT |  |
|  |                       | Fuse                     | Bussmann         |             |       |  |
|  |                       | Control Fuse             | Bussmann         |             |       |  |
|  |                       | Power Fuse               | Bussmann         |             |       |  |
|  |                       | Dummy Fuse               | Bussmann         |             |       |  |
|  |                       | Semiconductor Fuse       | Bussmann         |             |       |  |
|  |                       | Curve                    |                  |             |       |  |
|  |                       | Fuse Operation Indicator | Bussmann         |             |       |  |
|  |                       | Current Limiting Fuse    | General Electric |             |       |  |
|  |                       | Curves                   |                  |             |       |  |
|  |                       | Fuse                     | Ferraz           |             |       |  |
|  |                       | Current Limiting Fuse    | Ferraz           |             |       |  |

| Sub-Station: MO #21-25 Asset Inventory |  |                              |                                |             |       |  |
|--|--|------------------------------|--------------------------------|-------------|-------|--|
| ltem                                   | Image  | Inventory                    |                                |             |       |  |
| Rectifier                              |  | Rectifier (Controlled Power) |                                |             |       |  |
|  |  | COMPONENT                    | MANUFACTURER                   | PART NUMBER | COUNT |  |
|  |  | Surge Arrester               | Ohio Brass                     |             |       |  |
|  |  | Surge Arrester               | Swartz (SMC)                   |             |       |  |
|  | A HERE AND THE REAL AND THE REA | Diode Fuse Monitor           | VG Controls                    |             |       |  |
|  |  | Silicon Rectifier Diode      | Dynex Semiconductor            |             |       |  |
|  |  | Diode                        | Fagor                          |             |       |  |
|  |  | Diode                        | International Rectifier        |             |       |  |
| Rectifier                              |  | Silicon Rectifier Diode      | Microsemi Corp.                |             |       |  |
|  |  | Zener Diode                  | Motorola                       |             |       |  |
|  |  | Diode Clamp                  | Iconopower                     |             |       |  |
|  |  | Load Measuring Resistor      | Telema, Byrne & Schaefer, Inc. |             |       |  |
|  |  | Resistor                     | Ohmite                         |             |       |  |
|  |  | Mounting Feet                |                                |             |       |  |
|  |  | Resistor                     | Huntington                     |             |       |  |
|  |  | Mounting Feet                |                                |             |       |  |
|  |  | Metal Oxide Varistor         | Harris (Little fuse)           |             |       |  |
|  |  | Fuse                         | Bussmann                       |             |       |  |
|  |  | Control Fuse                 | Bussmann                       |             |       |  |
|  |  | Power Fuse                   | Bussmann                       |             |       |  |
|  |  | Dummy Fuse                   | Bussmann                       |             |       |  |
|  |  | Semiconductor Fuse           | Bussmann                       |             |       |  |
|  |  | Curve                        |                                |             |       |  |
|  |  | Fuse Operation Indicator     | Bussmann                       |             |       |  |
|  |  | Current Limiting Fuse        | General Electric               |             |       |  |
|  |  | Curves                       |                                |             |       |  |
|  |  | Fuse                         | Ferraz                         |             |       |  |
|  |  | Current Limiting Fuse        | Ferraz                         |             |       |  |

| Sub-Station: MO #21-25 Asset Inventory |   |                             |                       |             |       |
|--|---|-----------------------------|-----------------------|-------------|-------|
| ltem                                   | Image   | Inventory                   |                       |             |       |
| DC                                     |   | COMPONENT                   | MANUFACTURER          | PART NUMBER | COUNT |
| Breaker                                | FEILER FEEDER   | Molded Case Circuit Breaker | Cutler-Hammer         |             |       |
|  | UNT FY  | Curve                       |                       |             |       |
|  |   | Ground Provision            |                       |             |       |
|  |   | Key Interlock Mounting      |                       |             |       |
|  |   | Key Interlock               |                       |             |       |
|  |   | Contactor                   | ABB                   |             |       |
|  |   | Current Transformer         | ITI                   |             |       |
|  |   | Voltage Transformer         | Sadtem                |             |       |
|  |   | Control Power Transformer   | Magnetic Technologies |             |       |
|  | the second se | Interphase Transformer      | Magnetic Technologies |             |       |
|  |   | DC Current Transducer       | Swartz (SMC)          |             |       |
|  | 172-1 DC 172-2 DC   | DC Current Transducer       | Swartz (SMC)          |             |       |
|  | MO-24 TO MO-23 MO-24 TO MO-25 TRACK #1 & 42 EAST TRACK #1 & 42 EAST   | Voltage Transducer          | Scientific Columbus   |             |       |
|  |   | Undervoltage Relay          | ABB                   |             |       |
|  |   | Timing Relay                | Agastat               |             |       |
|  |   | Relay Extender Board        |                       |             |       |
|  | A CONTRACTOR OF AN ADDRESS  | Undervoltage Relay          | Basler                |             |       |
|  |   | DC Voltage Relay            | E-Max                 |             |       |
|  |   | Lockout Relay               | Electroswitch         |             |       |
|  |   | DC Multifunctional Relay    | PPECO                 |             |       |
|  |   | DC Reverse Current Relay    | Swartz (SMC)          |             |       |
|  |   | Structure Ground Relay      | Swartz (SMC)          |             |       |
|  |   | Fuse                        | Bussmann              |             |       |
|  |   | Control Fuse                | Bussmann              |             |       |
|  |   | Power Fuse                  | Bussmann              |             |       |
|  |   | Dummy Fuse                  | Bussmann              |             |       |
|  |   | Semiconductor Fuse          | Bussmann              |             |       |
|  |   | Curve                       |                       |             |       |
|  |   | Fuse Operation Indicator    | Bussmann              |             |       |
|  |   | Current Limiting Fuse       | General Electric      |             |       |
|  |   | Curves                      |                       |             |       |
|  |   | Fuse                        | Ferraz                |             |       |
|  |   | Current Limiting Fuse       | Ferraz                |             |       |

| Sub-Station: MO #21-25 Asset Inventory |       |                                 |              |             |       |  |
|--|-------|---------------------------------|--------------|-------------|-------|--|
| ltem                                   | Image | Inventory                       |              |             |       |  |
| House<br>Walls                         |       | House Walls                     |              |             |       |  |
|  |       | COMPONENT                       | MANUFACTURER | PART NUMBER | COUNT |  |
|  |       | Battery Assembly                | GNB          |             |       |  |
|  |       | MSDS                            |              |             |       |  |
|  |       | MSDS                            |              |             |       |  |
|  |       | Battery Charger                 | Hindle Power |             |       |  |
|  |       | Errata Sheet-Rectifier Assembly |              |             |       |  |
|  |       | Auxiliary Relay Alarm Card      |              |             |       |  |
|  |       | Temperature Probe               |              |             |       |  |
|  |       | Temp. Compensation Field Instr. |              |             |       |  |
| Sub-Statio | Sub-Station: MO #21-25 Asset Inventory |   |                      |             |       |  |  |  |
|------------|--|---|----------------------|-------------|-------|--|--|--|
| ltem       | Image                                  | Inventory   |                      |             |       |  |  |  |
| M.O.D.     |  | M.O.D. 89C  |                      |             |       |  |  |  |
| 89C        |  | COMPONENT   | MANUFACTURER         | PART NUMBER | COUNT |  |  |  |
|            |  | Load Interrupter Switch                                 | Cutler-Hammer        |             |       |  |  |  |
|            |  | Bolted Pressure Switch                                  | Filnor               |             |       |  |  |  |
|            |  | Disconnect Switch                                       | Filnor               |             |       |  |  |  |
|            |  | Gear Motor Drive  | Filnor (Bison Gear)  |             |       |  |  |  |
|            |  | Safety Switch   | General Electric     |             |       |  |  |  |
|            | • • · ·                                | Breaker Control, Selector, Ammeter & Voltmeter Switches | ITI                  |             |       |  |  |  |
|            |  | Test Switch & Test Plug                                 | ITI                  |             |       |  |  |  |
|            |  | Limit Switch  | Square D             |             |       |  |  |  |
|            |  | Limit Switch  | Siemens              |             |       |  |  |  |
|            |  | Toggle Switch   | Hubbell              |             |       |  |  |  |
|            |  | Pushbutton  | Cutler-Hammer        |             |       |  |  |  |
|            |  | Contact Block   |                      |             |       |  |  |  |
|            |  | Shroud  |                      |             |       |  |  |  |
|            |  | Enclosure & Cover                                       |                      |             |       |  |  |  |
|            |  | Indicating Light  | General Electric     |             |       |  |  |  |
|            |  | Lead/Lag Controller                                     | Eubank Manufacturing |             |       |  |  |  |
|            |  | Strip Heater  | Heatrex              |             |       |  |  |  |
|            |  | Strip Heater  | Watlow               |             |       |  |  |  |
|            |  | Thermostat  | Dayton               |             |       |  |  |  |
|            |  | Thermostat  | Therm-O-Disc         |             |       |  |  |  |
|            |  | Exhaust Fan   | Broan/Nutone         |             |       |  |  |  |

# 5<sup>th</sup> and Missouri Signal House



| 5 <sup>th</sup> and Mi | ssouri Signal House Asset Inv | entory   |  |  |   |  |  |  |
|------------------------|-------------------------------|--|--|--|---|--|--|--|
| ltem                   | Image                         | Inventory  | ventory  |  |   |  |  |  |
| Rack 1                 | Rack 1                        |  |  |  |   |  |  |  |
|                        |                               | COMPONENT  | MANUFACTURER   | PART NUMBER  | COUNT   |  |  |  |
|                        |                               | BPL-1  | EPC  |  | 8   |  |  |  |
|                        |                               | BPL-3  | HARMON   | 150-097031-013 REV O   | 1   |  |  |  |
|                        |                               |  |  |  |   |  |  |  |
|                        |                               |  |  |  |   |  |  |  |
| Rack 2                 |                               |  | Rack   | 2  |   |  |  |  |
| Rack 2                 |                               | COMPONENT  | Rack<br>MANUFACTURER   | 2<br>PART NUMBER   | COUNT   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR  | Rack<br>MANUFACTURER<br>Harmon   | 2<br>PART NUMBER<br>MLT-50   | COUNT<br>2  |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay   | Rack<br>MANUFACTURER<br>Harmon<br>GRS  | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01   | COUNT<br>2<br>8   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay  | Rack<br>MANUFACTURER<br>Harmon<br>GRS<br>GRS   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01   | COUNT<br>2<br>8<br>4  |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay   | Rack<br>MANUFACTURER<br>Harmon<br>GRS<br>GRS<br>GRS<br>GRS   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07   | COUNT<br>2<br>8<br>4<br>5   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay   | Rack<br>MANUFACTURER<br>Harmon<br>GRS<br>GRS<br>GRS<br>GRS<br>ALSTOM   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691  | COUNT<br>2<br>8<br>4<br>5<br>2  |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay  | Rack<br>MANUFACTURER<br>Harmon<br>GRS<br>GRS<br>GRS<br>GRS<br>ALSTOM<br>SAFETRAN   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700  | COUNT<br>2<br>8<br>4<br>5<br>2<br>1   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay   | Rack<br>MANUFACTURER<br>Harmon<br>GRS<br>GRS<br>GRS<br>ALSTOM<br>SAFETRAN<br>GRS   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02  | COUNT<br>2<br>8<br>4<br>5<br>2<br>1<br>1<br>2   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay  | RackMANUFACTURERHarmonGRSGRSGRSGRSALSTOMSAFETRANGRSGRSGRSGRS   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01  | COUNT<br>2<br>8<br>4<br>5<br>2<br>1<br>2<br>1<br>2<br>1   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay<br>Vital Relay  | RackMANUFACTURERHarmonGRSGRSGRSGRSALSTOMSAFETRANGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRS                                 | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01<br>A62-247   | COUNT       2       8       4       5       2       1       2   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay   | RackMANUFACTURERHarmonGRSGRSGRSALSTOMSAFETRANGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRSGRS                        | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01<br>A62-247<br>A62-671 56001-974-01   | COUNT       2       8       4       5       2       1       2       1       1       1       1   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay   | RackMANUFACTURERHarmonGRSGRSGRSALSTOMSAFETRANGRS   | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01<br>A62-247<br>A62-671 56001-974-01<br>400023                                   | COUNT   2   8   4   5   2   1   1   1   2   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay | RackMANUFACTURERHarmonGRSGRSGRSGRSALSTOMSAFETRANGRSGRSGRSGRSGRSGRSSAFETRANSAFETRANSAFETRANSAFETRANSAFETRANSAFETRANSAFETRAN | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-432 56001-785-01<br>A62-122 56001-921-07<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01<br>A62-247<br>A62-671 56001-974-01<br>400023<br>400900 | COUNT   2   8   4   5   2   1   2   1   2   1   2   1   1   2   1   1   2   1   |  |  |  |
| Rack 2                 |                               | COMPONENT<br>1X/2X XFMR<br>Vital Relay<br>Vital Relay<br>Relay<br>Rectifier  | RackMANUFACTURERHarmonGRSGRSGRSGRSALSTOMSAFETRANGRSGRSGRSGRSGRSSAFETRANSAFETRANSAFETRANSAFETRANSAFETRANSAFETRAN            | 2<br>PART NUMBER<br>MLT-50<br>A62-429 56001-926-01<br>A62-432 56001-785-01<br>A62-432 56001-785-01<br>A62-691<br>400700<br>A62-407 56001-745-02<br>A62-360 56001-774-01<br>A62-247<br>A62-671 56001-974-01<br>400023<br>400900<br>A53-541              | COUNT     2     8     4     5     2     1     2      1      2 |  |  |  |

| 5 <sup>th</sup> and Mis | ssouri Signal House Asset Invo   | entory                                  |              |                       |       |
|-------------------------|--|---|--------------|-----------------------|-------|
| ltem                    | Image  | Inventory                               |              |                       |       |
| Rack 3                  |  |   | Rack 3       |                       |       |
|                         |  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT |
|                         | PROFESSION AND AND AND AND AND AND AND AND AND AN  | Vital Relay                             | GRS          | A62-122 56001-921-07  | 2     |
|                         | 11 X 11  | Vital Relay                             | SAFETRAN     | 400900                | 2     |
|                         | THE OWNER OF LEVEL   | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |
|                         | STATE DISTORT  | 520 Receiver Module (2970 Feq.)         | EPC          | 150-088019-080 Rev. B | 4     |
|                         |  | 520 Receiver Module (3870 Feq.)         | EPC          | 150-088019-080 Rev. F | 1     |
|                         |  | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |
|                         |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. F | 1     |
|                         |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 8     |
|                         |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4     |
|                         |  | 540 Train Detection Coupler (3870 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
|                         |  | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
|                         |  | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
|                         |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
| Rack 4                  |  |   | Rack 4       |                       |       |
| Hack I                  | S AND X C  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT |
|                         | E PRALE LE   | Vital Relay                             | GRS          | A62-122 56001-921-07  | 1     |
|                         |  | 520 Receiver Module (3330 Feg.)         | EPC          | 150-088019-080 Rev. B | 2     |
|                         | AND A DESCRIPTION OF A  | 520 Receiver Module (4230 Feg.)         | EPC          | 150-088019-080 Rev. B | 4     |
|                         | the beautions /  | 520 Receiver Module (3680 Feg.)         | EPC          | 150-088019-080 Rev. B | 2     |
|                         |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 8     |
|                         | THE REAL PROPERTY AND IN THE REAL PROPERTY AND INCOMENTS OF A DESCRIPTION OF A DESCRIPTIONO | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4     |
|                         |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B | 2     |
|                         |  | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
|                         | ininal antiput   | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |
|                         |  |   |              |                       |       |

| 5 <sup>th</sup> and Mis | ssouri Signal House Asset Inve   | entory                         |              |                       |       |
|-------------------------|--|--------------------------------|--------------|-----------------------|-------|
| ltem                    | Image  | Inventory                      |              |                       |       |
| Rack 5                  | THE R. L. LANSING, MICH.   |                                | Rack 5       |                       |       |
|                         |  | COMPONENT                      | MANUFACTURER | PART NUMBER           | COUNT |
|                         |  | XFMR Matching Rail Coupler     | EPC          | 800-088019-300        | 4     |
|                         |  | AC Vain Relay                  | GRS          | A62-486               | 2     |
|                         | · 注意的意味了故:   | Bal Imp                        |              | A3-117                | 2     |
|                         |  | 3 OHM Resistor *               | GRS          | A3-207 (01246-1)      | 2     |
|                         |  | 25 OHM Resistor *              |              | 56105-11              | 2     |
|                         |  | 5T/9T XFMR                     | GRS          | 31094-000 (A95 50)    | 1     |
|                         |  | 510 Amplifier Module           | EPC          | 150-088019-050 Rev. B | 4     |
|                         | And and the second s  | 530 CAB Coupler (2340 Feq.)    | EPC          | 150-088019-051 Rev. B | 4     |
| Rack 6                  |  |                                | Rack 6       |                       |       |
|                         | The second second second   | COMPONENT                      | MANUFACTURER | PART NUMBER           | COUNT |
|                         |  | XFMR Matching Rail Coupler     | EPC          | 800-088019-300        | 2     |
|                         |  | XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 2     |
|                         |  | AC Vain Relay                  | Alstom       | A62-486               | 3     |
|                         | The second second in the second  | Bal Imp                        |              | A3-117                | 3     |
|                         |  | 3 OHM Resistor                 | GRS          | A3-207 (01246-1)      | 3     |
|                         | Transmitter and an and a second secon | 25 OHM Resistor                | Dale         | 56105-11              | 3     |
|                         | THE REPORT OF THE  | 7T/1XT/3XT XFMR                | GRS          | 31094-000 (A95 50)    | 2     |
|                         |  | 510 Amplifier Module           | EPC          | 150-088019-050 Rev. B | 4     |
|                         |  | 530 CAB Coupler (2340 Feq.)    | EPC          | 150-088019-051 Rev. B | 4     |
|                         |  |                                |              |                       |       |

| 5 <sup>th</sup> and Mis | ssouri Signal House Asset Invo  | entory                          |              |                       |       |
|-------------------------|---|---------------------------------|--------------|-----------------------|-------|
| ltem                    | Image   | Inventory                       |              |                       |       |
| Rack 7                  |   |                                 | Rack 7       |                       |       |
|                         | 10  | COMPONENT                       | MANUFACTURER | PART NUMBER           | COUNT |
|                         | the second second   | XFMR Matching Rail Coupler      | EPC          | 800-088019-300        | 4     |
|                         | and the second second   | AC Vain Relay                   | Alstom       | A62-486               | 2     |
|                         | AND A PROPERTY AND ADDRESS  | Bal Imp                         |              | A3-117                | 2     |
|                         |   | 3 OHM Resistor                  | GRS          | A3-207 (01246-1)      | 2     |
|                         |   | 25 OHM Resistor                 | Dale         | 56105-11              | 2     |
|                         |   | XFMR *                          | GRS          | 31094-000 (A95 50)    | 1     |
|                         | The second se | 510 Amplifier Module            | EPC          | 150-088019-050 Rev. B | 4     |
|                         |   | 530 CAB Coupler (2340 Feq.)     | EPC          | 150-088019-051 Rev. B | 4     |
| Rack 8                  | Nº 1  |                                 | Rack 8       |                       |       |
|                         | 10  | COMPONENT                       | MANUFACTURER | PART NUMBER           | COUNT |
|                         | the part of the second  | 520 Receiver Module (3510 Feq.) | EPC          | 150-088019-080 Rev. B | 1     |
|                         |   | 700 AMPLIFIER MODULE            | HARMOND      | 150-094017-022 REV.D  | 2     |
|                         |   | 701-2 CAB Coupler (2340 Feq.)   |              | 150-097031-010 Rev. O | 2     |
|                         |   |                                 |              |                       |       |

| 5 <sup>th</sup> and Mis | souri Signal House Asset Invo  | entory                 |              |                      |             |       |
|-------------------------|--|------------------------|--------------|----------------------|-------------|-------|
| ltem                    | Image  | Inventory              |              |                      |             |       |
| Rack 9                  |  |                        | R            | lack 9               |             |       |
| nacit s                 |  | COMPONE                | NT           | MANUFACTURER         | PART NUMBER | COUNT |
|                         | 111112 1   | Rotary Dials (Full Hem | isphere-OLD) |                      |             | 12    |
|                         |  | Non-Vital Re           | lays         |                      |             | 59    |
|                         |  | KEY SWITC              | H*           |                      |             | 1     |
|                         |  |                        |              |                      |             |       |
| Rack 10                 |  |                        | Rack 10      |                      |             |       |
|                         | THE REAL PROPERTY OF   | COMPONENT              | MANUFACTURER | PART NUMBER          | COUNT       |       |
|                         |  | Vital Relay            | GRS          | A62-122 56001-921-07 | 4           |       |
|                         | The second second  | VLP                    |              |                      | 2           |       |
|                         | Water of the second | ACP-2                  |              |                      | 2           |       |
|                         | Cartha States of the   |                        |              |                      | 2           |       |
|                         | State Balling and  | VSD                    |              |                      | 2           |       |
|                         | A.T. WILLIAM   | VGP I/O                |              |                      | 2           |       |
|                         | ALL DESCRIPTION  | VGP I/O-12V            |              |                      | 1           |       |
|                         |  | NV I/O                 |              |                      | 3           |       |
|                         |  | 32 NVI                 |              |                      | 2           |       |
|                         |  | VGPI 16                |              |                      | 4           |       |
|                         |  | Surge Protector BSA-4  | Harmon       | 250597               | 1           |       |
|                         |  | CLA BOARD              | Harmon       | 226859-000           | 1           |       |
|                         |  | RS-232                 |              |                      | 2           |       |
|                         |  | Modem                  |              |                      | 2           |       |
|                         |  | 12V Power Supply       |              |                      | 2           |       |

| 5 <sup>th</sup> and Mis | 5 <sup>th</sup> and Missouri Signal House Asset Inventory |                  |              |                  |       |  |
|-------------------------|---|------------------|--------------|------------------|-------|--|
| ltem                    | Image   | Inventory        |              |                  |       |  |
| SCADA                   |   |                  | SCADA        |                  |       |  |
|                         |   | COMPONENT        | MANUFACTURER | PART NUMBER      | COUNT |  |
|                         |   | Modem            |              |                  | 1     |  |
|                         |   | C186             |              |                  | 1     |  |
|                         | THE REAL PROPERTY AND INCOME.                             | SBX              |              |                  | 1     |  |
|                         |   | DI               |              |                  | 2     |  |
|                         |   | DO               |              |                  | 2     |  |
|                         |   | REMZ             |              |                  | 1     |  |
|                         |   | Power Supply     |              |                  | 2     |  |
|                         |   | Non Vital Relays |              |                  | 35    |  |
|                         |   | Batteries        | GENESIS      | NP7-12 12V,7.0Ah | 2     |  |
|                         | Ales T  |                  |              |                  |       |  |

| 5 <sup>th</sup> and N | Aissouri Signal House Asset Inv | entory   |                  |                 |               |   |
|-----------------------|---------------------------------|--|------------------|-----------------|---------------|---|
| ltem                  | Image                           | Inventory  |                  |                 |               |   |
| Sides                 |                                 | House Si   | de-A             |                 |               |   |
|                       |                                 | COMPONENT  | MANUFACTURER     | PART NUMBER     | COUN<br>T     |   |
|                       | - i prog                        | Switch Heater Push Button Box  |                  |                 | 1             |   |
|                       |                                 | Push Button CONTROL Box  |                  |                 | 1             |   |
|                       |                                 | House Si   | de-B             |                 |               |   |
|                       |                                 |  | CLCP             | Harmon          |               | 1 |
|                       |                                 | 12 V POWER SUPPLY  |                  |                 | 1             |   |
|                       |                                 | 12 V Battery   | CD TECHNOLOGIES  | TEL 12-90       | 1             |   |
|                       |                                 | 28V Power Supply   | Lamar he         | A12B-60-24V-A1  | 1             |   |
|                       |                                 | 28V Power Supply   | Lamarche         | A12B-20-24V-A1  | 1             |   |
|                       |                                 | 12V Power Supply   | NRS              | ERB/C 12/501    | 1             |   |
|                       |                                 | Received the second sec | 12V Power Supply | Lamarche        | A29-30-12V-A1 | 1 |
|                       |                                 | Heavy Duty Double Throw Safety Switch 100 A  |                  |                 |               |   |
|                       |                                 | 240V/250DC   | Siemens          |                 | 1             |   |
|                       |                                 | General Duty Safety Switch 100A 240V AC/250V DC  | Square D         | 40276-004-02    | 1             |   |
|                       |                                 | Automatic Transfer Switch  | Kohler           | KSS-DFNC-0100S  | 1             |   |
|                       |                                 | AFTAC  | Harmon           | 1101BT/R        | 1             |   |
|                       |                                 | SURGE PANNEL   |                  | 123             | 1             |   |
|                       |                                 | TRANSMITTER  |                  | 60371-1A        | 1             |   |
|                       |                                 | OUT PUT FILTER   |                  | 60257-C         | 1             |   |
|                       |                                 | FRONT END FILTER   |                  | 60235A          | 1             |   |
|                       |                                 | RECEIVER   |                  | 60360-1A        | 1             |   |
|                       |                                 | DISCRIMINATOR  |                  | 225020-020      | 1             |   |
|                       |                                 | FILTER   |                  | 225021-006      | 1             |   |
|                       |                                 | MINI/MICRO COMPUTER REGULATOR  | SOLAR ELECTRIC   | 63-23-150-8     | 1             |   |
|                       |                                 | House Si   | de-C             |                 |               |   |
|                       |                                 | 2.25V BATTERIES  | GNB              |                 | 7             |   |
|                       |                                 | ADJUSTABE RESISTOR   | RACO             |                 | 20            |   |
|                       |                                 | Heavy Duty Safety Switch 100A 240V AC/250V DC  | Square D         | 40276-003-02    | 1             |   |
|                       |                                 | House Side-D (Fire   | Control Panel)   |                 |               |   |
|                       |                                 | Keypad   | Raydioncs        | D360TD          | 1             |   |
|                       |                                 | Omega Alarm  | Raydioncs        | D8112           | 1             |   |
|                       |                                 | Modem  |                  | D8129           | 1             |   |
|                       |                                 | Batterv  |                  | NP7-1212V,7.0Ah | 1             |   |

## Airport Signal House Inventory



| Airport Sig | Airport Signal House Asset Inventory   |                           |                |                      |                        |       |  |  |  |
|-------------|--|---------------------------|----------------|----------------------|------------------------|-------|--|--|--|
| ltem        | Image  | Inventory                 | nventory       |                      |                        |       |  |  |  |
| Rack 1      |  |                           | Rack 1         |                      |                        |       |  |  |  |
|             |  | COMPONENT                 | MANUF          | FACTURER PART NUMBER |                        | COUNT |  |  |  |
|             |  | BPL-1                     | E              | EPC                  |                        | 4     |  |  |  |
|             |  |                           |                |                      |                        |       |  |  |  |
| Rack 2      |  | Rack 2                    |                |                      |                        |       |  |  |  |
|             |  | COMPONEN                  | Γ              | MANUFACTURER         | PART NUMBER            | COUNT |  |  |  |
|             | AND DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OWNER OWNER OWNER OWNER | Vital Relay               |                | GRS                  | A62-429 (56001-926-01) | 2     |  |  |  |
|             |  | Vital Relay               |                | GRS                  | A62-432 (50001-785-01) | 1     |  |  |  |
|             |  | Rectifier 120AC/120D      | C Switch       | Harmon               | 250756-000             | 1     |  |  |  |
|             |  | 510 Amplifier Mo          | dule           | EPC                  | 150-088019-050 Rev. B  | 5     |  |  |  |
|             |  | 530 CAB Coupler (23       | 40 Feq.)       | EPC                  | 150-088019-051 Rev. B  | 4     |  |  |  |
|             |  | 540 Train Detection Coupl | er (3870 Feq.) | EPC                  | 150-088019-060 Rev. B  | 1     |  |  |  |
|             |  |                           |                |                      |                        |       |  |  |  |

| Airport Si | gnal House Asset Inventory   |                                       |              |                        |       |
|------------|--|---------------------------------------|--------------|------------------------|-------|
| Item       | Image  | Inventory                             |              |                        |       |
| Rack 3     |  |                                       | Rack 3       |                        |       |
|            |  | COMPONENT                             | MANUFACTURER | PART NUMBER            | COUNT |
|            | The Area and a second s | Vital Relay                           | GRS          | A62-122 (56001-921-07) | 2     |
|            | HALL BE THREET WADE RECEIVER   | 520 Receiver Module (2970 Feq.)       | EPC          | 150-088019-080 Rev. B  | 1     |
|            |  | 520 Receiver Module (4410 Feq.)       | EPC          | 150-088019-080 Rev. B  | 1     |
|            |  | 520 Receiver Module (3510 Feq.)       | EPC          | 150-088019-080 Rev. B  | 1     |
|            |  | 520 Receiver Module (3510 Feq.)       | EPC          | 150-088019-080 Rev. F  | 1     |
|            |  | 510 Amplifier Module                  | EPC          | 150-088019-050 Rev. B  | 7     |
|            |  | 530 CAB Coupler (2340 Feq.)           | EPC          | 150-088019-051 Rev. B  | 4     |
|            | 1  | 540 Train Detection Coupler (2970 Feq | .) EPC       | 150-088019-060 Rev. B  | 1     |
|            |  | 540 Train Detection Coupler (3510 Feq | .) EPC       | 150-088019-060 Rev. B  | 1     |
|            |  | 540 Train Detection Coupler (4410 Feq | .) EPC       | 150-088019-060 Rev. B  | 1     |
| Rack 5     |  |                                       | Rack 5       |                        |       |
|            |  | COMPONENT                             | MANUFACTURER | PART NUMBER            | COUNT |
|            |  | XFMR Matching Rail Coupler            | EPC          | 800-088019-300         | 2     |
|            | and B and the owner of the set   | XFMR Loop Matching                    | EPC          | 800-088019-200         | 1     |
|            |  | AC Vain Relay                         | GRS          | A62-486                | 1     |
|            | A LA COMPANY AND A LA C  | AC Vain Relay                         | Alstom       | A62-486                | 1     |
|            |  | Bal Imp                               |              | A3-117                 | 2     |
|            | 1 1 1 1 1 1 1 1 1  | 3 ohm Resistor ABJ                    | GRS          | A3-207 (01246-1)       | 2     |
|            | · · · · · · · · · · · · · · · · · · ·  | 25 ohm Resistor ABJ                   | Dale         | 56105-11               | 2     |
|            |  | 530 CAB Coupler (2340 Feq.)           | EPC          | 150-088019-051 Rev. B  | 3     |
|            |  | 510 Amplifier Module                  | EPC          | 150-088019-050 Rev. B  | 3     |
|            |  | XFMR                                  | GRS          | (A95 50) 31094-000     |       |
|            |  |                                       |              |                        |       |

| Airport Sig | gnal House Asset Inventory   |   |              |                        |        |      |
|-------------|--|---|--------------|------------------------|--------|------|
| ltem        | Image  | Inventory                               |              |                        |        |      |
| Rack 6      | A although a set of  |   | Rack 6       |                        |        |      |
|             |  | COMPONENT                               | MANUFACTU    | IRER PART NUMBE        | ER CO  | OUNT |
|             |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080         | Rev. B | 1    |
|             | A DECEMBER OF A  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080         | Rev. B | 2    |
|             |  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080         | Rev. F | 1    |
|             |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080         | Rev. F | 1    |
|             |  | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080         | Rev. F | 1    |
|             |  | 510 Amplifier Module                    | EPC          | 150-088019-050         | Rev. B | 7    |
|             | and the second s | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051         | Rev. B | 4    |
|             | A DESCRIPTION OF TAXABLE PARTY OF TAXABLE PARTY  | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060         | Rev. B | 1    |
|             |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060         | Rev. B | 1    |
|             |  | 540 Train Detection Coupler (4950 Feq.) | EPC          | 150-088019-060         | Rev. B | 1    |
| Rack 7      |  |   | Rack 7       |                        | 1      |      |
|             | and the second second  | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT  | -    |
|             |  | Vital Relay                             | GRS          | A62-122 (56001-921-07) | 1      |      |
|             | and the second   | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. F  | 1      |      |
|             |  | 520 Receiver Module (3330Feq.)          | EPC          | 150-088019-080 Rev. F  | 1      |      |
|             |  | 520 Receiver Module (4230 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1      | _    |
|             |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 7      | _    |
|             |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B  | 4      |      |
|             | A DECEMBER OF THE PARTY OF THE  | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1      |      |
|             |  | 540 Train Detection Coupler (4950 Feq.) |              | 150-088019-060 Rev. B  | 1      | -    |
|             |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B  | 1      | J    |

| Airport Sig | nal House Asset Inventory  |                                  |             |              |              |       |
|-------------|--|----------------------------------|-------------|--------------|--------------|-------|
| ltem        | Image  | Inventory                        |             |              |              |       |
| Rack 9      |  |                                  | Ra          | ick 9        |              |       |
|             | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | COMPONENT                        |             | MANUFACTURER | PART NUMBER  | COUNT |
|             | and the second second second   | Rotary Dials (Full Hemispl       | here-OLD)   |              |              | 16    |
|             | * * * * * * * *  | Rotary Dials (Half Hemispherics) | nere-NEW)   |              |              | 3     |
|             | ****   | Non-Vital Relays                 | 5           |              |              | 60    |
|             |  |                                  |             |              |              |       |
| Rack 10     |  |                                  | Rac         | k 10         |              |       |
|             | The second s   | COMPONENT                        | MANUFACTURE | R PART I     | NUMBER       | COUNT |
|             | Rate in the second   | Vital Relay                      | GRS         | A62-122 (5   | 6001-921-07) | 2     |
|             | COLUMN AND A   | Vital Relay                      | SafeTran    | 40           | 0900         | 3     |
|             | Distance of the second second  | VLP                              |             |              |              | 2     |
|             | I I I HARVE TELEVISION TO  | ACP-2                            |             |              |              | 2     |
|             |  | SSM                              |             |              |              | 2     |
|             |  |                                  |             |              |              | 1     |
|             | Manual Of The Lots   | VGPI/O                           |             |              |              | 1     |
|             | And in case of the local division of the loc | VGP I/O-12V                      |             |              |              | 1     |
|             | LUCION DE LOS DANS DE LOS DE LOS DE  | NV 1/0                           |             |              |              | 3     |
|             |  | 32 NVI                           |             |              |              | 2     |
|             |  | VGPI 16                          |             |              |              | 2     |
|             |  | Surge Protector BSA-4            | Harmon      | 25           | 0597         | 1     |
|             |  | RS-232                           |             |              |              | 2     |
|             |  | Modem                            |             |              |              | 1     |
|             |  | 12V Power Supply                 |             |              |              | 2     |

| Airport Si | gnal House Asset Inventory    |                                   |              |                         |       |  |  |  |  |
|------------|-------------------------------|-----------------------------------|--------------|-------------------------|-------|--|--|--|--|
| Item       | Image                         | Inventory                         |              |                         |       |  |  |  |  |
| SCADA      |                               |                                   |              |                         |       |  |  |  |  |
|            | Sa Ma and Statement           | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |  |
|            | And Annual Contraction of the | Modem                             |              |                         | 1     |  |  |  |  |
|            |                               | C186                              |              |                         | 1     |  |  |  |  |
|            |                               | SPX                               |              |                         | 1     |  |  |  |  |
|            |                               | DI                                |              |                         | 2     |  |  |  |  |
|            |                               | DO                                |              |                         | 2     |  |  |  |  |
|            |                               | REMZ                              |              |                         | 1     |  |  |  |  |
|            |                               | Relay                             |              |                         | 4     |  |  |  |  |
|            |                               | Power Supply                      |              |                         | 2     |  |  |  |  |
|            |                               | Non Vital Relays                  |              |                         | 32    |  |  |  |  |
|            |                               | Batteries                         |              |                         | 2     |  |  |  |  |
| Walls      | Advert das                    | House Side-A                      |              |                         |       |  |  |  |  |
|            |                               | Switch Heater Dush Button Bo      | MANOFACTORER | PART NOWIDER            | 1     |  |  |  |  |
|            |                               | Switch Heater Push Button Bu      |              |                         | 1     |  |  |  |  |
|            | - ÷ ÷                         |                                   | House Side-B |                         |       |  |  |  |  |
|            | 0                             | Diode Board (Control Panel)       | Harmon       |                         | 1     |  |  |  |  |
|            |                               | Battery                           | PowerSafe    | 12V 155FS               | 1     |  |  |  |  |
|            | 9 9 O 9 7                     | 28V Power Supply                  | Lamarche     | A29-60-24V              | 1     |  |  |  |  |
|            | and the set                   |                                   |              |                         |       |  |  |  |  |
|            | 💆 🖸 👰 🦉 🦉 👰 🙆 🖉               |                                   | House Side-C |                         | L     |  |  |  |  |
|            |                               | 12V Power Supply                  |              | Lamarche: A12B-30-12V-A | 1 1   |  |  |  |  |
|            |                               |                                   |              |                         |       |  |  |  |  |
|            |                               | House Side-D (Fire Control Panel) |              |                         |       |  |  |  |  |
|            |                               | Keypad                            | D360TD       | 1                       |       |  |  |  |  |
|            |                               | Omega Alarm                       | D8112        | 1                       |       |  |  |  |  |
|            |                               | Modem                             | D8129        | 1                       |       |  |  |  |  |
|            |                               | Battery                           |              | NP7-1212V,7.0Ah         | 1     |  |  |  |  |

## **Bellville Signal House**



| Bellville S | ignal House Asset Inventory |                            |        |          |               |                                |         |       |
|-------------|-----------------------------|----------------------------|--------|----------|---------------|--------------------------------|---------|-------|
| ltem        | Image                       | Inventory                  |        |          |               |                                |         |       |
| Rack 1      |                             | Rack 1                     |        |          |               |                                |         |       |
|             |                             | COMPONENT                  | MANUFA | ACTURER  | PART NUMBER C |                                | COUNT   |       |
|             |                             | BPL-3                      | HARI   | MON      | 150-097       | 031-013 Rev. O                 | 4       |       |
|             |                             | Carrier Surge Arrester 1   | HARI   | MON      | 25            | 0197-001                       | 2       |       |
|             |                             |                            |        |          |               |                                |         |       |
| Rack 2      |                             | Rack 2                     |        |          |               |                                |         |       |
|             |                             | COMPONENT                  |        | MANUFAC  | TURER         | PART NUM                       | BER     | COUNT |
|             | INTERNAL OF                 | Vital Relay                |        | Alsto    | m             | A62-407 56001                  | -745-02 | 1     |
|             |                             | Vital Relay                |        | Alstom   |               | A62-122 56001                  | -921-07 | 3     |
|             |                             | POR XFMR                   |        | Alsto    | m             | 31094-000-01                   | Rev. F  | 1     |
|             |                             | 28V Power Supply           |        | Керс     | 0             | PRR 28-38M24787                |         | 2     |
|             |                             | 28V Power Supply           |        | Керс     | 0             | PRM 28-17-2                    | 4810    | 2     |
|             |                             | Rectifier 25V .3A Selenium | Type S | Alsto    | m             | A53-541                        |         | 1     |
| Deals 2     |                             |                            |        | Do als Q |               |                                |         |       |
| Kack 3      |                             |                            | 54     |          | DED           |                                |         |       |
|             |                             | Destifier 120AC/120DC Swi  | itch   | ANUFACIU |               |                                |         | 2     |
|             |                             | Vital Palay                |        | Alstom   |               | 200700-000<br>62-420 56001 024 | 5-01    | 2     |
|             |                             | Vital Relay                |        | AISLUIII | At            | 62 423 50001-920               | 5 01    | 0     |
|             |                             | Vildi Keidy                |        | AISLOIN  | A             | 22-432 20001-78:<br>مدد مم     | 10-01   | 4     |
|             | THE REAL PROPERTY OF        | Vital Relay                |        | AISLUITI |               | HOZ-24/                        | 1.07    | 4     |
|             |                             | vital Relay                |        | GKS      | At            | 02-122 36001-92                | 1-07    | T     |
|             |                             |                            |        |          |               |                                |         |       |

| Bellville S | ignal House Asset Inventory |                                 |              |                         |       |
|-------------|-----------------------------|---------------------------------|--------------|-------------------------|-------|
| ltem        | Image                       | Inventory                       |              |                         |       |
| Rack 4      | 14 MI                       |                                 | Rack 4       |                         |       |
|             |                             | COMPONENT                       | MANUFACTURER | PART NUMBER             | COUNT |
|             |                             | XFMR Loop Matching (2340 Feq.)  | EPC          | 800-088019-200          | 1     |
|             |                             | XFMR Matching Rail Coupler      | EPC          | 800-088019-300          | 2     |
|             |                             | AC Vain Relay                   | Alstom       | A62-486                 | 2     |
|             |                             | Bal Imp                         | Alstom       | A3-117                  | 2     |
|             |                             | 1 ohm Resistor (1XT/3XT)        | GRS          | A3-207 (01246-1)        | 2     |
|             |                             | 2.5 ohm Resistor (1XTRN/3XTRN)* |              | 56105-11                | 2     |
|             | F 2                         | 1T/1XT XFMR                     | Alstom       | 31094-000 (A95 50) 1    |       |
|             | A Ritemark                  | 700 Amplifier Module            |              | 150-094017-022 Rev. D 1 |       |
|             |                             | 700 Amplifier Module            |              | 150-094017-022 Rev. C 2 |       |
|             | A STR                       | 701-2 CAB Coupler (2340 Feq.)   |              | 150-097031-010 Rev. O   | 3     |
|             |                             | Chassis AF Track XMT TTT-2      | Getsgs       | 812-097031-001          | 1     |
| Rack 5      | THE HER                     |                                 | Rack 5       |                         |       |
|             |                             | COMPONENT                       | MANUFACTURER | PART NUMBER             | COUNT |
|             |                             | XFMR Loop Matching (2340 Feq.)  | EPC          | 800-088019-200          | 1     |
|             |                             | XFMR Matching Rail Coupler      | EPC          | 800-088019-300          | 2     |
|             |                             | AC Vain Relay                   | Alstom       | A62-486                 | 2     |
|             |                             | Bal Imp                         | Alstom       | A3-117                  | 2     |
|             |                             | 1 ohm Resistor (1XT/3XT)        | GRS          | A3-207 (01246-1)        | 2     |
|             |                             | 2.5 ohm Resistor (1XTRN/3XTRN)  |              | 56105-11                | 2     |
|             | Miles -                     | 3T/3XT XFMR                     | Alstom       | 31094-000 (A95 50)      | 1     |
|             |                             | 700 Amplifier Module            |              | 150-094017-022 Rev. D   | 3     |
|             | THE STREET                  | 701-2 CAB Coupler (2340 Feq.)   |              | 150-097031-010 Rev. O   | 3     |
|             |                             | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001           | 1     |
|             |                             |                                 |              |                         |       |

| Bellville S  | ignal House Asset Inventory  |                                   |                       |                       |       |  |  |  |
|--------------|--|-----------------------------------|-----------------------|-----------------------|-------|--|--|--|
| ltem         | Image  | Inventory                         |                       |                       |       |  |  |  |
| Rack 6       |  | Rack 6                            |                       |                       |       |  |  |  |
|              |  | COMPONENT                         | MANUFACTURER          | PART NUMBER           | COUNT |  |  |  |
|              |  | 700 Amplifier Module              |                       | 150-094017-022 Rev. D | 7     |  |  |  |
|              | A STATE OF  | 701-2 CAB Coupler (2340 Feq.)     |                       | 150-097031-010 Rev. O | 4     |  |  |  |
|              | COLUMN TWO IS NOT  | 702-1 Track Coupler (4410 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              |  | 702-1 Track Coupler (3870 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              |  | 702-1 Track Coupler (2970 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              | A REAL PROPERTY AND A REAL | 703-1 Receiver Module (3510 Feq.) |                       | 150-095025-047 Rev. D | 1     |  |  |  |
| Million I Im | 703-1 Receiver Module (4410 Feq.)  |                                   | 150-095025-047 Rev. D | 1                     |       |  |  |  |
|              | 703-1 Receiver Module (3870 Feq.)  |                                   | 150-095025-047 Rev. D | 1                     |       |  |  |  |
|              | CARSAS A LAN   | 703-1 Receiver Module (2970 Feq.) |                       | 150-095025-047 Rev. E | 1     |  |  |  |
|              |  | Chassis AF Track XMT TTT-2        | Getsgs                | 812-097031-001        | 2     |  |  |  |
|              |  | AF Track Receiver Chassis         | Getsgs                | 812-097031-034        | 1     |  |  |  |
| Rack 7       |  |                                   | Rack 7                |                       |       |  |  |  |
|              |  | COMPONENT                         | MANUFACTURER          | PART NUMBER           | COUNT |  |  |  |
|              |  | 700 Amplifier Module              |                       | 150-094017-022 Rev. D | 6     |  |  |  |
|              |  | 701-2 CAB Coupler (2340 Feq.)     |                       | 150-097031-010 Rev. O | 3     |  |  |  |
|              |  | 702-1 Track Coupler (4410 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              |  | 702-1 Track Coupler (3870 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              | TAX DESCRIPTION OF TAXABLE PARTY   | 702-1 Track Coupler (2970 Feq.)   |                       | 150-095025-034 Rev. B | 1     |  |  |  |
|              |  | 703-1 Receiver Module (4410 Feq.) |                       | 150-095025-047 Rev. D | 3     |  |  |  |
|              |  | 703-1 Receiver Module (3870 Feq.) |                       | 150-095025-047 Rev. D | 1     |  |  |  |
| The VIA SA   |  | Chassis AF Track XMT TTT-2        | Getsgs                | 812-097031-001        | 2     |  |  |  |
|              |  | AF Track Receiver Chassis         | Getsgs                | 812-097031-034        | 1     |  |  |  |
|              |  |                                   |                       |                       |       |  |  |  |

| Bellville S | ignal House Asset Inventory  |                                   |              |                         |       |  |  |
|-------------|--|-----------------------------------|--------------|-------------------------|-------|--|--|
| ltem        | Image  | Inventory                         |              |                         |       |  |  |
| Rack 8      |  | Rack 8                            |              |                         |       |  |  |
|             |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |
|             |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 7     |  |  |
|             |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 1     |  |  |
|             |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 4     |  |  |
|             | and a second sec | 702-1 Track Coupler (3690 Feq.)   |              | 150-095025-034 Rev. CAC | ) 1   |  |  |
|             |  | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|             |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|             |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|             |  | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|             |  | 703-1 Receiver Module (3330 Feq.) |              | 150-095025-047 Rev. D   | 2     |  |  |
|             | THE REAL PROPERTY AND  | 703-1 Receiver Module (4230 Feq.) |              | 150-095025-047 Rev. D   | 2     |  |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |
|             |  |                                   |              |                         |       |  |  |
| Rack 9      | A REAL PROPERTY AND A REAL PROPERTY AND A  | Rack 9                            |              |                         |       |  |  |
|             |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |
|             |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 5     |  |  |
|             |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 3     |  |  |
|             | ALL PROPERTY AND A DESCRIPTION OF A DESC | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|             |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|             |  | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|             | The second se  | 703-1 Receiver Module (3330 Feq.) |              | 150-095025-047 Rev. D   | 1     |  |  |
|             |  | 703-1 Receiver Module (4230 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |
|             |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |
|             |  |                                   |              |                         |       |  |  |

| Bellville Signal House Asset Inventory |  |                   |                     |               |        |             |       |   |
|--|--|-------------------|---------------------|---------------|--------|-------------|-------|---|
| ltem                                   | Image  | Inventory         |                     |               |        |             |       |   |
| Rack 10                                |  |                   | Rack 10             |               |        | 7           |       |   |
|  | LUN and  | COMPONENT         | MANUFACTUROR        | PART NUMBER   | COUNT  | •           |       |   |
|  |  | VLP               |                     |               | 2      |             |       |   |
|  | The Galling I  | ACP-2             |                     |               | 2      |             |       |   |
|  | WALLAND TALL   | SSM               |                     |               | 2      |             |       |   |
|  |  | CCI               |                     |               | 2      |             |       |   |
|  | States in the second   | VSD               |                     |               | 1      |             |       |   |
|  | A REAL PROPERTY AND A REAL | VGPI 16           |                     |               | 2      |             |       |   |
|  |  | VGP I/O-12V       |                     |               |        |             |       |   |
|  |  | VGP I/O           |                     |               | 3      |             |       |   |
|  |  | NV I/O            |                     |               | 3      |             |       |   |
|  |  | 32 NVI            |                     |               | 4      |             |       |   |
|  |  | CLA Board         |                     |               | 1      |             |       |   |
|  |  | RS-232            |                     |               | 2      |             |       |   |
|  |  | Modem             |                     |               | 2      |             |       |   |
|  |  | 12V Power Supply  |                     |               | 2      |             |       |   |
| Rack 11                                |  |                   |                     | Rack 11       |        |             |       | ] |
|  | ·····  | СОМ               | PONENT              | MANUFACT      | TUROR  | PART NUMBER | COUNT |   |
|  |  | Rotary Dials (HAL | .F Hemisphere-NEW)  |               |        |             | 20    |   |
|  | 31   | Non-V             | ital Relays         |               |        |             | 60    |   |
|  | THE REPORT OF THE PARTY OF   | KEY LOCK SWITCH/2 | -POS 2-POLE STD. LC | CK EOA SWITCH | I CORP | 51-236.025D | 1     |   |
|  | Marine Participation and and   |                   |                     |               |        |             |       |   |
|  | Contraction of the local division of the loc |                   |                     |               |        |             |       |   |
|  |  |                   |                     |               |        |             |       |   |
|  |  |                   |                     |               |        |             |       |   |
|  | · · · · · · · · · · · · · · · · · · ·  |                   |                     |               |        |             |       |   |
|  | · · · · · · · · · · · · · · · · · · ·  |                   |                     |               |        |             |       |   |
|  |  |                   |                     |               |        |             |       |   |
|  | 10   |                   |                     |               |        |             |       |   |

| Bellville S                 | ignal House Asset Inventory |                      |                           |              |       |
|-----------------------------|-----------------------------|----------------------|---------------------------|--------------|-------|
| ltem                        | Image                       | Inventory            |                           |              |       |
| SCADA                       | The second such             |                      | SCADA                     |              |       |
|                             |                             | COMPONENT            | MANUFACTUROR              | PART NUMBER  | COUNT |
| In succession of the second |                             | Power Supply         | Schneider Electric        | TSXPSY1610   | 1     |
|                             |                             | CPU                  | Schneider Electric        | TSP57203     | 1     |
|                             |                             | Memory Card          | Schneider Automation S.A. | TSXMRP064P   | 1     |
|                             |                             | RS-232               |                           |              | 1     |
|                             |                             | Input Card           | Schneider Electric        | TSX DEY12A2  | 6     |
|                             |                             | INPUT TERMINAL BLOCK | Schneider Automation S.A. | TSX BLY01    | 6     |
|                             |                             | Output Card          | Schneider Electric        | TSX DSY64T2K | 1     |
|                             |                             | Output Cord          | Phoenix Contact           | 22 98 438    | 2     |
|                             |                             | Relays               | Phoenix Contact           | ABE7*        | 2     |
|                             |                             | Power Supply         | WEID MULLER               | CSA 991534   | 1     |
|                             |                             | Battery Charger      | WEID MULLER               | 991628 0024  | 1     |
|                             |                             | Batteries            | CD Technologies           | UPS12-150MR  | 2     |
|                             |                             | Backplane            |                           |              | 1     |
|                             |                             | MODEM                | MOTOROLA                  | B3600        | 1     |

| Bellville | Signal House Asset Inventory   |  |                 |                          |       |  |  |  |
|-----------|--|--|-----------------|--------------------------|-------|--|--|--|
| ltem      | Image  | Inventory  |                 |                          |       |  |  |  |
| Sides     |  | Hous   | e Side-A        |                          |       |  |  |  |
|           | The second se  | COMPONENT  | MANUFACTUROR    | PART NUMBER              | COUNT |  |  |  |
|           | House and a second   | FIA-Keypad Controller                              | NAPCO           | RPC3000LCDe              | 1     |  |  |  |
|           |  | SWITCH HEATER CONTROL BOX                          |                 |                          | 1     |  |  |  |
|           | a contra per   | House Side-B                                       |                 |                          |       |  |  |  |
|           |  | Fire Intrusion Alarm                               | NAPCO           | MA 3000                  | 1     |  |  |  |
|           | and and and a second se | Battery  | Genesis         | NP7-1212V,7.0Ah          | 2     |  |  |  |
|           | Construction of the owner   | Main Board   |                 |                          | 1     |  |  |  |
|           |  | Relay Boards                                       |                 |                          | 1     |  |  |  |
|           |  | House Side-C                                       |                 |                          |       |  |  |  |
|           |  |  |                 |                          |       |  |  |  |
|           |  |  |                 |                          |       |  |  |  |
|           |  | House Side-D                                       |                 |                          |       |  |  |  |
|           |  | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D        | 40274-556-01             | 1     |  |  |  |
|           |  | GENERAL Duty Safety Switch 100A 240V AC/ 250V DC   | Square D        | 40275-933-01             | 1     |  |  |  |
|           |  | BATTERY SURGE ARRESTOR 4                           | US&S            | N451552-0507             | 1     |  |  |  |
|           |  | Current Monitor*                                   | NRS             |                          | 1     |  |  |  |
|           |  | 12V Power Supply                                   | NRS             | ERB-C 12/40C             | 1     |  |  |  |
|           |  | BATTERY  | MARATHON        | M12V90                   | 1     |  |  |  |
|           |  | CLCP 256 IO LED Driver Module                      | Getsgs          | Assy 227027-001 Rev. 806 | 1     |  |  |  |
|           |  | Power Supply CLCP 12VDC 20W                        | Getsgs          | 226609-200               | 1     |  |  |  |
|           |  | KEY LOCK SWITCH/2-POS 2-POLE STD. LOCK             | EOA SWITCH CORP | 51-236.025D              | 1     |  |  |  |
|           |  |  |                 |                          |       |  |  |  |

## **Big Bend Signal House**



| Big Bend S | ignal House Asset Inventory |                                 |              |                        |        |       |  |  |  |  |
|------------|-----------------------------|---------------------------------|--------------|------------------------|--------|-------|--|--|--|--|
| ltem       | Image                       | Inventory                       |              |                        |        |       |  |  |  |  |
| Rack 1A    |                             | Rack 1A                         |              |                        |        |       |  |  |  |  |
|            |                             | COMPONENT                       | MANUFACTURER | PART NUMBE             | R      | COUNT |  |  |  |  |
|            |                             | BPL-3                           | Harmon       | 150-097031-013 R       | Rev. O | 11    |  |  |  |  |
|            |                             |                                 |              |                        |        |       |  |  |  |  |
| Rack 1B    | 72 4 4                      |                                 | Rack 1B      |                        |        |       |  |  |  |  |
|            |                             | COMPONENT                       | MANUFACTURER | PART NUMBER            | 1      | COUNT |  |  |  |  |
|            |                             | BPL-3                           | Harmon       | 150-097031-013 Re      | 11     |       |  |  |  |  |
|            |                             |                                 |              |                        |        |       |  |  |  |  |
| Rack 2     |                             |                                 | Rack 2       | 2                      |        |       |  |  |  |  |
|            |                             | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUNT  |       |  |  |  |  |
|            |                             | Vital Relay                     | Alstom       | A62-407 (56001-745-02) | 1      |       |  |  |  |  |
|            |                             | Vital Relay                     | Alstom       | A62-122 (56001-921-07) | 3      |       |  |  |  |  |
|            |                             | Vital Relay                     | Alstom       | A62-247                | 4      |       |  |  |  |  |
|            | 383 - ( 10-                 | XFMR Alstom 31094-000-01 Rev. F |              |                        |        |       |  |  |  |  |
|            |                             | 28V Power Supply                | Керсо        | PRR 28-38M24787        | 3      |       |  |  |  |  |
|            |                             | 28V Power Supply                | Керсо        | PRM 28-17-24810        | 1      |       |  |  |  |  |
|            |                             | Rectifier                       | Alstom       | A53-541                | 1      |       |  |  |  |  |
|            |                             |                                 |              |                        |        |       |  |  |  |  |

| Big Bend Signal House Asset Inventory |  |                         |                 |               |                 |              |                       |       |
|---------------------------------------|--|-------------------------|-----------------|---------------|-----------------|--------------|-----------------------|-------|
| ltem                                  | Image  | Inventory               |                 |               |                 |              |                       |       |
| Rack 3                                |  |                         |                 |               |                 |              |                       |       |
|                                       |  | COMPONENT               | PONENT MANUFACT |               | RER PART NUMBER |              | COUNT                 |       |
|                                       |  | 28V Power Supply        | Керс            | 0             | PRR 28          | 3-38M24787   | 3                     |       |
|                                       |  | 28V Power Supply        | Керс            | 0             | PRM 2           | 8-17-24810   | 1                     |       |
|                                       |  |                         |                 |               |                 |              |                       |       |
| Rack 4                                | A Pression of  |                         | Ra              | ck 4          |                 |              |                       |       |
|                                       |  | COMPONENT               |                 | MANUFAC       | CTURER          | PART NUMBER  |                       | COUNT |
|                                       |  | 700 Amplifier Mod       | lule            | Harm          | on              | 150-094017   | 150-094017-022 Rev. D |       |
|                                       |  | 701-2 CAB Coupler (23-  | 40 Feq.)        | Harm          | on              | 150-097031   | -010 Rev. O           | 8     |
|                                       |  | 702-1 Track Coupler (29 | 970 Feq.)       | Harm          | on              | 150-095025-0 | 034 Rev. CAO          | 1     |
|                                       | The state of the s | 702-1 Track Coupler (38 | 370 Feq.)       | Harm          | on              | 150-095025-0 | 034 Rev. CAO          | 1     |
|                                       |  | 702-1 Track Coupler (44 | 10 Feq.)        | Harm          | on              | 150-095025-0 | 034 Rev. CAO          | 2     |
|                                       | Y INC  | 702-1 Track Coupler (35 | 510 Feq.)       | Harm          | on              | 150-095025-0 | 034 Rev. CAO          | 1     |
|                                       |  | 702-1 Track Coupler (29 | 970 Feq.)       | Harm          | on              | 150-095025-0 | 034 Rev. CAO          | 2     |
|                                       |  | 702-1 Track Coupler (38 | 370 Feq.)       | Harm          | on              | 150-095025   | -034 Rev. B           | 1     |
|                                       |  | Chassis AF Track XMT    | TTT-2           | Getsgs 812097 |                 | 8120970      | 031-001               | 4     |
|                                       |  |                         |                 |               |                 |              |                       |       |

| Big Bend S | ignal House Asset Inventory      |                                 |              |                         |           |  |  |  |  |
|------------|----------------------------------|---------------------------------|--------------|-------------------------|-----------|--|--|--|--|
| ltem       | Image                            | Inventory                       |              |                         |           |  |  |  |  |
| Rack 5     |                                  | Rack 5                          |              |                         |           |  |  |  |  |
|            |                                  | COMPONENT MANUFACTURER          |              | PART NUMBER             | COUN<br>T |  |  |  |  |
|            |                                  | 700 Amplifier Module            | Harmon       | 150-094017-022 Rev. D   | 16        |  |  |  |  |
|            | A CONTRACT OF A CONTRACT OF      | 701-2 CAB Coupler (2340 Feq.)   | Harmon       | 150-097031-010 Rev. O   | 9         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (3510 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (2970 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 1         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (3870 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (4410 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001           | 4         |  |  |  |  |
| Rack 6     |                                  | Rack 6                          |              |                         |           |  |  |  |  |
|            |                                  | COMPONENT                       | MANUFACTURER | PART NUMBER             | COUNT     |  |  |  |  |
|            |                                  | 700 Amplifier Module            | Harmon       | 150-094017-022 Rev. D   | 16        |  |  |  |  |
|            | THE REAL PROPERTY AND ADDRESS OF | 701-2 CAB Coupler (2340 Feq.)   | Harmon       | 150-097031-010 Rev. O   | 9         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (4230 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (3690 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (4950 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 2         |  |  |  |  |
|            |                                  | 702-1 Track Coupler (3330 Feq.) | Harmon       | 150-095025-034 Rev. CAO | 1         |  |  |  |  |
|            |                                  | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001           | 4         |  |  |  |  |
|            |                                  |                                 |              |                         |           |  |  |  |  |

| Big Bend S | ignal House Asset Inventory   |                                   |              |                         |       |  |  |  |  |
|------------|---|-----------------------------------|--------------|-------------------------|-------|--|--|--|--|
| ltem       | Image   | Inventory                         |              |                         |       |  |  |  |  |
| Rack 7     |   | Rack 7                            |              |                         |       |  |  |  |  |
|            |   | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |  |
|            |   | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 14    |  |  |  |  |
|            |   | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 8     |  |  |  |  |
|            |   | 702-1 Track Coupler (3330 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 3     |  |  |  |  |
|            |   | 702-1 Track Coupler (4950 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |  |
|            |   | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |  |
|            | COLUMN STREET, STREET,  | 702-1 Track Coupler (3690 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |  |
|            | The second second   | Chassis AF Track XMT TTT-2        | Getsgs       | 812097031-001           | 4     |  |  |  |  |
| Rack 8     |   |                                   | Rack 8       |                         |       |  |  |  |  |
|            | The second se | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |  |
|            |   | 703-1 Receiver Module (3870 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 6     |  |  |  |  |
|            |   | 703-1 Receiver Module (4410 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 5     |  |  |  |  |
|            |   | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 3     |  |  |  |  |
|            |   | 703-1 Receiver Module (2970 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 4     |  |  |  |  |
|            |   | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 3     |  |  |  |  |
|            |   |                                   |              |                         |       |  |  |  |  |

| Big Bend | Signal House Asset Inventory   |                                   |              |                    |          |      |
|----------|--|-----------------------------------|--------------|--------------------|----------|------|
| Item     | Image  | Inventory                         |              |                    |          |      |
| Rack 9   | winter Karrison  |                                   | Rack 9       |                    |          |      |
|          | And  | COMPONENT                         | MANUFACTURER | PART NUMBER        | R COL    | JUNT |
|          | INCOMENTATION OF THE OWNER   | 703-1 Receiver Module (3690 Feq.) | Harmon       | 150-095025-047 Rev | v. FAO 5 | 5    |
|          |  | 703-1 Receiver Module (4950 Feq.) | Harmon       | 150-095025-047 Rev | v. FAO 6 | 6    |
|          |  | 703-1 Receiver Module (3330 Feq.) | Harmon       | 150-095025-047 Rev | v. FAO 5 | 5    |
|          |  | 703-1 Receiver Module (4230 Feq.) | Harmon       | 150-095025-047 Rev | v. FAO 3 | 3    |
|          | IN STATE OF THE PARTY OF THE PA | AF Track Receiver Chassis         | Getsgs       | 812-097031-03      | 4 3      | 3    |
| Back 10  |  |                                   | Rack 10      |                    |          |      |
|          | -27 The main start   | COMPONENT                         | MANUFACTURER | PART NUMBER        | COUNT    |      |
|          | In the American Street Contraction   | HLC Cabinet with Lexan Cover      | Getsgs       | 226802-001         | 2        |      |
|          | The second se  | VLP                               | -            |                    | 2        |      |
|          |  | ACP-3                             |              |                    | 2        |      |
|          | The second second  | SSM                               |              |                    | 2        |      |
|          |  | CCI                               |              |                    | 2        |      |
|          | And the second s | VSD                               |              |                    | 1        |      |
|          |  | VGP I/O-12V                       |              |                    | 3        |      |
|          | _  | NV I/O                            |              |                    | 4        |      |
|          |  | 32 NVI                            |              |                    | 5        |      |
|          |  | VGPI 16                           |              |                    | 2        |      |
|          |  | CLA Board                         |              |                    | 1        |      |
|          |  | RS-232                            |              |                    | 5        | ł    |
|          |  | Modem                             |              |                    | 1        |      |
|          |  | 12V Power Supply                  |              |                    | 2        | l    |

| Big Bend S | ignal House Asset Inventory |                                  |              |              |       |       |  |
|------------|-----------------------------|----------------------------------|--------------|--------------|-------|-------|--|
| ltem       | Image                       | Inventory                        |              |              |       |       |  |
| Rack 11    |                             |                                  | Rack 11      |              |       | 7     |  |
|            |                             | COMPONENT                        | MANUFACTURER | PART NUMBER  | COUNT |       |  |
|            |                             | HLC Cabinet with Lexan Cover     | Getsgs       | 226802-001   | 1     |       |  |
|            |                             | VLP                              |              |              | 1     |       |  |
|            |                             | ACP-3                            |              |              | 1     |       |  |
|            |                             | SSM                              |              |              | 1     |       |  |
|            |                             | CCI                              |              |              | 1     |       |  |
|            |                             | NV I/O                           |              |              | 1     |       |  |
|            |                             | RS-232                           |              |              | 2     |       |  |
|            |                             | Modem                            |              |              | 1     |       |  |
|            |                             | 12V Power Supply                 |              |              | 1     |       |  |
| Rack 12    |                             |                                  | Rack 12      |              |       |       |  |
|            |                             | COMPONENT                        | MANUFAC      | TURER PART N | UMBER | COUNT |  |
|            | 2.2.2.2.e                   | Rotary Dials (Full Hemisphere-NE | EW)          |              |       | 34    |  |
|            | A # # # # # # # #           | Non-Vital Relays                 |              |              |       | 78    |  |
|            |                             |                                  |              |              |       |       |  |

| Big Bend S | ignal House Asset Inventory  |                       |                           |                  |       |  |  |
|------------|--|-----------------------|---------------------------|------------------|-------|--|--|
| Item       | Image  | Inventory             |                           |                  |       |  |  |
| SCADA      |  | SCADA                 |                           |                  |       |  |  |
|            | The second second  | COMPONENT             | MANUFACTURER              | PART NUMBER      | COUNT |  |  |
|            |  | Power Supply          | Schneider Electric        | TSXPSY1610       | 1     |  |  |
|            | Contraction of the local division of the loc | CPU                   | Schneider Electric        | TSP57203         | 1     |  |  |
|            | 100.00 C CO CO   | Memory Card           | Schneider Automation S.A. | TSXMRP064P       | 1     |  |  |
|            | Share the second   | Input Card            | Schneider Electric        | TSXDEY32D2K      | 3     |  |  |
|            | Street 1   | Input Cord            | Schneider Electric        | TSXCDP203        | 6     |  |  |
|            | The second  | Output Card           | Schneider Electric        | TSXDSY32T2K      | 1     |  |  |
|            |  | Output Cord           | Phoenix Contact           | 22 98 438        | 2     |  |  |
|            |  | Input Card ABE7       | Schneider Electric        | ABE7H16C11       | 6     |  |  |
|            |  | Relays                | Phoenix Contact           | PLC-V8/FLK14/OUT | 4     |  |  |
|            |  | Power Supply          | Connect Power             | 992534 0024      | 1     |  |  |
|            |  | Battery Charger       | Connect Power             | 991628 0024      | 1     |  |  |
|            |  | Batteries             | CD Technologies           | UPS12-150MR      | 2     |  |  |
|            |  | Fiber Media Converter | GarrettCom Inc.           | CS14P-SST-48VDC  | 1     |  |  |
|            | To an and  | Phone Line Extender   | Tcom                      |                  | 1     |  |  |
|            |  | Backplane             |                           |                  | 1     |  |  |

| Big Bend | Signal House Asset Inventory   |                                 |                  |                          |       |
|----------|--|---------------------------------|------------------|--------------------------|-------|
| ltem     | Image  | Inventory                       |                  |                          |       |
| Sides    |  |                                 | House East Wall  |                          |       |
|          |  | COMPONENT                       | MANUFACTURER     | PART NUMBER              | COUNT |
|          |  | FIA-Keypad Controller           | NAPCO            | RPC3000LCDe              | 1     |
|          |  | Fire Intrusion Alarm            | NAPCO            |                          | 1     |
|          |  | Battery                         | Genesis          | NP7-1212V,7.0Ah          | 2     |
|          |  | Main Board                      |                  |                          | 1     |
|          |  | Relay Boards                    |                  |                          | 1     |
|          | · · · · · · · · · · · · · · · · · · ·  | Expansion Modules               |                  |                          | 1     |
|          | and the second s | Hawk Event Recorder             | Getsgs           | 251210-00001             | 2     |
|          |  |                                 |                  |                          |       |
|          |  |                                 | House North Wall |                          |       |
|          |  | CLCP 256 IO LED Driver Module   | Getsgs           | Assy 227027-001 Rev. 806 | 1     |
|          |  | Power Supply CLCP 12VDC 20W     | Getsgs           | 226609-200               | 1     |
|          |  |                                 | House West Wall  |                          |       |
|          |  |                                 |                  |                          |       |
|          |  |                                 |                  |                          |       |
|          |  |                                 | House South Wall |                          |       |
|          |  | Surge Protector 18V AC 15A USSP | US&S             | N451552-0507             | 3     |
|          |  | Current Monitor                 | NRS              | 16775-00                 | 2     |
|          |  | 12V Power Supply                | NRS              | ERB-C 12/501C            | 2     |
|          |  | 2.25V Battery                   | GNB              | 50A15                    | 12    |

### **Brentwood Signal House**



| Brentwo | Brentwood Signal House Asset Inventory |   |  |  |  |  |
|---------|--|---|--|--|--|--|
| ltem    | Image                                  | Inventory   |  |  |  |  |
| Rack 1  |  | Rack 1COMPONENTMANUFACTURERPART NUMBERCOUNTBPL-3HARMON150-097031-013 Rev. 03  |  |  |  |  |
| Rack 2  |  | Rack 2COMPONENTMANUFACTURERPART NUMBERCOUNTVital RelayAlstomA62-407 (56001-745-02)1Vital RelayAlstomA62-122 (56001-921-07)3POR XFMRAlstom31094-000-01 Rev. F128V Power SupplyKepcoPRR 28-38M24787228V Power SupplyKepcoPRM 28-17-248102BX110/NX110 - 100Hz ConverterBehlmanRR1200-1001RectifierAlstomA53-5411 |  |  |  |  |

| Brentwood Signal House Asset Inventory |                              |                                 |              |                        |       |
|--|------------------------------|---------------------------------|--------------|------------------------|-------|
| ltem                                   | Image                        | Inventory                       |              |                        |       |
| Rack 3                                 | a tak                        | Rack 3                          |              |                        |       |
|  |                              | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUNT |
|  |                              | Switch Rectifier 120AC/120DC    |              | 250756-000             | 2     |
|  |                              | Vital Relay                     | Alstom       | A62-429 (56001-926-01) | 8     |
|  | THE DESIGNATION OF THE OWNER | Vital Relay                     | Alstom       | A62-432 (56001-785-01) | 4     |
|  |                              | Vital Relay                     | Alstom       | A62-122 (56001-921-07) | 2     |
|  |                              | Vital Relay                     | Alstom       | A62-247                | 4     |
| Rack 4                                 | TRANSITION AND               |                                 | Rack 4       |                        |       |
|  |                              | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUN  |
|  |                              | 700 Amplifier Module            | Harmon       | 150-094017-022 Rev. D  | 14    |
|  |                              | 701-2 CAB Coupler (2340 Feq.)   | Harmon       | 150-097031-010 Rev. O  | 8     |
|  |                              | 702-1 Track Coupler (3870 Feq.) | Harmon       | 150-095025-034 Rev. CA | D 2   |
|  |                              | 702-1 Track Coupler (2970 Feq.) | Harmon       | 150-095025-034 Rev. CA | D 1   |
|  |                              | 702-1 Track Coupler (3510 Feq.) | Harmon       | 150-095025-034 Rev. CA | D 1   |
|  |                              | 702-1 Track Coupler (4410 Feq.) | Harmon       | 150-095025-034 Rev. CA | D 1   |
|  |                              | 702-1 Track Coupler (4410 Feq.) | Harmon       | 150-095025-034 Rev. B  | 1     |
|  | Little and                   | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001          | 4     |
|  |                              |                                 |              |                        |       |

| Brentwood Signal House Asset Inventory |   |                                   |              |                         |       |  |
|--|---|-----------------------------------|--------------|-------------------------|-------|--|
| ltem                                   | Image   | Inventory                         |              |                         |       |  |
| Rack 5                                 |   | Rack 5                            |              |                         |       |  |
|  |   | COMPONENT                         | MANUFACTURE  | R PART NUMBER           | COUNT |  |
|  |   | 700 Amplifier Module              | HARMON       | 150-094017-022 Rev. D   | 8     |  |
|  |   | 701-2 CAB Coupler (2340 Feq.)     | HARMON       | 150-097031-010 Rev. C   | 4     |  |
|  |   | 702-1 Track Coupler (3870 Feq.)   | HARMON       | 150-095025-034 Rev. CA  | 0 1   |  |
|  | THE R OF THE R. P. LEWIS CO., LANSING MICH.   | 702-1 Track Coupler (2970 Feq.)   | HARMON       | 150-095025-034 Rev. CA  | 0 1   |  |
|  |   | 702-1 Track Coupler (3510 Feq.)   | HARMON       | 150-095025-034 Rev. CA  | 0 1   |  |
|  |   | 702-1 Track Coupler (4410 Feq.)   | HARMON       | 150-095025-034 Rev. CA  | 0 3   |  |
|  |   | 703-1 Receiver Module (4410 Feq.) | ) HARMON     | 150-095025-047 Rev. FA  | 0 3   |  |
|  |   | 703-1 Receiver Module (3870 Feq.) | ) HARMON     | 150-095025-047 Rev. FA  | 0 3   |  |
|  | Concession of Long Long Long Long   | 703-1 Receiver Module (2970 Feq.) | ) HARMON     | 150-095025-047 Rev. FA  | 0 2   |  |
|  | IN ALT A PERFECT  | 703-1 Receiver Module (3510 Feq.) | ) HARMON     | 150-095025-047 Rev. FA  | 0 2   |  |
|  |   | 703-1 Receiver Module (3510 Feq.) | ) HARMON     | 150-095025-047 Rev. E   | 2     |  |
|  |   | 703-1 Receiver Module (4410 Feq.) | ) HARMON     | 150-095025-047 Rev. E   | 1     |  |
|  |   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |
|  |   | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 2     |  |
| Dack 6                                 | Company of |                                   | Pack 6       |                         |       |  |
| RACK O                                 | The second second second  | COMPONENT                         | MANUEACTURER | PART NUMBER             | COUNT |  |
|  |   | XEMB Loop Matching                | FPC          | 800-088019-200          | 2     |  |
|  |   | AC Vain Relay                     | Alstom       | Δ62-597                 | 2     |  |
|  |   | Bal Imp                           | Alstom       | A3-117                  | 2     |  |
|  | A REAL PROPERTY AND INC.  | 3 ohm Besistor                    | GRS          | A3-207 (01246-1)        | 2     |  |
|  |   | 25 ohm Resistor                   | 00           | 56105-11                | 2     |  |
|  |   | XFMR                              | Alstom       | 31094-000 (A95 50)      | 2     |  |
|  |   | 700 Amplifier Module              | HARMON       | 150-094017-022 Rev. D   | 4     |  |
|  |   | 701-2 CAB Coupler (2340 Fea.)     | HARMON       | 150-097031-010 Rev. O   | 3     |  |
|  |   | 702-1 Track Coupler (3870 Feg.)   | HARMON       | 150-095025-034 Rev. CAO | 1     |  |
|  |   | 702-1 Track Coupler (4950 Feg.)   | HARMON       | 150-095025-034 Rev. CAO | 1     |  |
|  | and the second  | 702-1 Track Coupler (3330 Feg.)   | HARMON       | 150-095025-034 Rev. CAO | 2     |  |
|  |   | 702-1 Track Coupler (4230 Feq.)   | HARMON       | 150-095025-034 Rev. CAO | 1     |  |
|  |   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 1     |  |
|  |   |                                   |              |                         |       |  |
| Brentwo | od Signal House Asset Inventory   |  |  |   |   |  |  |  |
|---------|---|--|--|---|---|--|--|--|
| ltem    | Image   | age Inventory  |  |   |   |  |  |  |
| Rack 7  |   | Rack 7   |  |   |   |  |  |  |
|         |   | COMPONENT  | MANUFACTURER   | PART NUMBER   | COUNT   |  |  |  |
|         |   | 700 Amplifier Module   | HARMON   | 150-094017-022 Rev. D   | 16  |  |  |  |
|         |   | 701-2 CAB Coupler (2340 Feq.)  | HARMON   | 150-097031-010 Rev. O   | 9   |  |  |  |
|         | CONTRACTOR OF THE PARTY OF THE | 702-1 Track Coupler (4950 Feq.)  | HARMON   | 150-095025-034 Rev. CAO   | 3   |  |  |  |
|         |   | 702-1 Track Coupler (3330 Feq.)  | HARMON   | 150-095025-034 Rev. B   | 1   |  |  |  |
|         |   | 702-1 Track Coupler (4230 Feq.)  | HARMON   | 150-095025-034 Rev. CAO   | 1   |  |  |  |
|         |   | 702-1 Track Coupler (3690 Feq.)  | HARMON   | 150-095025-034 Rev. CAO   | 1   |  |  |  |
|         |   | 702-1 Track Coupler (3330 Feq.)  | HARMON   | 150-095025-034 Rev. CAO   | 1   |  |  |  |
|         |   | Chassis AF Track XMT TTT-2   | Getsgs   | 812-097031-001  | 4   |  |  |  |
|         |   |  |  |   |   |  |  |  |
| Rack 8  |   |  | Rack 8   |   |   |  |  |  |
| Rack 8  |   | COMPONENT  | Rack 8   | PART NUMBER   | COUNT   |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module  | Rack 8<br>MANUFACTURER<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D  | COUNT<br>8  |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)   | Rack 8<br>MANUFACTURER<br>HARMON<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O   | <b>COUNT</b><br>8<br>4  |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)  | Rack 8<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC   | COUNT<br>8<br>4<br>0 1  |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)   | Rack 8<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. CAC   | COUNT           8           4           0         1           0         1   |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)  | Rack 8<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. CAC           150-095025-034 Rev. CAC           150-095025-034 Rev. CAC   | COUNT           8           4           0         1           0         1           0         1   |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)   | Rack 8       MANUFACTURER       HARMON       HARMON       HARMON       HARMON       HARMON       HARMON       HARMON       HARMON       HARMON   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC   | COUNT           8           4           1           0           1           0           1           1           1   |  |  |  |
| Rack 8  |   | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (3690 Feq.)           703-1 Receiver Module (3330 Feq.)   | Rack 8       MANUFACTURER       HARMON  | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC   | COUNT           8           4           0           1           0           1           0           1           0           1           0   |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)   | Rack 8MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMON   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. E   | COUNT           8           4           0           1           0           1           0           1           0           1           0           1           1           1           1           1   |  |  |  |
| Rack 8  |   | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           703-1 Receiver Module (3330 Feq.)           703-1 Receiver Module (3690 Feq.)           703-1 Receiver Module (3690 Feq.)   | Rack 8         MANUFACTURER         HARMON  | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. E           150-095025-047 Rev. FAC           150-095025-047 Rev. FAC           150-095025-047 Rev. FAC   | COUNT           8           4           0           1           0           1           0           1           0           1           0           1           0           2   |  |  |  |
| Rack 8  |   | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (4950 Feq.)           703-1 Receiver Module (3330 Feq.)           703-1 Receiver Module (3690 Feq.)           703-1 Receiver Module (3690 Feq.)           703-1 Receiver Module (4230 Feq.)           703-1 Receiver Module (4230 Feq.)   | Rack 8         MANUFACTURER         HARMON                               | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. E           150-095025-047 Rev. FAC   | COUNT           8           4           0           1           0           1           0           1           0           1           0           2           0           2           0   |  |  |  |
| Rack 8  |   | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           703-1 Receiver Module (3330 Feq.)           703-1 Receiver Module (3690 Feq.)           703-1 Receiver Module (3690 Feq.)           703-1 Receiver Module (4230 Feq.)   | Rack 8         MANUFACTURER         HARMON                | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. E           150-095025-047 Rev. FAC   | COUNT           8           4           0           1           0           1           0           1           0           1           0           1           0           2           0           2           0           2           0           3                         |  |  |  |
| Rack 8  |   | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (3690 Feq.)           703-1 Receiver Module (3330 Feq.)           703-1 Receiver Module (4230 Feq.)           703-1 Receiver Module (4950 Feq.)           703-1 Receiver Module (4950 Feq.)           703-1 Receiver Module (4950 Feq.) | Rack 8         MANUFACTURER         HARMON         HARMON | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. FAC           150-095025-047 Rev. FAC   | COUNT           8           4           0           1           0           1           0           1           0           1           0           1           0           2           0           2           0           2           0           3           1             |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)   | Rack 8         MANUFACTURER         HARMON                | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. FAC           150-095025-047 Rev. E           812-097031-001  | COUNT           8           4           0           1           0           1           0           1           0           1           0           1           0           1           0           2           0           2           0           3           1           2 |  |  |  |
| Rack 8  |   | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4250 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>Chassis AF Track XMT TTT-2<br>AF Track Receiver Chassis  | Rack 8MANUFACTURERHARMONGetsgsGetsgs   | PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAC           150-095025-034 Rev. E           150-095025-047 Rev. FAC           150-097031-001           812-097031-034 | COUNT<br>8<br>4<br>0 1<br>1<br>0 1<br>1<br>0 4<br>1<br>0 4<br>1<br>0 2<br>0 2<br>0 2<br>0 2<br>0 3<br>1<br>1<br>2<br>2<br>2<br>2  |  |  |  |

#### **Brentwood Signal House Asset Inventory** Inventory Rack 9 COMPONENT MANUFACTURER PART NUMBER COUNT HLC Cabinet with Lexan Cover 226802-001 Getsgs 2 VLP 2 ACP-3 2 SSM 2 CCI 2 VSD 1 VGP I/O-12V 2 NV I/O 4 32 NVI 6 VGPI 16 2 **CLA Board** 1 RS-232 4 Modem 2 12V Power Supply 2

| Rack 10 |  |
|---------|--|

Item

Rack 9

Image

|                                    | Rack 10      |             |       |
|------------------------------------|--------------|-------------|-------|
| COMPONENT                          | MANUFACTURER | PART NUMBER | COUNT |
| Rotary Dials (Full Hemisphere-NEW) |              |             | 28    |
| Non-Vital Relays                   |              |             | 82    |

| Brentwood Signal House Asset Inventory |  |                       |                           |                  |       |  |  |
|--|--|-----------------------|---------------------------|------------------|-------|--|--|
| ltem                                   | Image  | Inventory             | ventory                   |                  |       |  |  |
| SCADA                                  |  |                       | SCADA                     |                  |       |  |  |
|  |  | COMPONENT             | MANUFACTURER              | PART NUMBER      | COUNT |  |  |
|  |  | Power Supply          | Schneider Electric        | TSXPSY1610       | 1     |  |  |
|  | the share is the                               | CPU                   | Schneider Electric        | TSP57203         | 1     |  |  |
|  |  | Memory Card           | Schneider Automation S.A. | TSXMRP064P       | 1     |  |  |
|  |  | Input Card            | Schneider Electric        | TSXDEY32D2K      | 3     |  |  |
|  | STREET BOARD                                   | Input Cord            | Schneider Electric        | TSXCDP203        | 6     |  |  |
|  |  | Output Card           | Schneider Electric        | TSXDSY32T2K      | 1     |  |  |
|  | ntwood Signal House Asset Inventory n Image DA | Output Cord           | Phoenix Contact           | 22 98 438        | 2     |  |  |
|  | ntwood Signal House Asset Inventory Image DA   | Input Card ABE7       | Schneider Electric        | ABE7H16C11       | 6     |  |  |
|  |  | Relays                | Phoenix Contact           | PLC-V8/FLK14/OUT | 4     |  |  |
|  |  | Power Supply          | Connect Power             | 992534 0024      | 1     |  |  |
|  |  | Battery Charger       | Connect Power             | 991628 0024      | 1     |  |  |
|  |  | Batteries             | CD Technologies           | UPS12-150MR      | 2     |  |  |
|  |  | Fiber Media Converter | GarrettCom Inc.           | CS14P-SST-48VDC  | 1     |  |  |
|  |  | Phone Line Extender   | Tcom                      |                  | 1     |  |  |
|  |  | Backplane             |                           |                  | 1     |  |  |
|  |  |                       |                           |                  |       |  |  |

| Brentwood Signal House Asset Inventory |  |  |              |                          |       |  |  |  |
|--|--|--|--------------|--------------------------|-------|--|--|--|
| ltem                                   | Image  | Inventory                                      |              |                          |       |  |  |  |
| Sides                                  |  | House Side-A                                   |              |                          |       |  |  |  |
|  |  | COMPONENT                                      | MANUFACTURER | PART NUMBER              | COUNT |  |  |  |
|  | Contraction of the local division of the loc | FIA-Keypad Controller                          | NAPCO        | RPC3000LCDe              | 1     |  |  |  |
|  |  | Switch Heater Push Button Box                  |              |                          | 1     |  |  |  |
|  | 1 10 10 10 10 10 10 10 10 10 10 10 10 10   | Нс   | ouse Side-B  |                          |       |  |  |  |
|  |  | Fire Intrusion Alarm                           | NAPCO        |                          | 1     |  |  |  |
|  |  | Battery  | Genesis      | NP7-1212V,7.0Ah          | 2     |  |  |  |
|  |  | Main Board                                     |              |                          | 1     |  |  |  |
|  |  | Relay Boards                                   |              |                          | 1     |  |  |  |
|  | NONLIN POWERSPOTENCE   | Expansion Modules                              |              |                          |       |  |  |  |
|  |  | House Side-C                                   |              |                          |       |  |  |  |
|  |  |  |              |                          |       |  |  |  |
|  |  |  |              |                          |       |  |  |  |
|  |  | House Side-D                                   |              |                          |       |  |  |  |
|  |  | CLCP 256 IO LED Driver Module                  | Getsgs       | Assy 227027-001 Rev. 806 | 1     |  |  |  |
|  |  | Power Supply CLCP 12VDC 20W                    | Getsgs       | 226609-200               | 1     |  |  |  |
|  |  | Double Throw Enclosed Switch 100A 240V AC/     |              |                          |       |  |  |  |
|  | 1  | 250V DC  | Square D     | 40275-953-01             | 1     |  |  |  |
|  |  | Heavy Duty Safety Switch 100A 240V AC/ 250V DC | Square D     | 40276-003-01             | 1     |  |  |  |
|  |  | Heavy Duty Safety Switch 100A 240V AC/ 250V DC | Square D     | 40276-003-02             | 1     |  |  |  |
|  |  | Automatic Transfer Switch                      | Kohler       | KCT-AFNA-0104S           | 1     |  |  |  |
|  |  | Hawk Event Recorder                            | Getsgs       | 251210-00001             | 1     |  |  |  |
|  |  | Surge Protector 18V AC 15A USSP                | US&S         | N451552-0507             | 2     |  |  |  |
|  |  | Current Monitor                                | NRS          | 16775-00                 | 2     |  |  |  |
|  |  | 12V Power Supply                               | NRS          | ERB-C 12/501C            | 2     |  |  |  |
|  |  | 2.25V Battery                                  | GNB          | 50A15                    | 12    |  |  |  |

# **Central West End Signal House**



Photo 3

Side D

| Central West End Signal House Asset Inventory |                   |                |                    |                      |                        |       |  |  |  |
|---|-------------------|----------------|--------------------|----------------------|------------------------|-------|--|--|--|
| ltem  | Image             | mage Inventory |                    |                      |                        |       |  |  |  |
| Rack 1  |                   |                | Rac                | k 1                  |                        |       |  |  |  |
|   |                   | COMPONENT      | MANUFACTURER       | PART NUMBER          | COUNT                  |       |  |  |  |
|   |                   | BPL-3          | HARMON             | 150-097031-013 REV.O | 1                      |       |  |  |  |
|   |                   | BPL-1          | EPC                |                      | 13                     |       |  |  |  |
|   |                   |                |                    |                      |                        |       |  |  |  |
| Rack 2  |                   | Rack 2         |                    |                      |                        |       |  |  |  |
|   |                   | C              | OMPONENT           | MANUFACTURER         | PART NUMBER            | COUNT |  |  |  |
|   |                   | SWITCH RECTIF  | IER 12AC/120DC SWI | TCH HARMON           | 250756-00              | 2     |  |  |  |
|   |                   |                | Vital Relay        | GRS                  | A62-429 (56001-926-01) | 8     |  |  |  |
|   |                   |                | Vital Relay        | GRS                  | A62-432 (56001-785-01) | 4     |  |  |  |
|   |                   |                | Vital Relay        | GRS                  | A62-122 (56001-921-07) | 6     |  |  |  |
|   |                   |                | Vital Relay        | ALSTOM               | 56001-934              | 1     |  |  |  |
|   | PET TO A STATE OF |                | Vital Relay        | GRS                  | A62-407 (56001-745-02) | 1     |  |  |  |
|   |                   |                | Vital Relay        | GRS                  | A62-360 (56001-774-01) | 1     |  |  |  |
|   |                   |                | Vital Relay        | SAFETRAN             | 400023                 | 1     |  |  |  |
|   |                   |                | Rectifier          | CDC                  | A53-541                | 1     |  |  |  |
|   |                   |                |                    |                      | 30733-1                | 1     |  |  |  |
|   |                   |                |                    |                      |                        |       |  |  |  |

| Central West End Signal House Asset Inventory |  |   |              |                        |       |  |  |  |
|---|--|---|--------------|------------------------|-------|--|--|--|
| ltem  | Image  | Inventory                               |              |                        |       |  |  |  |
| Rack 3  |  | Rack 3                                  |              |                        |       |  |  |  |
|   |  | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT |  |  |  |
|   | AT MANY THE REAL PROPERTY AND  | 520 Receiver Module (2970 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1     |  |  |  |
|   | ALL AND ALL AN | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1     |  |  |  |
|   |  | 520 Receiver Module (3870 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1     |  |  |  |
|   |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. B  | 2     |  |  |  |
|   |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 7     |  |  |  |
|   |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. F  | 1     |  |  |  |
|   |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B  | 4     |  |  |  |
|   |  | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | 540 Train Detection Coupler (3870 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | XMIT CHASSIS EPC 800-088019             |              | 800-088019-020         | 2     |  |  |  |
|   |  | RECEIVER CHASSIS                        | EPC          | 800-088019-030         | 1     |  |  |  |
| Pack 4  |  |   | Rack A       |                        | ]     |  |  |  |
| Nack 4  |  | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT |  |  |  |
|   |  | Vital Relav                             | GRS          | A62-122 (56001-921-07) | 1     |  |  |  |
|   |  | 520 Receiver Module (3510 Fea.)         | EPC          | 150-088019-080 Rev. B  | 2     |  |  |  |
|   | DITION   | 520 Receiver Module (2970 Fea.)         | EPC          | 150-088019-080 Rev. F  | 1     |  |  |  |
|   |  | 520 Receiver Module (4410 Fea.)         | EPC          | 150-088019-080 Rev. B  | 2     |  |  |  |
|   | Contraction and and a second s | 520 Receiver Module (3870 Feg.)         | EPC          | 150-088019-080 Rev. B  | 2     |  |  |  |
|   |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 8     |  |  |  |
|   |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B  | 4     |  |  |  |
|   |  | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   | NINITE AND   | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   |  | 540 Train Detection Coupler (3870 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |
|   | and the second se  | XMIT CHASSIS                            | EPC          | 800-088019-020         | 2     |  |  |  |
|   |  | RECEIVER CHASSIS                        | EPC          | 800-088019-030         | 1     |  |  |  |

| Central W | est End Signal House Asset Inventory  |   |   |   |  |  |  |  |
|-----------|---|---|---|---|--|--|--|--|
| ltem      | Image   | Inventory   | Inventory   |   |  |  |  |  |
| Rack 5    | Second Second   |   | Rack 5  |   |  |  |  |  |
|           | The second se | COMPONENT   | MANUFACTURER  | PART NUMBER   | COUNT  |  |  |  |
|           |   | XFMR Matching Rail Coupler  | EPC   | 800-088019-300  | 2  |  |  |  |
|           |   | XFMR Loop Matching  | EPC   | 800-088019-200  | 1  |  |  |  |
|           |   | AC Vain Relay   | GRS   | A62-486   | 2  |  |  |  |
|           |   | Bal Imp   |   | A3-117  | 2  |  |  |  |
|           |   | 3 OHM ADJUSTABLE Resistor   | GRS   | A3-207 (01246-1)  | 2  |  |  |  |
|           |   | 25 OHM ADJUSTABLE Resistor  |   | 56105-11  | 2  |  |  |  |
|           |   | XFMR  | GRS   | 31094-000 (A95 50)  | 1  |  |  |  |
|           |   | 510 Amplifier Module  | EPC   | 150-088019-050 Rev. B   | 3  |  |  |  |
|           |   | 530 CAB Coupler (2340 Feq.)   | EPC   | 150-088019-051 Rev. B   | 3  |  |  |  |
|           |   |   |   |   |  |  |  |  |
|           |   | XMIT CHASSIS  | EPC   | 800-088019-020  | 1  |  |  |  |
| Rack 6    |   | XMIT CHASSIS  | EPC<br>Rack 6   | 800-088019-020  | 1  |  |  |  |
| Rack 6    |   | XMIT CHASSIS  | EPC<br>Rack 6<br>MANUFACTURER   | 800-088019-020<br>PART NUMBER   | 1<br>COUNT   |  |  |  |
| Rack 6    |   | XMIT CHASSIS COMPONENT XFMR Matching Rail Coupler   | EPC<br>Rack 6<br>MANUFACTURER<br>EPC  | 800-088019-020<br>PART NUMBER<br>800-088019-300   | 1<br><b>COUNT</b><br>2   |  |  |  |
| Rack 6    |   | XMIT CHASSIS COMPONENT XFMR Matching Rail Coupler XFMR Loop Matching  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC   | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200   | 1<br><b>COUNT</b><br>2<br>1  |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom   | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486  | 1<br>COUNT<br>2<br>1<br>2  |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp   | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom   | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117  | 1<br>COUNT<br>2<br>1<br>2<br>2<br>2  |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS  | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)  | 1<br>COUNT<br>2<br>1<br>2<br>2<br>2<br>2   |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor<br>25 OHM ADJUSTABLE Resistor  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS<br>Dale                                    | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11  | 1<br>COUNT<br>2<br>1<br>2<br>2<br>2<br>2<br>2<br>2                                 |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor<br>25 OHM ADJUSTABLE Resistor<br>XFMR  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS<br>Dale<br>GRS                             | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)  | 1<br><b>COUNT</b><br>2<br>1<br>2<br>2<br>2<br>2<br>1                               |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor<br>25 OHM ADJUSTABLE Resistor<br>XFMR<br>510 Amplifier Module  | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS<br>Dale<br>GRS<br>EPC                      | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)<br>150-088019-050 Rev. B   | 1<br><b>COUNT</b><br>2<br>1<br>2<br>2<br>2<br>2<br>1<br>2<br>2<br>1<br>2           |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor<br>25 OHM ADJUSTABLE Resistor<br>XFMR<br>510 Amplifier Module<br>510 Amplifier Module                                | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS<br>Dale<br>GRS<br>EPC<br>EPC<br>EPC        | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)<br>150-088019-050 Rev. B<br>150-088019-050 Rev. F                          | 1<br><b>COUNT</b><br>2<br>1<br>2<br>2<br>2<br>2<br>1<br>2<br>1<br>2<br>1<br>2<br>1 |  |  |  |
| Rack 6    |   | XMIT CHASSIS<br>COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM ADJUSTABLE Resistor<br>25 OHM ADJUSTABLE Resistor<br>XFMR<br>510 Amplifier Module<br>510 Amplifier Module<br>530 CAB Coupler (2340 Feq.) | EPC<br>Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>Alstom<br>GRS<br>Dale<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC | 800-088019-020<br>PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)<br>150-088019-050 Rev. B<br>150-088019-050 Rev. F<br>150-088019-051 Rev. B | 1<br>COUNT<br>2<br>1<br>2<br>2<br>2<br>2<br>1<br>2<br>1<br>3                       |  |  |  |

| Central West End Signal House Asset Inventory |  |   |              |                       |       |  |  |
|---|--|---|--------------|-----------------------|-------|--|--|
| ltem  | Image  | Inventory                               |              |                       |       |  |  |
| Rack 7  |  | Rack 7                                  |              |                       |       |  |  |
|   | A LO REMARKANCE AND  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT |  |  |
|   | THE MERSEN STOR  | Vital Relay                             | SafeTran     | 400900                | 4     |  |  |
|   |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |  |  |
|   | AND DEPENDENT OF THE   | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. B | 3     |  |  |
|   |  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080 Rev. B | 2     |  |  |
|   | managan (  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 6     |  |  |
|   |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. F | 1     |  |  |
|   |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4     |  |  |
|   |  | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   | A DESCRIPTION OF A DESC | 540 Train Detection Coupler (3330Feq.)  | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   |  | 540 Train Detection Coupler (4950 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   |  | XMIT CHASSIS                            | EPC          | 800-088019-020        | 2     |  |  |
|   | Contraction of Contra | RECEIVER CHASSIS                        | EPC          | 800-088019-030        | 1     |  |  |
|   |  |   | <b>D</b> 1 0 |                       |       |  |  |
| каск в  |  | COMPONENT                               |              |                       | COUNT |  |  |
|   |  | COMPONENT                               | WANUFACTURER |                       | COUNT |  |  |
|   | and a second secon   |   | GRS          | A62-122 56001-921-07  | 2     |  |  |
|   | State Concession -   | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. F | 1     |  |  |
|   |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. F | 1     |  |  |
|   |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |  |  |
|   |  | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |  |  |
|   |  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080 Rev. B | 2     |  |  |
|   | and a second sec | 520 Receiver Module (4230 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |  |  |
|   |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | /     |  |  |
|   |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4     |  |  |
|   |  | 540 Irain Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   |  | 540 Irain Detection Coupler (4950Feq.)  | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |
|   |  | XMIT CHASSIS                            | EPC          | 800-088019-020        | 2     |  |  |
|   |  | RECEIVER CHASSIS                        | EPC          | 800-088019-030        | 1     |  |  |

| Central West End Signal House Asset Inventory |   |                          |            |              |              |       |  |  |
|---|---|--------------------------|------------|--------------|--------------|-------|--|--|
| ltem  | Image   | Inventory                |            |              |              |       |  |  |
| Rack 9  |   | Rack 9                   |            |              |              |       |  |  |
| Nuck 5  | ····· · · · ·   | COMPONEN                 | г          | MANUFACTURER | PART NUMBE   |       |  |  |
|   | · · · · · · · · · · · · · · · · · · ·   | Rotary Dials (Full Hemis | phere-OLD) |              |              | 22    |  |  |
|   | *******   | Non-Vital Rela           | ys         |              |              | 72    |  |  |
|   |   |                          |            |              |              |       |  |  |
| Rack 10                                       |   |                          | R          | ack 10       |              |       |  |  |
|   |   | COMPONENT                | MANUFACT   | URER PART I  | NUMBER       | COUNT |  |  |
|   |   | Vital Relay              | GRS        | A62-122 (5   | 6001-921-07) | 3     |  |  |
|   |   | VLP                      |            |              |              | 2     |  |  |
|   | THE R. O. D.  | ACP-2                    |            |              |              | 2     |  |  |
|   |   | SSM                      |            |              |              | 2     |  |  |
|   |   | CCI                      |            |              |              | 2     |  |  |
|   | THINK IS IN   | VSD                      |            |              |              | 1     |  |  |
|   | The second se | VGP I/O                  |            |              |              | 3     |  |  |
|   | d Warman  | VGP I/O-12V              |            |              |              | 1     |  |  |
|   |   | NV I/O                   |            |              |              | 5     |  |  |
|   |   | 32 NVI                   |            |              |              | 2     |  |  |
|   | 2 Deal 1  | VGPI 16                  | l la m     |              | 0507         | 4     |  |  |
|   |   | Surge Protector BSA-4    | Harmon     | 1 25         | 0597         | 1     |  |  |
|   |   | KS-232                   |            |              |              | 2     |  |  |
|   |   |                          |            |              |              | 2     |  |  |
|   |   | IZV POwer Suppry         |            |              |              | ۷     |  |  |
|   |   | ΛΗΙ Ο ΟΗΔΟΖΙΟ            | Harmon     | 2266         | 07-003       | 2     |  |  |

| Central West End Signal House Asset Inventory |  |                 |                              |                  |       |  |  |  |
|---|--|-----------------|------------------------------|------------------|-------|--|--|--|
| ltem  | Image  | Inventory       | ventory                      |                  |       |  |  |  |
| SCADA   | AND THE REAL PROPERTY IN   |                 | SCADA                        |                  |       |  |  |  |
|   | 1911 HH 4  | COMPONENT       | MANUFACTURER                 | PART NUMBER      | COUNT |  |  |  |
|   | The second of the  | Modem           | Telenetics                   | V3600            | 1     |  |  |  |
|   |  | Power Supply    | Modicon                      | TSXPSY1610       | 1     |  |  |  |
|   | No and the second secon | CPU             | Modicon                      | TSXP57203        | 1     |  |  |  |
|   | The second se  | RS-232          |                              |                  | 1     |  |  |  |
|   |  | Memory Card     |                              |                  | 1     |  |  |  |
|   | R.R. VIEWERSTER  | Input Card      | Modicon                      | TSX DEY32D2K     | 3     |  |  |  |
|   |  | Input Cord      |                              |                  | 6     |  |  |  |
|   | TOTAL AND A DESCRIPTION OF THE PARTY OF THE  | Output Card     | Modicon                      | TSXDSY32T2K      | 1     |  |  |  |
|   | AND A DESCRIPTION OF A  | Output Cord     |                              | 22 98 438        | 2     |  |  |  |
|   | ALL AND A DESCRIPTION OF A DESCRIPTION O | Input Card ABE7 |                              |                  | 6     |  |  |  |
|   |  | Relays          | Phoenix Contact              | PLC-V8/FLK14/OUT | 4     |  |  |  |
|   |  | Power Supply    | Connect Power                | 992534 0024      | 1     |  |  |  |
|   |  | Battery Charger | Connect Power                | 991628 0024      | 1     |  |  |  |
|   |  | Batteries       | Technologies Power Solutions | UPS12-140FR      | 2     |  |  |  |
|   |  | BACKPLANE       | SCHNEIDER ELECTRIC           | TSXRKY12EX       | 1     |  |  |  |

| Central West End Signal House Asset Inventory |  |   |                  |                 |   |  |  |  |
|---|--|---|------------------|-----------------|---|--|--|--|
| ltem  | Image                                    | Inventory                                     |                  |                 |   |  |  |  |
| Sides   |  | House Side-A                                  |                  |                 |   |  |  |  |
|   |  | COMPONENT                                     | PART NUMBER      | COUNT           |   |  |  |  |
|   |  | Switch Heater Push Button Box                 |                  |                 | 1 |  |  |  |
|   |  | PUSH BUTTON CONTROL BOX                       |                  |                 | 1 |  |  |  |
|   |  | House   | Side-B           |                 |   |  |  |  |
|   |  | Diode Board (Control Panel)                   | Harmon           |                 | 1 |  |  |  |
|   | a la | Battery                                       | PowerSafe        | 12V 155FS       | 1 |  |  |  |
|   |  | 28V Power Supply                              | Lamarche         | A29-60-24V-A1   | 1 |  |  |  |
|   | CONTRACTOR OF THE OWNER                  | 28V Power Supply                              | Lamarche         | A29-20-24V-A1   | 1 |  |  |  |
|   |  | 12V Power Supply                              | Lamarche         | A12B-30-12V-A1  | 1 |  |  |  |
|   | - manual and a man                       | Heavy Duty Double Throw Safety Switch 100 A   |                  |                 |   |  |  |  |
|   |  | 240V/250DC                                    | Siemens          |                 | 1 |  |  |  |
|   |  | General Duty Safety Switch 100A 240V AC/250V  |                  |                 |   |  |  |  |
|   |  | DC  | Square D         | 40276-004-02    | 1 |  |  |  |
|   |  | Automatic Transfer Switch                     | Kohler           | KSS-DFNC-0100S  | 1 |  |  |  |
|   |  | House   | Side-C           |                 |   |  |  |  |
|   | • •                                      | Heavy Duty Safety Switch 100A 240V AC/250V DC | Square D         | 40276-003-02    | 1 |  |  |  |
|   |  | 12V Power Supply                              | NRS              | ERB/C 12/501    | 1 |  |  |  |
|   |  | TRANSFORMER                                   | Harmon           | MLT-50          | 2 |  |  |  |
|   |  | SURGE SUPPRESSOR                              | EATON            | PTX160-1S101    | 1 |  |  |  |
|   |  | 2.25 V BATTERY                                | GNB              |                 | 8 |  |  |  |
|   |  | House Side-D (Fir                             | e Control Panel) |                 |   |  |  |  |
|   |  | Keypad Raydioncs D360TD 2                     |                  |                 |   |  |  |  |
|   | Omega Alarm Raydioncs D8112              |   |                  |                 |   |  |  |  |
|   |  | Modem   |                  | D8129           | 1 |  |  |  |
|   |  | Battery                                       |                  | NP7-1212V,7.0Ah | 1 |  |  |  |

# **Debaliviere Signal House**



| Debalivi | ere Signal House Asset Inventory |                   |                |                  |               |           |       |  |
|----------|----------------------------------|-------------------|----------------|------------------|---------------|-----------|-------|--|
| ltem     | Image                            | Inventory         |                |                  |               |           |       |  |
| Rack 1   |                                  |                   |                | Rack 1           |               |           |       |  |
| NACK 1   |                                  | СОМРО             | NENT           | MANUFACTURER     | PART NUM      | IBER      | COUNT |  |
|          |                                  | BPL               | -3             | Harmon           | 150-097031-01 | .3 Rev. O | 4     |  |
|          |                                  | ISOLATED LOOP CIR | CUIT PROTECTOR |                  | PC642C-03     | 36X       | 3     |  |
|          |                                  |                   |                |                  |               |           |       |  |
| Rack 2   | The Target                       |                   | Rac            | k 2              |               |           |       |  |
|          |                                  | COMPONENT         | MANUFACTURER   | PART NUMB        | ER COUNT      | Т         |       |  |
|          |                                  | Vital Relay       | Alstom         | A62-407 (56001-7 | 45-02) 1      |           |       |  |
|          |                                  | Vital Relay       | Alstom         | A62-122 (56001-9 | 921-07) 8     | _         |       |  |
|          |                                  | XFMR              | Alstom         | 31094-000-01 F   | ev. F 1       |           |       |  |
|          |                                  | 28V Power Supply  | Керсо          | PRR 28-38M24     | 787 3         |           |       |  |
|          |                                  | 28V Power Supply  | Керсо          | PRM 28-17-24     | 810 1         |           |       |  |
|          |                                  | Rectifier         | Alstom         | A53-541          | 1             |           |       |  |
|          |                                  |                   |                |                  |               |           |       |  |

| Debalivi | ere Signal House Asset Inventory  |                      |          |          |               |                  |       |  |
|----------|---|----------------------|----------|----------|---------------|------------------|-------|--|
| ltem     | Image   | Inventory            |          |          |               |                  |       |  |
| Rack 3   |   |                      |          | Rack 3   |               |                  |       |  |
|          |   | COMPONENT            | MANUFAC  | TURER P/ | ART NUMBER    | COUNT            |       |  |
|          |   | 28V Power Supply     | Керсс    | D PRF    | R 28-38M24787 | 3                |       |  |
|          | Time in   | 28V Power Supply     | Керсс    | D PRI    | M 28-17-24810 | 1                |       |  |
|          |   |                      |          |          |               |                  |       |  |
| Rack 4   |   |                      |          | Rack     | k 4           |                  |       |  |
|          |   | COMPONE              | NT       | MANUFACT | URER PA       | RT NUMBER        | COUNT |  |
|          | NAME AND ADDRESS OF TAXABLE PARTY.  | Switch Rectifier 120 | AC/120DC |          | 2             | 50756-000        | 2     |  |
|          |   | Vital Relay          | /        | Alstom   | A62-42        | 9 (56001-926-01) | 4     |  |
|          | The second se | Vital Relay          | /        | Alstom   | A62-43        | 2 (56001-785-01) | 2     |  |
|          |   | Vital Relay          | /        | Alstom   | A62-12.       | 2 (56001-921-07) | 2     |  |
|          |   |                      | ý        | AISTOM   | 1             | A02-247          | 0     |  |
|          |   |                      |          |          |               |                  |       |  |

|        | iere Signal House Asset Inventory  |  |  |  |  |
|--------|--|--|--|--|--|
| ltem   | Image  | Inventory  |  |  |  |
| Rack 5 | and the second   |  | Rack 5   |  |  |
|        | AND IN COLUMN TWO IS NOT   | COMPONENT  | MANUFACTURER   | PART NUMBER  | COUNT                                      |
|        | The second secon | XFMR Loop Matching   | EPC  | 800-088019-200   | 2  |
|        | State of the state | AC Vain Relay  | Alstom   | A62-0486   | 2  |
|        |  | Bal Imp  | Alstom   | A3-117   | 2  |
|        |  | 3 ohm Resistor   | GRS  | A3-207 (01246-1)   | 2  |
|        |  | 25 ohm Resistor  |  | 56105-11   | 2  |
|        |  | XFMR   | Alstom   | 31094-000 (A95 50)   | 2  |
|        | Anna   | 700 Amplifier Module   | Harmon   | 150-094017-022 Rev. D  | 4  |
|        |  | 701-2 CAB Coupler (2340 Feq.)  | Harmon   | 150-097031-010 Rev. O  | 2  |
|        | A CONTRACTOR   | 702-1 Track Coupler (3870 Feq.)  | Harmon   | 150-095025-034 Rev. B  | 1  |
|        |  | 702-1 Track Coupler (4410 Feq.)  | Harmon   | 150-095025-034 Rev. CAO  | 1  |
|        | all the second second  | Chassis AF Track XMT TTT-2   | Getsgs   | 812-097031-001   | 1  |
| Rack 6 |  |  |  |  |  |
|        |  |  | Rack 6   |  |  |
|        |  | COMPONENT  | Rack 6<br>MANUFACTURER   | PART NUMBER  | COUNT                                      |
|        |  | COMPONENT<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER<br>Harmon   | <b>PART NUMBER</b><br>150-094017-022 Rev. D  | <b>COUNT</b><br>15                         |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)   | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon   | <b>PART NUMBER</b><br>150-094017-022 Rev. D<br>150-097031-010 Rev. O   | <b>COUNT</b><br>15<br>10                   |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)  | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon                               | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO   | <b>COUNT</b><br>15<br>10<br>1              |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)   | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon                               | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO  | COUNT<br>15<br>10<br>1<br>1                |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (4230 Feq.)  | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon                     | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO   | COUNT<br>15<br>10<br>1<br>1<br>2           |
|        |  | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (3510 Feq.)           702-1 Track Coupler (4410 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.) | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon           | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO                  | COUNT<br>15<br>10<br>1<br>1<br>2<br>1      |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>Chassis AF Track XMT TTT-2             | Rack 6<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Getsgs | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>812097031-001 | COUNT<br>15<br>10<br>1<br>1<br>2<br>1<br>4 |

| 1      | iere Signal House Asset Inventory  |   |  |  |   |
|--------|--|---|--|--|---|
| ltem   | Image  | Inventory   |  |  |   |
| Rack 7 | States D   |   | Rack 7   |  |   |
|        | THE PARTY OF THE P | COMPONENT   | MANUFACTURER   | PART NUMBER  | COUNT   |
|        |  | 700 Amplifier Module  | Harmon   | 150-094017-022 Rev. D  | 15  |
|        |  | 701-2 CAB Coupler (2340 Feq.)   | Harmon   | 150-097031-010 Rev. O  | 9   |
|        | C. Martine State of State  | 702-1 Track Coupler (3510 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        | And the second second second second  | 702-1 Track Coupler (2970 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        |  | 702-1 Track Coupler (3510 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        |  | 702-1 Track Coupler (3870 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        |  | 702-1 Track Coupler (4410 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        | The second second  | 702-1 Track Coupler (3510 Feq.)   | Harmon   | 150-095025-034 Rev. CAO  | 1   |
|        |  | Chassis AF Track XMT TTT-2  | Getsgs   | 812-097031-001   | 4   |
| Rack 8 |  |   | Rack 8   |  |   |
|        |  |   |  |  |   |
|        |  | COMPONENT   | MANUFACTURER   | PART NUMBER  | COUNT   |
|        |  | COMPONENT<br>700 Amplifier Module   | MANUFACTURER<br>Harmon   | <b>PART NUMBER</b><br>150-094017-022 Rev. D  | <b>COUNT</b> 16                                     |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)  | MANUFACTURER<br>Harmon<br>Harmon   | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O  | <b>COUNT</b><br>16<br>9                             |
|        |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)   | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon                               | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO   | <b>COUNT</b><br>16<br>9<br>1                        |
|        |  | COMPONENT700 Amplifier Module701-2 CAB Coupler (2340 Feq.)702-1 Track Coupler (4230 Feq.)702-1 Track Coupler (3690 Feq.)  | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon                     | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B  | COUNT<br>16<br>9<br>1<br>1                          |
|        |  | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (4950 Feq.)  | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon                     | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO   | COUNT<br>16<br>9<br>1<br>1<br>2                     |
|        |  | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (4950 Feq.)           702-1 Track Coupler (3330 Feq.)  | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon           | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO  | COUNT<br>16<br>9<br>1<br>1<br>2<br>1                |
|        |  | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (4950 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (3690 Feq.)                                      | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO                   | COUNT<br>16<br>9<br>1<br>1<br>2<br>1<br>2<br>2      |
|        |  | COMPONENT           700 Amplifier Module           701-2 CAB Coupler (2340 Feq.)           702-1 Track Coupler (4230 Feq.)           702-1 Track Coupler (3690 Feq.)           702-1 Track Coupler (4950 Feq.)           702-1 Track Coupler (3330 Feq.)           702-1 Track Coupler (3690 Feq.)           Chassis AF Track XMT TTT-2 | MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Getsgs | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. CAO<br>812-097031-001 | COUNT<br>16<br>9<br>1<br>1<br>2<br>1<br>2<br>2<br>4 |

| Debally  | iere Signal House Asset Inventory       |   |   |  |   |
|----------|---|---|---|--|---|
| ltem     | Image                                   | Inventory   |   |  |   |
| Rack 9   |   |   | Rack 9  |  |   |
| naen s   |   | COMPONENT   | MANUFACTURER  | PART NUMBER  | COUNT   |
|          |   | 700 Amplifier Module  | Harmon  | 150-094017-022 Rev. D  | 3   |
|          |   | 701-2 CAB Coupler (2340 Feq.)   | Harmon  | 150-097031-010 Rev. O  | 2   |
|          | <b>1 1 1 1 1 1 1 1 1 1</b>              | 702-1 Track Coupler (4950 Feq.)   | Harmon  | 150-095025-034 Rev. CAO  | 1   |
|          | THE REAL PROPERTY AND                   | 703-1 Receiver Module (4410 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 2   |
|          |   | 703-1 Receiver Module (3510 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 3   |
|          |   | 703-1 Receiver Module (2970 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 2   |
|          |   | 703-1 Receiver Module (3690 Feq.)   | Harmon  | 150-095025-047 Rev. E  | 1   |
|          | ALL | 703-1 Receiver Module (3330 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 1   |
|          |   | 703-1 Receiver Module (3690 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 1   |
|          |   | 703-1 Receiver Module (3870 Feq.)   | Harmon  | 150-095025-047 Rev. FAO  | 1   |
|          |   | Chassis AF Track XMT TTT-2  | Getsgs  | 812-097031-001   | 1   |
|          |   |   |   |  |   |
|          |   | AF Track Receiver Chassis   | Getsgs  | 812-097031-034   | 3   |
| Rack     |   | AF Track Receiver Chassis   | Getsgs  | 812-097031-034   | 3   |
| ack      |   | AF Track Receiver Chassis   | Getsgs<br>Rack 10<br>MANUFACTURER   | 812-097031-034   | 3<br>   |
| ıck      |   | AF Track Receiver Chassis  COMPONENT 700 Amplifier Module   | Getsgs Rack 10 MANUFACTURER Harmon  | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D   | 3<br>COUN<br>2  |
| ack<br>) |   | AF Track Receiver Chassis  COMPONENT  700 Amplifier Module 701-2 CAB Coupler (2340 Feg.)  | Getsgs Rack 10 MANUFACTURER Harmon Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O  | 3<br>COUN<br>2<br>1   |
| nck<br>) |   | AF Track Receiver Chassis COMPONENT 700 Amplifier Module 701-2 CAB Coupler (2340 Feq.) 702-1 Track Coupler (4230 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO   | 3<br>COUN<br>2<br>1<br>1  |
| ck       |   | AF Track Receiver Chassis COMPONENT 700 Amplifier Module 701-2 CAB Coupler (2340 Feq.) 702-1 Track Coupler (4230 Feq.) 703-1 Receiver Module (4410 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO  | 3<br>COUN<br>2<br>1<br>1<br>2   |
| ack<br>) |   | AF Track Receiver Chassis COMPONENT 700 Amplifier Module 701-2 CAB Coupler (2340 Feq.) 702-1 Track Coupler (4230 Feq.) 703-1 Receiver Module (4410 Feq.) 703-1 Receiver Module (3510 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO   | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>2<br>1                               |
| ick<br>) |   | AF Track Receiver Chassis<br>COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>703-1 Receiver Module (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (2970 Feq.)   | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO  | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>1<br>1<br>1                          |
| ck       |   | AF Track Receiver Chassis COMPONENT TOO Amplifier Module TO1-2 CAB Coupler (2340 Feq.) TO2-1 Track Coupler (4230 Feq.) TO3-1 Receiver Module (4410 Feq.) TO3-1 Receiver Module (3510 Feq.) TO3-1 Receiver Module (2970 Feq.) TO3-1 Receiver Module (3690 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon   | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO  | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>3                                    |
| k        |   | AF Track Receiver Chassis COMPONENT TOO Amplifier Module TO1-2 CAB Coupler (2340 Feq.) TO2-1 Track Coupler (4230 Feq.) TO3-1 Receiver Module (3510 Feq.) TO3-1 Receiver Module (2970 Feq.) TO3-1 Receiver Module (2970 Feq.) TO3-1 Receiver Module (3690 Feq.) TO3-1 Receiver Module (4950 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon                               | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO   | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>3<br>3<br>3                          |
| k        |   | AF Track Receiver Chassis COMPONENT COMPONENT 700 Amplifier Module 701-2 CAB Coupler (2340 Feq.) 702-1 Track Coupler (4230 Feq.) 703-1 Receiver Module (3510 Feq.) 703-1 Receiver Module (3510 Feq.) 703-1 Receiver Module (2970 Feq.) 703-1 Receiver Module (3690 Feq.) 703-1 Receiver Module (3690 Feq.) 703-1 Receiver Module (3300 Feq.) 703-1 Receiver Module (3330 Feq.)  | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon                     | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO  | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>3<br>3<br>3<br>1                     |
| ck       |   | AF Track Receiver Chassis COMPONENT TOO Amplifier Module TO1-2 CAB Coupler (2340 Feq.) TO2-1 Track Coupler (4230 Feq.) TO3-1 Receiver Module (4410 Feq.) TO3-1 Receiver Module (2970 Feq.) TO3-1 Receiver Module (2970 Feq.) TO3-1 Receiver Module (3690 Feq.) TO3-1 Receiver Module (3690 Feq.) TO3-1 Receiver Module (3300 Feq.) TO3-1 Receiver Module (4230 Feq.) TO3-1 Receiver Module (4230 Feq.)                                      | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon | 812-097031-034<br>PART NUMBER<br>150-094017-022 Rev. D<br>150-095025-034 Rev. CAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO<br>150-095025-047 Rev. FAO  | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>3<br>3<br>1<br>3<br>3<br>1<br>3      |
| ack<br>O |   | AF Track Receiver Chassis COMPONENT COMPONENT 700 Amplifier Module 701-2 CAB Coupler (2340 Feq.) 702-1 Track Coupler (4230 Feq.) 703-1 Receiver Module (4410 Feq.) 703-1 Receiver Module (3510 Feq.) 703-1 Receiver Module (3690 Feq.) 703-1 Receiver Module (3690 Feq.) 703-1 Receiver Module (3690 Feq.) 703-1 Receiver Module (3300 Feq.) 703-1 Receiver Module (3330 Feq.) 703-1 Receiver Module (4230 Feq.) Chassis AF Track XMT TTT-2 | Getsgs<br>Rack 10<br>MANUFACTURER<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Harmon<br>Getsgs           | B12-097031-034           PART NUMBER           150-094017-022 Rev. D           150-097031-010 Rev. O           150-095025-034 Rev. CAO           150-095025-047 Rev. FAO           150-095025-047 Rev. FAO | 3<br>COUN<br>2<br>1<br>1<br>2<br>1<br>1<br>3<br>3<br>1<br>3<br>1<br>3<br>1<br>1 |

| Debaliviere Signal House Asset Inventory |  |                              |              |             |       |  |  |
|--|--|------------------------------|--------------|-------------|-------|--|--|
| ltem                                     | Image  | Inventory                    |              |             |       |  |  |
| Rack                                     |  | Rack 11                      |              |             |       |  |  |
| 11                                       | The second second  | COMPONENT                    | MANUFACTURER | PART NUMBER | COUNT |  |  |
| 11                                       | Contraction of the local division of the loc | HLC Cabinet with Lexan Cover | Getsgs       | 226802-001  | 2     |  |  |
|  | The second s   | VLP                          | 0            |             | 2     |  |  |
|  |  | ACP-3                        |              |             | 2     |  |  |
|  |  | SSM                          |              |             | 2     |  |  |
|  |  | CCI                          |              |             | 2     |  |  |
|  | Comming to the second second second  | VSD                          |              |             | 2     |  |  |
|  |  | VGP I/O-12V                  |              |             | 5     |  |  |
|  |  | NV I/O                       |              |             | 1     |  |  |
|  |  | 32 NVI                       |              |             | 6     |  |  |
|  | I  | VGPI 16                      |              |             | 2     |  |  |
|  |  | CLA Board                    |              |             | 1     |  |  |
|  |  | RS-232                       |              |             | 5     |  |  |
|  |  | Modem                        |              |             | 1     |  |  |
|  |  | 12V Power Supply             |              |             | 2     |  |  |
| Rack                                     |  |                              | Rack 12      |             |       |  |  |
| 12                                       |  | COMPONENT                    | MANUFACTURER | PART NUMBER | COUNT |  |  |
| 12                                       |  | HLC Cabinet with Lexan Cover | Getsgs       | 226802-001  | 2     |  |  |
|  |  | VLP                          | -            |             | 2     |  |  |
|  |  | ACP-3                        |              |             | 2     |  |  |
|  |  | SSM                          |              |             | 2     |  |  |
|  |  | CCI                          |              |             | 1     |  |  |
|  |  | VSD                          |              |             | 1     |  |  |
|  |  | VGP I/O-12V                  |              |             | 6     |  |  |
|  |  | NV I/O                       |              |             | 5     |  |  |
|  |  | RS-232                       |              |             | 3     |  |  |
|  |  | Modem                        |              |             | 2     |  |  |
|  | 62.8   | 12V Power Supply             |              |             | 2     |  |  |
|  |  |                              |              |             |       |  |  |

| Debalivi | ere Signal House Asset Inventory   |                                    |              |             |        |  |  |  |
|----------|--|------------------------------------|--------------|-------------|--------|--|--|--|
| ltem     | Image  | Inventory                          |              |             |        |  |  |  |
| Rack     |  | Rack 13                            |              |             |        |  |  |  |
| 13       |  | COMPONENT                          | MANUFACTURER | PART NUMBER | COUNT  |  |  |  |
|          |  | Rotary Dials (Full Hemisphere-NEW) |              |             | 19     |  |  |  |
|          |  | Non-Vital Relays                   |              |             | 75     |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          | Torn   |                                    |              |             |        |  |  |  |
|          | The second state of plantane stranger  |                                    |              |             |        |  |  |  |
|          | I designation of the second se |                                    |              |             |        |  |  |  |
|          | A CONTRACTOR OF  |                                    |              |             |        |  |  |  |
|          | Chiefe and the   |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          | and the second se  |                                    |              |             |        |  |  |  |
| D l      | ADD THE ADD IN THE ADD INTERNAL ADD IN THE ADD INTERNAL AD |                                    | Deals 14     |             |        |  |  |  |
| каск     | THEFT AND A DESCRIPTION OF A   | COMPONENT                          |              | PART NUMBER | COLINT |  |  |  |
| 14       | The second second second second second   | Rotary Dials (Full Hemisphere-NFW) |              |             | 14     |  |  |  |
|          | Constant and a second second   | Non-Vital Relays                   |              |             | 50     |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          | D  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          | CONTRACTOR CONTRACTOR  |                                    |              |             |        |  |  |  |
|          | Matching and a state of the state  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          | and and a second second  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |
|          |  |                                    |              |             |        |  |  |  |

| Debalivi | ere Signal House Asset Inventory |                           |                                    |                  |       |  |  |
|----------|----------------------------------|---------------------------|------------------------------------|------------------|-------|--|--|
| ltem     | Image                            | Inventory                 |                                    |                  |       |  |  |
| SCADA    |                                  | SCADA                     |                                    |                  |       |  |  |
|          |                                  | COMPONENT                 | COMPONENT MANUFACTURER PART NUMBER |                  | COUNT |  |  |
|          |                                  | Power Supply              | Schneider Electric                 | TSXPSY1610       | 1     |  |  |
|          | CPU                              | Schneider Electric        | TSP57203                           | 1                |       |  |  |
|          | Memory Card                      | Schneider Automation S.A. | TSXMRP064P                         | 1                |       |  |  |
|          |                                  | Input Card                | Schneider Electric                 | TSXDEY32D2K      | 4     |  |  |
|          | HEADING A                        | Input Cord                | Schneider Electric                 | TSXCDP203        | 8     |  |  |
|          |                                  | Output Card               | Schneider Electric                 | TSXDSY32T2K      | 2     |  |  |
|          |                                  | Output Cord               | Phoenix Contact                    | 22 98 438        | 4     |  |  |
|          |                                  | Input Card ABE7           | Schneider Electric                 | ABE7H16C11       | 8     |  |  |
|          |                                  | Relays                    | Phoenix Contact                    | PLC-V8/FLK14/OUT | 8     |  |  |
|          |                                  | Power Supply              | Connect Power                      | 992534 0024      | 1     |  |  |
|          |                                  | Battery Charger           | Connect Power                      | 991628 0024      | 1     |  |  |
|          |                                  | Batteries                 | CD Technologies                    | UPS12-150MR      | 2     |  |  |
|          |                                  | Fiber Media Converter     | GarrettCom Inc.                    | CS14P-SST-48VDC  | 1     |  |  |
|          |                                  | Phone Line Extender       | Tcom                               |                  | 1     |  |  |
|          |                                  | Backplane                 |                                    |                  | 1     |  |  |

| Debalivi | ere Signal House Asset Inventory |                               |              |                 |       |  |  |  |
|----------|----------------------------------|-------------------------------|--------------|-----------------|-------|--|--|--|
| ltem     | Image                            | Inventory                     |              |                 |       |  |  |  |
| Sides    | 7. / /                           |                               | House Side-A |                 |       |  |  |  |
| Diaco    |                                  | COMPONENT                     | MANUFACTURER | PART NUMBER     | COUNT |  |  |  |
|          | _                                | FIA-Keypad Controller         | NAPCO        | RPC3000LCDe     | 1     |  |  |  |
|          |                                  | Switch Heater Push Button Box |              |                 | 1     |  |  |  |
|          |                                  |                               |              |                 |       |  |  |  |
|          | House Side-B                     |                               |              |                 |       |  |  |  |
|          |                                  | Fire Intrusion Alarm          | NAPCO        |                 | 1     |  |  |  |
|          | 1                                | Battery                       | Genesis      | NP7-1212V,7.0Ah | 2     |  |  |  |
|          |                                  | Main Board                    |              |                 | 1     |  |  |  |
|          |                                  | Relay Boards                  |              |                 | 1     |  |  |  |
|          | and an orally who was a first    | Expansion Modules             |              |                 | 1     |  |  |  |
|          | LAUTER HANNE                     |                               | House Side-C |                 |       |  |  |  |
|          | summer annue statut antitute itt | 87.                           |              |                 |       |  |  |  |
|          | A                                | 12                            |              |                 |       |  |  |  |
|          |                                  | 1                             | House Side-D |                 | 1     |  |  |  |
|          |                                  |                               | Catal        | Assy 22/02/-001 | 4     |  |  |  |
|          |                                  | CLCP 256 TO LED DRIVER MOdule | Getsgs       | Rev. 806        | 1     |  |  |  |
|          |                                  | Power Supply CLCP 12VDC 2000  | Getsgs       | 226609-200      | 1     |  |  |  |
|          |                                  | 100A 240V AC/ 250V DC         | Square D     | 40275-953-01    | 1     |  |  |  |
|          |                                  | Heavy Duty Safety Switch 100A |              |                 |       |  |  |  |
|          |                                  | 240V AC/ 250V DC              | Square D     | 40276-003-01    | 2     |  |  |  |
|          |                                  | Hawk Event Recorder           | Getsgs       | 251210-00001    | 2     |  |  |  |
|          |                                  | Surge Protector 18V AC 15A    |              |                 |       |  |  |  |
|          |                                  | USSP                          | US&S         | N451552-0507    | 4     |  |  |  |
|          |                                  | Current Monitor               | NRS          | 16775-00        | 2     |  |  |  |
|          |                                  | 12V Power Supply              | NRS          | ERB-C 12/501C   | 2     |  |  |  |
|          |                                  | 2.25V Battery                 | GNB          | 50A15           | 12    |  |  |  |

# **Emerson Park A Signal House**



| Emerso | n Park A Signal House Asset Inventory  | ,                 |              |                      |               |          |       |  |
|--------|--|-------------------|--------------|----------------------|---------------|----------|-------|--|
| ltem   | Image  | Inventory         |              |                      |               |          |       |  |
| Rack 1 |  |                   |              | Rack 1               |               |          |       |  |
|        |  | COMPONENT         | Manu         | nufacturer PART NUMB |               | BER      | COUNT |  |
|        |  | BPL-3             | HAF          | RMON                 | 150-097031-01 | 3 Rev. O | 3     |  |
| l      |  | CARRIER SURGE ARR | RESTOR HAP   | RMON                 | 250197-0      | 01       | 2     |  |
|        |  |                   |              |                      |               |          |       |  |
| Rack 2 | and a start of the |                   | Rac          | k 2                  |               |          |       |  |
|        |  | COMPONENT         | Manufacturer | PART                 | NUMBER        | COUNT    | _     |  |
|        |  | Vital Relay       | Alstom       | A62-122              | 56001-921-07  | 5        | 4     |  |
|        |  | 1X/2X XFMR        | HARMON       | N                    | /LT-50        | 2        | 4     |  |
|        | TRACE OF THE   | 28V Power Supply  | Керсо        | PRR 28               | 3-38M24787    | 2        | 4     |  |
|        |  | 28V Power Supply  | Керсо        | PRM 2                | 8-17-24810    | 2        |       |  |
|        |  |                   |              |                      |               |          |       |  |

| Emerson Park A Signal House Asset Inventory |  |                                   |              |                       |       |  |  |
|---|--|-----------------------------------|--------------|-----------------------|-------|--|--|
| Item  | Image  | Inventory                         |              |                       |       |  |  |
| Rack 3                                      |  | Rack 3                            |              |                       |       |  |  |
|   |  | COMPONENT                         | Manufacturer | PART NUMBER           | COUNT |  |  |
|   |  | Rectifier 120AC/120DC Switch      |              | 250756-000            | 2     |  |  |
|   |  | Vital Relay                       | Alstom       | A62-429 56001-926-01  | 6     |  |  |
|   | And the second s | Vital Relay                       | SAFE TRAN    | 400600                | 3     |  |  |
|   | TERES TEREPERTURNE   | Vital Relay                       | Alstom       | A62-407 56001-745-02  | 2     |  |  |
|   |  | Vital Relay                       | Alstom       | A62-122 56001-921-07  | 2     |  |  |
|   |  | Vital Relay                       | SAFE TRAN    | 400700                | 2     |  |  |
|   |  | Vital Relay                       | GRS          | A62-360 56001-774-01  | 1     |  |  |
|   |  | Vital Relay                       | Alstom       | A62-580 56001-951-01  | 2     |  |  |
|   |  | NON VITAL RELAY                   |              |                       | 1     |  |  |
|   |  | Vital Relay                       | SAFE TRAN    | 400900                | 2     |  |  |
|   |  | Vital Relay                       | Alstom       | A62-691               | 5     |  |  |
|   |  | Rectifier 25V .3A Selenium Type S | Alstom       | A53-541               | 2     |  |  |
|   |  | RELAY FLASHER                     | Alstom       | 30733-001-04          | 2     |  |  |
| Pack 4                                      |  |                                   | Pack 4       |                       |       |  |  |
|   |  | COMPONENT                         | Manufacturer | PART NUMBER           | COUNT |  |  |
|   |  | XEMR Matching Bail Counter        | FPC          | 810-088019-311        | 2     |  |  |
|   |  | XFMR Loop Matching (2340 Feg.)    | EPC          | 800-088019-200        | 1     |  |  |
|   | The second se  | AC Vain Relay                     | Alstom       | A62-486               | 2     |  |  |
|   |  | Bal Imp                           | Alstom       | A3-117                | 2     |  |  |
|   |  | 1 ohm Resistor (1XT/3XT)          | GRS          | A3-207 (01246-1)      | 2     |  |  |
|   |  | 2.5 ohm Resistor (1XTRN/3XTRN)    |              | 56105-11              | 2     |  |  |
|   |  | 1T/1XT XFMR                       | Alstom       | 31094-000 (A95 50)    | 1     |  |  |
|   |  | VITAL RELAY                       | Alstom       | A62-122 56001-921-07  | 1     |  |  |
|   |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D | 3     |  |  |
|   |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O | 3     |  |  |
|   | Ham  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 1     |  |  |
|   |  |                                   |              |                       |       |  |  |

| Emersor | n Park A Signal House Asset Inventory |                                |              |                       |       |  |
|---------|---------------------------------------|--------------------------------|--------------|-----------------------|-------|--|
| ltem    | Image                                 | Inventory                      |              |                       |       |  |
| Rack 5  |                                       | Rack 5                         |              |                       |       |  |
| Hack 5  |                                       | COMPONENT                      | Manufacturer | PART NUMBER           | COUNT |  |
|         |                                       | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 4     |  |
|         |                                       | AC Vain Relay                  | Alstom       | A62-486               | 2     |  |
|         |                                       | Bal Imp                        | Alstom       | A3-117                | 2     |  |
|         |                                       | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |  |
|         | T THE REAL PROPERTY OF                | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |  |
|         | and the state of the                  | 1AT/C-977T XFMR                | Alstom       | 31094-000 (A95 50)    | 1     |  |
|         |                                       | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 4     |  |
|         |                                       | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 4     |  |
|         |                                       | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 1     |  |
| Rack 6  |                                       |                                | Rack 6       |                       |       |  |
|         |                                       | COMPONENT                      | Manufacturer | PART NUMBER           | COUNT |  |
|         |                                       | XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 1     |  |
|         |                                       | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 2     |  |
|         | and the second second                 | AC Vain Relay                  | Alstom       | A62-486               | 2     |  |
|         |                                       | Bal Imp                        | Alstom       | A3-117                | 2     |  |
|         |                                       | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |  |
|         |                                       | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |  |
|         |                                       | 5T/5XT XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |  |
|         |                                       | VITAL RELAY                    | Alstom       | A62-122 56001-921-07  | 1     |  |
|         |                                       | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 3     |  |
|         |                                       | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 3     |  |
|         |                                       | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 1     |  |
|         |                                       |                                |              |                       |       |  |

| Emerson Park A Signal House Asset Inventory |            |   |                        |   |  |
|---|------------|---|------------------------|---|--|
| ltem  | Image      | Inventory   |                        |   |  |
| Rack 7                                      | A FIRE     |   | Rack 7                 |   |  |
|   |            | COMPONENT   | Manufacturer           | PART NUMBER   | COUNT                                    |
|   |            | AC Vain Relay   | Alstom                 | A62-486   | 1  |
|   |            | Bal Imp   | Alstom                 | A3-117  | 1  |
|   |            | XFMR Matching Rail Coupler  | EPC                    | 810-088019-311  | 2  |
|   | THE REPORT | 1 ohm Resistor (1XT/3XT)  | GRS                    | A3-207 (01246-1)  | 1  |
|   |            | 2.5 ohm Resistor (1XTRN/3XTRN)  |                        | 56105-11  | 1  |
|   |            | 5AT/C-SP XFMR   | Alstom                 | 31094-000 (A95 50)  | 1  |
|   |            | Chassis AF Track XMT TTT-2  | Getsgs                 | 812097031-001   | 1  |
|   |            | 700 Amplifier Module  |                        | 150-094017-022 Rev. D   | 2  |
|   |            | 701-2 CAB Coupler (2340 Feq.)   |                        | 150-097031-010 Rev. O   | 2  |
|   |            |   |                        |   |  |
| Rack 8                                      |            |   | Rack 8                 |   |  |
| Rack 8                                      |            | COMPONENT   | Rack 8<br>Manufacturer | PART NUMBER   | COUNT                                    |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module   | Rack 8<br>Manufacturer | <b>PART NUMBER</b><br>150-094017-022 Rev. D   | COUNT<br>6                               |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module   | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C   | <b>COUNT</b><br>6<br>1                   |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)  | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O  | COUNT<br>6<br>1<br>4                     |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)   | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B   | COUNT<br>6<br>1<br>4<br>1                |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)  | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO  | COUNT<br>6<br>1<br>4<br>1<br>1           |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (2970 Feq.)                               | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B                   | COUNT<br>6<br>1<br>4<br>1<br>1<br>1      |
| Rack 8                                      |            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>Chassis AF Track XMT TTT-2 | Rack 8<br>Manufacturer | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. CAO<br>150-095025-034 Rev. B<br>812-097031-001 | COUNT<br>6<br>1<br>4<br>1<br>1<br>1<br>3 |

| Emerson Park A Signal House Asset Inventory |                          |  |   |   |   |
|---|--------------------------|--|---|---|---|
| ltem  | Image                    | Inventory  |   |   |   |
| Rack 9                                      |                          | Rack 9   |   |   |   |
|   | 1 11 1 11 + +++ 2 2 H 11 | COMPONENT  | Manufacturer  | PART NUMBER   | COUNT   |
|   |                          | 700 Amplifier Module   |   | 150-094017-022 Rev. C   | 1   |
|   |                          | 700 Amplifier Module   |   | 150-094017-022 Rev. D   | 5   |
|   |                          | 700 Amplifier Module   |   | 150-094017-022 Rev. A   | 2   |
|   |                          | 701-2 CAB Coupler (2340 Feq.)  |   | 150-097031-010 Rev. O   | 4   |
|   | ALL AND A LAND           | 702-1 Track Coupler (3690 Feq.)  |   | 150-095025-034 Rev. B   | 1   |
| I   |                          | 702-1 Track Coupler (4950 Feq.)  |   | 150-095025-034 Rev. B   | 1   |
|   | A REAL PROPERTY AND      | 702-1 Track Coupler (3330 Feq.)  |   | 150-095025-034 Rev. B   | 1   |
|   |                          | 702-1 Track Coupler (4230 Feq.)  |   | 150-095025-034 Rev. B   | 1   |
|   |                          | Chassis AF Track XMT TTT-2   | Getsgs  | 812-097031-001  | 3   |
|   |                          |  |   |   |   |
| Pack  |                          |  | Rack 10   |   |   |
| Rack  |                          | COMPONENT  | Rack 10<br>Manufacturer   | PART NUMBER   |   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feg.  | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.  | COUNT   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.  | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.<br>150-095025-047 Rev. I   | COUNT<br>E 1<br>E 2   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.<br>703-1 Receiver Module (4410 Feq.  | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.<br>150-095025-047 Rev. I<br>150-095025-047 Rev. I  | COUNT           E         1           E         2           E         2   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.<br>703-1 Receiver Module (4410 Feq.<br>703-1 Receiver Module (4950 Feq.  | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.   | COUNT           E         1           E         2           E         2           O         2   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.<br>703-1 Receiver Module (4410 Feq.<br>703-1 Receiver Module (4950 Feq.<br>703-1 Receiver Module (3330 Feq.  | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.  | COUNT           E         1           E         2           E         2           O         2           O         1   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.<br>703-1 Receiver Module (4410 Feq.<br>703-1 Receiver Module (4950 Feq.<br>703-1 Receiver Module (3330 Feq.<br>703-1 Receiver Module (3690 Feq.                              | Rack 10<br>Manufacturer   | PART NUMBER<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.<br>150-095025-047 Rev.   | COUNT           E         1           E         2           COURT         2           D         2           D         1   |
| Rack<br>10                                  |                          | COMPONENT<br>703-1 Receiver Module (2970 Feq.<br>703-1 Receiver Module (3510 Feq.<br>703-1 Receiver Module (4410 Feq.<br>703-1 Receiver Module (4950 Feq.<br>703-1 Receiver Module (3330 Feq.<br>703-1 Receiver Module (3690 Feq.<br>AF Track Receiver Chassis | Rack 10         Manufacturer         )         )         )         )         )         )         )         )         )         )         )         )         )         )         )         )         )         )         Getsgs | PART NUMBER           150-095025-047 Rev.           150-095025-047 Rev. | COUNT           E         1           E         2           E         2           D         2           D         1           D         1           D         2 |

| Emerson Park A Signal House Asset Inventory |  |                      |                |              |             |       |
|---|--|----------------------|----------------|--------------|-------------|-------|
| ltem  | Image  | Inventory            |                |              |             |       |
| Rack  |  |                      | Rack 11        |              |             |       |
| 11  | 100 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -   | COMPONENT            | Manufacturer   | PART NUMBER  | COUNT       |       |
|   |  | VLP                  |                |              | 2           |       |
|   |  | ACP-2                |                |              | 2           |       |
|   |  | SSM                  |                |              | 2           |       |
|   | The second s | CCI                  |                |              | 2           |       |
|   | Contraction of the   | VSD                  |                |              | 2           |       |
|   |  | VGP I/O              |                |              | 2           |       |
|   |  | VGP I/O-12           |                |              | 1           |       |
|   |  | VGP 16               |                |              | 2           |       |
|   |  | NV I/O               |                |              | 4           |       |
|   |  | 32 NVI               |                |              | 3           |       |
|   |  | CLA Board            |                |              | 2           |       |
|   |  | KS-232               |                |              | 2           |       |
|   |  | 12V Power Supply     |                |              | 2           |       |
|   |  |                      |                |              |             |       |
| Rack  |  | Rack 12              |                |              |             |       |
| 12  |  | СОМРС                | DNENT          | Manufacturer | PART NUMBER | COUNT |
|   | S  | Rotary Dials (HALF I | Hemisphere-NEW | )            |             | 20    |
|   |  | Non-Vita             | I Relays       |              |             | 140   |
|   |  |                      |                |              |             |       |

| Emerson Park A Signal House Asset Inventory |         |                      |                           |              |       |  |
|---|---------|----------------------|---------------------------|--------------|-------|--|
| ltem  | Image   | nventory             |                           |              |       |  |
| SCADA                                       |         |                      | SCADA                     |              |       |  |
|   |         | COMPONENT            | Manufacturer              | PART NUMBER  | COUNT |  |
|   |         | Power Supply         | Schneider Electric        | TSXPSY1610   | 1     |  |
| Charles and and a start                     | CPU     | Schneider Electric   | TSXP57202                 | 1            |       |  |
|   | THE FRE | Memory Card          | Schneider Automation S.A. | TSXMRP064P   | 1     |  |
|   |         | RS-232               |                           |              | 1     |  |
|   |         | Input Card           | Schneider Electric        | TSX DEY16A2  | 9     |  |
|   |         | INPUT TERMINAL BLOCK | Schneider Automation S.A. | TSX BLY01    | 9     |  |
|   |         | Output Card          | Schneider Electric        | TSX DSY64T2K | 1     |  |
|   |         | Output Cord          | Phoenix Contact           | 22 98 438    | 4     |  |
|   |         | Relays*              | Phoenix Contact           | ABE7*        | 4     |  |
|   |         | Power Supply         | WEID MULLER               | CSA 991534   | 1     |  |
|   |         | Battery Charger      | WEID MULLER               | 991628 0024  | 1     |  |
|   |         | Batteries            | CD Technologies           | UPS12-150MR  | 2     |  |
|   |         | Backplane            |                           |              | 1     |  |
|   |         | MODEM                | MOTOROLA                  | V3600        | 1     |  |

| AP | PE | ND | IX | А |
|----|----|----|----|---|
|    |    |    |    |   |

| Emerson Park A Signal House Asset Inventory |  |  |                 |                          |       |  |  |  |
|---|--|--|-----------------|--------------------------|-------|--|--|--|
| ltem  | Image  | Inventory                                      |                 |                          |       |  |  |  |
| Sides                                       |  | House Side-A                                   |                 |                          |       |  |  |  |
|   | - In the   | COMPONENT                                      | Manufacturer    | PART NUMBER              | COUNT |  |  |  |
|   | I and the second | FIA-Keypad Controller                          | NAPCO           | RPC3000LCDe              | 1     |  |  |  |
|   |  | SWITCH HEATER CONTROL BOX                      |                 |                          | 1     |  |  |  |
|   | THE OWNER OF TAXABLE PARTY.  | Ho   | use Side-B      |                          | L     |  |  |  |
|   |  | Fire Intrusion Alarm                           | NAPCO           |                          | 1     |  |  |  |
|   |  | Battery  | Genesis         | NP7-1212V.7.0Ah          | 2     |  |  |  |
|   |  | Main Board                                     |                 |                          | 1     |  |  |  |
|   |  | Relay Boards                                   |                 |                          | 1     |  |  |  |
|   |  | PUSH BUTTON CONTROL BOX                        |                 |                          | 1     |  |  |  |
|   |  | House Side-C                                   |                 |                          |       |  |  |  |
|   |  |  |                 |                          |       |  |  |  |
|   |  |  |                 |                          |       |  |  |  |
|   |  | House Side-D                                   |                 |                          |       |  |  |  |
|   |  | CLCP 256 IO LED Driver Module                  | Getsgs          | Assy 227027-001 Rev. 806 | 2     |  |  |  |
|   |  | Power Supply CLCP 12VDC 20W                    | Getsgs          | 226609-200               | 2     |  |  |  |
|   |  | Double Throw NOT FUSEABLE Switch 100A 240V AC/ |                 |                          |       |  |  |  |
|   |  | 250V DC  | Square D        | 40274-556-01             | 1     |  |  |  |
|   |  | GENERAL Duty Safety Switch 100A 240V AC/ 250V  |                 |                          |       |  |  |  |
|   |  | DC   | Square D        | 40275-933-01             | 1     |  |  |  |
|   |  | Current Monitor                                | NRS             | 16775-00                 | 2     |  |  |  |
|   |  | BATTERY SURGE ARRESTOR 4                       | HARMON          | 250597                   | 1     |  |  |  |
|   |  | 12V Power Supply                               | NRS             | ERB-C 12/40              | 2     |  |  |  |
|   |  | 12V Power Supply                               | NRS             | ERB-C 12/501             | 1     |  |  |  |
|   |  | 12V Battery                                    | MARATHON        | M12V90                   | 1     |  |  |  |
|   |  | 12V Battery                                    | CD TECHNOLOGIES | 12V-90AH                 | 1     |  |  |  |
|   |  | Resistor (adjustable)*                         |                 | 029603-2                 | 18    |  |  |  |
|   |  | 2.25V Battery                                  | GNB             | 50A15                    | 8     |  |  |  |

# **Emerson Park B Signal House**



| Emerson P | Emerson Park B Signal House Asset Inventory |                      |              |                       |       |  |  |  |  |
|-----------|---|----------------------|--------------|-----------------------|-------|--|--|--|--|
| ltem      | Image                                       | Inventory            | Inventory    |                       |       |  |  |  |  |
| Rack 1    |   | Rack 1               |              |                       |       |  |  |  |  |
|           |   | COMPONENT            | Manufacturer | PART NUMBER           | COUNT |  |  |  |  |
|           |   | BPL-3                | HARMON       | 150-097031-013 Rev. O | 3     |  |  |  |  |
|           |   | CARRIER SURGE ARREST | OR HARMON    | 250197-001            | 2     |  |  |  |  |
|           |   |                      |              |                       |       |  |  |  |  |
| Rack 2    | in paths                                    | Rack 2               |              |                       |       |  |  |  |  |
|           |   | COMPONENT            | Manufacturer | PART NUMBER           | COUNT |  |  |  |  |
|           |   | Vital Relay          | Alstom       | A62-122 56001-921-07  | 5     |  |  |  |  |
|           |   | 1X/2X XFMR           | HARMON       | MLT-50                | 2     |  |  |  |  |
|           | TRANS OF THE PARTY                          | 28V Power Supply     | Керсо        | PRR 28-38M24787       | 2     |  |  |  |  |
|           |   | 28V Power Supply     | Керсо        | PRM 28-17-24810       | 2     |  |  |  |  |
|           |   |                      |              |                       |       |  |  |  |  |

| tory                              |              |                      |       |
|-----------------------------------|--------------|----------------------|-------|
| •                                 | Rack 3       |                      |       |
| COMPONENT                         | Manufacturer | PART NUMBER          | COUNT |
| Rectifier 120AC/120DC Switch      |              | 250756-000           | 2     |
| Vital Relay                       | Alstom       | A62-429 56001-926-01 | 6     |
| Vital Relay                       | SAFE TRAN    | 400600               | 3     |
| Vital Relay                       | Alstom       | A62-407 56001-745-02 | 2     |
| Vital Relay                       | Alstom       | A62-122 56001-921-07 | 2     |
| Vital Relay                       | SAFE TRAN    | 400700               | 2     |
| Vital Relay                       | GRS          | A62-360 56001-774-01 | 1     |
| Vital Relay                       | Alstom       | A62-580 56001-951-01 | 2     |
| NON VITAL RELAY                   |              |                      | 1     |
| Vital Relay                       | SAFE TRAN    | 400900               | 2     |
| Vital Relay                       | Alstom       | A62-691              | 5     |
| Rectifier 25V .3A Selenium Type S | Alstom       | A53-541              | 2     |

Rack 4

Item

Rack 3

**Emerson Park B Signal House Asset Inventory** 

Inventory

RELAY FLASHER

Image

| Rack 4                         |              |                       |       |  |  |  |  |
|--------------------------------|--------------|-----------------------|-------|--|--|--|--|
| COMPONENT                      | Manufacturer | PART NUMBER           | COUNT |  |  |  |  |
| XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 2     |  |  |  |  |
| XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 1     |  |  |  |  |
| AC Vain Relay                  | Alstom       | A62-486               | 2     |  |  |  |  |
| Bal Imp                        | Alstom       | A3-117                | 2     |  |  |  |  |
| 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |  |  |  |  |
| 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |  |  |  |  |
| 1T/1XT XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |  |  |  |  |
| VITAL RELAY                    | Alstom       | A62-122 56001-921-07  | 1     |  |  |  |  |
| 700 Amplifier Module           |              | 150-094017-022 Rev. D | 3     |  |  |  |  |
| 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 3     |  |  |  |  |
| Chassis AF Track XMT TTT-2     | Getsgs       | 812-097031-001        | 1     |  |  |  |  |

Alstom

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30733-001-04

| Emerson Park B Signal House Asset Inventory |  |                                |              |                       |       |  |  |  |
|---|--|--------------------------------|--------------|-----------------------|-------|--|--|--|
| ltem  | Image  | Inventory                      |              |                       |       |  |  |  |
| Rack 5                                      |  | Rack 5                         |              |                       |       |  |  |  |
| Nuck 5                                      |  | COMPONENT                      | Manufacturer | PART NUMBER           | COUNT |  |  |  |
|   |  | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 4     |  |  |  |
|   |  | AC Vain Relay                  | Alstom       | A62-486               | 2     |  |  |  |
|   |  | Bal Imp                        | Alstom       | A3-117                | 2     |  |  |  |
|   |  | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |  |  |  |
|   | The state of the s | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |  |  |  |
|   | i las  | 1AT/C-977T XFMR                | Alstom       | 31094-000 (A95 50)    | 1     |  |  |  |
|   | 1 10 10 10 10 10   | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 4     |  |  |  |
|   |  | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 4     |  |  |  |
|   |  | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 1     |  |  |  |
| Back 6                                      |  |                                | Back 6       |                       |       |  |  |  |
| Nack O                                      | THE REAL PROPERTY OF   | COMPONENT                      | Manufacturer | PART NUMBER           | COUNT |  |  |  |
|   |  | XEMB Loop Matching (2340 Feg.) | FPC          | 800-088019-200        | 1     |  |  |  |
|   |  | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 2     |  |  |  |
|   |  | AC Vain Relay                  | Alstom       | A62-486               | 2     |  |  |  |
|   |  | Bal Imp                        | Alstom       | A3-117                | 2     |  |  |  |
|   |  | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |  |  |  |
|   |  | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |  |  |  |
|   |  | 5T/5XT XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |  |  |  |
|   |  | VITAL RELAY                    | Alstom       | A62-122 56001-921-07  | 1     |  |  |  |
|   |  | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 3     |  |  |  |
|   |  | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 3     |  |  |  |
|   | Aller I  | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 1     |  |  |  |
|   |  |                                |              |                       |       |  |  |  |

| Emerson Park B Signal House Asset Inventory |   |                                 |              |                         |       |  |  |
|---|---|---------------------------------|--------------|-------------------------|-------|--|--|
| ltem  | Image   | Inventory                       |              |                         |       |  |  |
| Rack 7                                      | A PART  | Rack 7                          |              |                         |       |  |  |
|   |   | COMPONENT                       | Manufacturer | PART NUMBER             | COUNT |  |  |
|   |   | AC Vain Relay                   | Alstom       | A62-486                 | 1     |  |  |
|   |   | Bal Imp                         | Alstom       | A3-117                  | 1     |  |  |
|   | The second se | XFMR Matching Rail Coupler      | EPC          | 810-088019-311          | 2     |  |  |
|   | How Bernand A   | 1 ohm Resistor (1XT/3XT)        | GRS          | A3-207 (01246-1)        | 1     |  |  |
|   |   | 2.5 ohm Resistor (1XTRN/3XTRN)  |              | 56105-11                | 1     |  |  |
|   |   | 5AT/C-SP XFMR                   | Alstom       | 31094-000 (A95 50)      | 1     |  |  |
|   |   | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001           | 1     |  |  |
|   |   | 700 Amplifier Module            |              | 150-094017-022 Rev. D   | 2     |  |  |
|   |   | 701-2 CAB Coupler (2340 Feq.)   |              | 150-097031-010 Rev. O   | 2     |  |  |
| Rack 8                                      |   |                                 | Rack 8       |                         |       |  |  |
| Nack o                                      | And the second second   | COMPONENT                       | Manufacturer | PART NUMBER             | COUNT |  |  |
|   |   | 700 Amplifier Module            |              | 150-094017-022 Rev. D   | 6     |  |  |
|   |   | 700 Amplifier Module            |              | 150-094017-022 Rev. C   | 1     |  |  |
|   |   | 701-2 CAB Coupler (2340 Feg.)   |              | 150-097031-010 Rev. O   | 4     |  |  |
|   |   | 702-1 Track Coupler (3510 Feg.) |              | 150-095025-034 Rev. B   | 1     |  |  |
|   |   | 702-1 Track Coupler (4410 Feg.) |              | 150-095025-034 Rev. CAO | 1     |  |  |
|   | and the second  | 702-1 Track Coupler (2970 Feq.) |              | 150-095025-034 Rev. B   | 1     |  |  |
|   |   | Chassis AF Track XMT TTT-2      | Getsgs       | 812-097031-001          | 3     |  |  |
|   |   |                                 |              |                         |       |  |  |
| Emerson P | ark B Signal House Asset Inventory   |                                   |              |                       |       |  |  |  |
|-----------|--|-----------------------------------|--------------|-----------------------|-------|--|--|--|
| ltem      | Image  | Inventory                         |              |                       |       |  |  |  |
| Rack 9    |  | Rack 9                            |              |                       |       |  |  |  |
| index 9   | 1 1 2 2 2 44- 2 2 M 11   | COMPONENT                         | Manufacturer | PART NUMBER           | COUNT |  |  |  |
|           |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C | 1     |  |  |  |
|           |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D | 5     |  |  |  |
|           |  | 700 Amplifier Module              |              | 150-094017-022 Rev. A | 2     |  |  |  |
|           |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O | 4     |  |  |  |
|           | ALL DE LE DE | 702-1 Track Coupler (3690 Feq.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|           |  | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|           | A REAL PROPERTY AND ADDRESS  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|           |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|           |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 3     |  |  |  |
| Back 10   |  |                                   | Rack 10      |                       | ]     |  |  |  |
|           | THE DATE OF THE OWNER OF THE   | COMPONENT                         | Manufacturer | PART NUMBER           | COUNT |  |  |  |
|           | Refer to the t   | 703-1 Receiver Module (2970 Feq.) |              | 150-095025-047 Rev. E | 1     |  |  |  |
|           |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. E | 2     |  |  |  |
|           |  | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. E | 2     |  |  |  |
|           | AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA   | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. D | 2     |  |  |  |
|           |  | 703-1 Receiver Module (3330 Feq.) |              | 150-095025-047 Rev. D | 1     |  |  |  |
|           | a later  | 703-1 Receiver Module (3690 Feq.) |              | 150-095025-047 Rev. D | 1     |  |  |  |
|           |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034        | 2     |  |  |  |
|           |  |                                   |              |                       |       |  |  |  |

| Emerson P | Emerson Park B Signal House Asset Inventory  |                             |            |              |             |       |
|-----------|--|-----------------------------|------------|--------------|-------------|-------|
| ltem      | Image  | Inventory                   |            |              |             |       |
| Rack 11   | The second s   |                             | Rac        | :k 11        |             |       |
|           | A CONTRACTOR   | COMPONENT                   | Manufactur | er PAI       | RT NUMBER   | COUNT |
|           |  | VLP                         |            |              |             | 2     |
|           |  | ACP-2                       |            |              |             | 2     |
|           | and the second s | SSM                         |            |              |             | 2     |
|           |  | CCI                         |            |              |             | 2     |
|           |  | VSD                         |            |              |             | 2     |
|           |  | VGP I/O                     |            |              |             | 2     |
|           |  | VGP I/O-12                  |            |              |             | 1     |
|           |  | VGP 16                      |            |              |             | 2     |
|           |  | NV I/O                      |            |              |             | 4     |
|           |  | 32 NVI                      |            |              |             | 3     |
|           |  | CLA Board                   |            |              |             | 2     |
|           |  | RS-232                      |            |              |             | 2     |
|           |  | Modem                       |            |              |             | 2     |
|           | 188  | 12V Power Supply            |            |              |             | 2     |
|           |  |                             |            |              |             |       |
| Rack 12   |  |                             | Rac        | :k 12        |             |       |
|           |  | COMPONENT                   |            | Manufacturer | PART NUMBER | COUNT |
|           |  | Rotary Dials (HALF Hemisphe | ere-NEW)   |              |             | 20    |
|           |  | Non-Vital Relays            |            |              |             | 47    |
|           |  |                             |            |              |             |       |

| Emerson Pa | Emerson Park B Signal House Asset Inventory |   |              |                       |        |  |
|------------|---|---|--------------|-----------------------|--------|--|
| ltem       | Image                                       | Inventory   |              |                       |        |  |
| Sides      |   | House Side  | e-A          |                       |        |  |
|            |   | COMPONENT   | Manufacturer | PART NUMBER           | COUNT  |  |
|            |   | FIA-Keypad Controller                                 | NAPCO        | RPC3000LCDe           | 1      |  |
|            |   | SWITCH HEATER CONTROL BOX                             |              |                       | 1      |  |
|            |   |   |              |                       |        |  |
|            | 111   | House Side  | e-B          |                       |        |  |
|            |   | Fire Intrusion Alarm                                  | NAPCO        |                       | 1      |  |
|            |   | Battery   | Genesis      | NP7-1212V,7.0Ah       | 2      |  |
|            |   | Main Board  |              |                       | 1      |  |
|            |   | Relay Boards  |              |                       | 1      |  |
|            |   | PUSH BUTTON CONTROL BOX                               |              |                       | 1      |  |
|            |   | House Side  | e-C          | ſ                     |        |  |
|            |   |   |              |                       |        |  |
|            |   |   |              |                       |        |  |
|            |   | House Side  | e-D          |                       |        |  |
|            |   |   | <u> </u>     | Assy 227027-001       |        |  |
|            |   | CLCP 256 IO LED Driver Module                         | Getsgs       | Rev. 806              | 2      |  |
|            |   | Power Supply CLCP 12VDC 20W                           | Getsgs       | 226609-200            | 2      |  |
|            |   | Double Throw NOT FUSEABLE Switch 100A 240V AC/ 250V   | Causa a      | 10074 550 01          | 1      |  |
|            |   | DL<br>CENERAL Duty Sefety Switch 1004 240V/AC/250V/DC | Square D     | 40274-556-01          | 1      |  |
|            |   | GENERAL Duty Safety Switch 100A 240V AC/ 250V DC      | Square D     | 40275-933-01          | 1      |  |
|            |   |   |              | 250507                | 2<br>1 |  |
|            |   | 121/ Dowor Supply                                     |              | 230397<br>EPR C 12/40 | 2      |  |
|            |   | 12V Power Supply                                      | NRS          | ERB-C 12/40           | 2<br>1 |  |
|            |   | 12V Rottery   | MARATHON     | M12V90                | 1      |  |
|            |   |   | CD           | 10112030              | 1      |  |
|            |   | 12V Battery   | TECHNOLOGIES | 12V-90AH              | 1      |  |
|            |   | Resistor (adjustable)*                                |              | 029603-2              | 18     |  |
|            |   | 2.25V Battery   | GNB          | 50A15                 | 8      |  |

## **Enterprise Signal House**



| Enterprise | Enterprise Signal House Asset Inventory |                                 |              |                       |       |  |  |  |  |  |
|------------|---|---------------------------------|--------------|-----------------------|-------|--|--|--|--|--|
| ltem       | Image                                   | Inventory                       | Inventory    |                       |       |  |  |  |  |  |
| Rack 1     | NHE STATE                               | Rack 1                          |              |                       |       |  |  |  |  |  |
|            |   | COMPONENT                       | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |  |  |
|            |   | BPL-3                           | HARMON       | 150-097031-013 Rev. O | 13    |  |  |  |  |  |
|            |   | Carrier Surge Arrester 1        | HARMON       | 250197-001            | 2     |  |  |  |  |  |
|            |   |                                 |              |                       |       |  |  |  |  |  |
| Rack 2     |   |                                 | Rack 2       |                       |       |  |  |  |  |  |
|            |   | COMPONENT                       | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |  |  |
|            | ( La Basile R.                          | Vital Relay                     | Alstom       | A62-407 56001-745-02  | 1     |  |  |  |  |  |
|            | Car and a second                        | Vital Relay                     | Alstom       | A62-122 56001-921-07  | 3     |  |  |  |  |  |
|            |   | POR XFMR                        | Alstom       | 31094-000-01 Rev. F   | 1     |  |  |  |  |  |
|            |   | 28V Power Supply                | Керсо        | PRR 28-38M24787       | 2     |  |  |  |  |  |
|            |   | 28V Power Supply                | Керсо        | PRM 28-17-24810       | 2     |  |  |  |  |  |
|            |   | Rectifier 25V .3A Selenium Type | S Aistom     | A53-541               | 1     |  |  |  |  |  |
|            | 11/2                                    |                                 |              |                       |       |  |  |  |  |  |

| Enterprise | nterprise Signal House Asset Inventory   |                                     |              |                              |       |  |  |  |
|------------|--|-------------------------------------|--------------|------------------------------|-------|--|--|--|
| ltem       | Image  | Inventory                           |              |                              |       |  |  |  |
| Rack 3     | and the second sec | Rack 3                              |              |                              |       |  |  |  |
| Hack 5     |  | COMPONENT                           | MANUFACTURER | PART NUMBER                  | COUNT |  |  |  |
|            |  | Rectifier 120AC/120DC Switch        |              | 250756-000                   | 2     |  |  |  |
|            | Concentration of the second  | Vital Relay                         | Alstom       | A62-429 56001-926-01         | 8     |  |  |  |
|            |  | Vital Relay                         | Alstom       | A62-432 56001-785-01         | 4     |  |  |  |
|            | A DESCRIPTION OF THE OWNER OF THE OWNER  | Vital Relay                         | Alstom       | A62-247                      | 4     |  |  |  |
|            |  | Vital Relay                         | GRS          | A62-122 56001-921-07         | 1     |  |  |  |
|            |  |                                     |              |                              |       |  |  |  |
| Rack 4     |  |                                     | Rack 4       |                              |       |  |  |  |
|            |  |                                     | MANUFACTURER |                              | COUNT |  |  |  |
|            |  | XFMR Loop Matching (2340 Feq.)      | EPC          | 800-088019-200               | 1     |  |  |  |
|            |  |                                     | EPC          | 800-088019-300               | 2     |  |  |  |
|            |  | AC Vall Relay                       | Aistom       | A02-480                      | 2     |  |  |  |
|            |  | Ballinp<br>1 ohm Bosistor (1VT/2VT) | AISTOIL      | A3-117                       | 2     |  |  |  |
|            |  | 2.5 obm Resistor (1XTRN/2XTRN)*     | GNS          | A3-207 (01240-1)<br>56105-11 | 2     |  |  |  |
|            |  |                                     | Alstom       | 31094-000 (A95 50)           | 1     |  |  |  |
|            |  | 700 Amplifier Module                | Aistoini     | 150-094017-022 Boy a         | 2     |  |  |  |
|            |  | 700 Amplifier Module                |              | 150-094017-022 Rev. C        | 1     |  |  |  |
|            |  | 701-2 CAB Coupler (2340 Feg.)       |              | 150-097031-010 Rev. 0        | 3     |  |  |  |
|            |  | Chassis AF Track XMT TTT-2          | Getsgs       | 812-097031-001               | 1     |  |  |  |
|            |  |                                     | -            |                              |       |  |  |  |

| Enterprise | Signal House Asset Inventory  |                                   |              |                       |       |  |  |  |
|------------|---|-----------------------------------|--------------|-----------------------|-------|--|--|--|
| ltem       | Image   | Inventory                         |              |                       |       |  |  |  |
| Rack 5     |   | Rack 5                            |              |                       |       |  |  |  |
|            |   | COMPONENT                         | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |
|            |   | XFMR Loop Matching (2340 Feq.)    | EPC          | 800-088019-200        | 1     |  |  |  |
|            |   | XFMR Matching Rail Coupler        | EPC          | 800-088019-300        | 2     |  |  |  |
|            | Charles Street  | AC Vain Relay                     | Alstom       | A62-486               | 2     |  |  |  |
|            |   | Bal Imp                           | Alstom       | A3-117                | 2     |  |  |  |
|            |   | 1 ohm Resistor (1XT/3XT)          | GRS          | A3-207 (01246-1)      | 2     |  |  |  |
|            |   | 2.5 ohm Resistor (1XTRN/3XTRN)    |              | 56105-11              | 2     |  |  |  |
|            |   | 3T/3XT XFMR                       | Alstom       | 31094-000 (A95 50)    | 1     |  |  |  |
|            |   | 700 Amplifier Module              |              | 150-094017-022 Rev. A | 1     |  |  |  |
|            |   | 700 Amplifier Module              |              | 150-094017-022 Rev. C | 1     |  |  |  |
|            |   | 700 Amplifier Module              |              | 150-094017-022 Rev. D | 1     |  |  |  |
|            |   | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O | 3     |  |  |  |
|            | A CONTRACTOR OF THE OWNER OWNER OF THE OWNER | Chassis AF Track XMT TTT-2        | Getsgs       | 812097031-001         | 1     |  |  |  |
| Pack 6     |   |                                   | Back 6       |                       |       |  |  |  |
| NACK U     |   | COMPONENT                         | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |
|            |   | 700 Amplifier Module              |              | 150-094017-022 Rev. A | 2     |  |  |  |
|            |   | 700 Amplifier Module              |              | 150-094017-022 Rev. C | 3     |  |  |  |
|            |   | 701-2 CAB Coupler (2340 Feg.)     |              | 150-097031-010 Rev. O | 3     |  |  |  |
|            |   | 702-1 Track Coupler (4410 Feg.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|            |   | 702-1 Track Coupler (3870 Feg.)   |              | 150-095025-034 Rev. B | 1     |  |  |  |
|            | THE REAL PROPERTY IN LABOR.   | 703-1 Receiver Module (4410 Feg.) |              | 150-095025-047 Rev. E | 2     |  |  |  |
|            |   | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. D | 1     |  |  |  |
|            |   | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. D | 1     |  |  |  |
|            |   | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. D | 2     |  |  |  |
|            | Jahnese   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 2     |  |  |  |
|            |   | AF Track Receiver Chassis         | Getsgs       | 812-097031-034        | 1     |  |  |  |
|            |   |                                   |              |                       |       |  |  |  |

| Enterprise | Signal House Asset Inventory   |                                   |              |                         |       |  |  |  |
|------------|--|-----------------------------------|--------------|-------------------------|-------|--|--|--|
| ltem       | Image  | Inventory                         |              |                         |       |  |  |  |
| Rack 7     | Card La La Cardon de Cardon  | Rack 7                            |              |                         |       |  |  |  |
|            |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |
|            |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 3     |  |  |  |
|            | No. 19 August 19 | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1     |  |  |  |
|            |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 2     |  |  |  |
|            | A DESCRIPTION OF THE PARTY OF T | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 3     |  |  |  |
|            |  | 702-1 Track Coupler (3510 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |  |
|            |  | 702-1 Track Coupler (4410 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |  |
|            |  | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |  |
|            |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. D   | 2     |  |  |  |
|            | N IN PROPERTY  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |  |
|            |  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |  |
|            |  | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |  |
|            |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |  |
|            |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |  |
|            | Address of the second  |                                   |              |                         |       |  |  |  |
| Rack 8     |  |                                   | Rack 8       |                         |       |  |  |  |
|            | STATE OF THE REAL PROPERTY AND ADDRESS OF THE OWNER OWNER OF THE OWNER O   | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |
|            |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 2     |  |  |  |
|            |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 3     |  |  |  |
|            |  | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1     |  |  |  |
|            |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 3     |  |  |  |
|            | AND A LANGE THE PARTY OF A LAN | 702-1 Track Coupler (3690 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |  |
|            | STATES OF THE OWNER.   | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |  |
|            |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |  |
|            |  | 703-1 Receiver Module (3690 Feq.) |              | 150-095025-047 Rev. D   | 1     |  |  |  |
|            |  | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. D   | 3     |  |  |  |
|            |  | 703-1 Receiver Module (3330 Feq.) |              | 150-095025-047 Rev. D   | 2     |  |  |  |
|            |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |  |
|            |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |  |
|            |  |                                   |              |                         |       |  |  |  |

| Enterpris | se Signal House Asset Inventory   |                          |                |                 |             |       |  |  |
|-----------|---|--------------------------|----------------|-----------------|-------------|-------|--|--|
| ltem      | Image   | Inventory                |                |                 |             |       |  |  |
| Rack 9    |   |                          | Rack 9         |                 |             |       |  |  |
|           |   | COMPONENT                | MANUFACTU      | JRER PART       | NUMBER      | COUNT |  |  |
|           | Same Company ()   | VLP                      |                |                 |             | 2     |  |  |
|           | Contraction of the second   | ACP-2                    |                |                 |             | 2     |  |  |
|           | HATTON WATER AND  | SSM                      |                |                 |             | 2     |  |  |
|           |   | CCI                      |                |                 |             | 2     |  |  |
|           |   | VSD                      |                |                 |             | 1     |  |  |
|           |   | VGPI 16                  |                |                 |             | 2     |  |  |
|           |   | VGP I/O-12V              |                |                 |             |       |  |  |
|           |   | VGP I/O                  |                |                 |             | 3     |  |  |
|           | A CONTRACT OF A | NV I/O                   |                |                 |             | 3     |  |  |
|           |   | 32 NVI                   |                |                 |             | 4     |  |  |
|           |   | CLA Board                |                |                 |             | 1     |  |  |
|           |   | RS-232                   |                |                 |             | 2     |  |  |
|           |   | Modem                    |                |                 |             | 2     |  |  |
|           | LUNCIN  | 12V Power Supply         |                |                 |             | 2     |  |  |
| Rack 10   |   |                          | ck 10          |                 |             |       |  |  |
|           | and the second sec  | COMPONEN                 | Ţ              | MANUFACTURER    | PART NUMBER | COUNT |  |  |
|           |   | Rotary Dials (HALF Hemi  | sphere-NEW)    |                 |             | 18    |  |  |
|           |   | Non-Vital Rela           | ays            |                 |             | 58    |  |  |
|           | and the second  | KEY LOCK SWITCH/2-POS 2- | POLE STD. LOCK | EOA SWITCH CORP | 51-236.025D | 1     |  |  |
|           |   |                          |                |                 |             |       |  |  |

**\_** 

| Enterprise | Enterprise Signal House Asset Inventory  |                      |                           |              |       |  |  |  |
|------------|--|----------------------|---------------------------|--------------|-------|--|--|--|
| Item       | Image  | Inventory            |                           |              |       |  |  |  |
| SCADA      |  |                      | SCADA                     |              |       |  |  |  |
|            | and the second second  | COMPONENT            | MANUFACTURER              | PART NUMBER  | COUNT |  |  |  |
|            |  | Power Supply         | Schneider Electric        | TSXPSY1610   | 1     |  |  |  |
|            | and the second s | CPU                  | Schneider Electric        | TSP57203     | 1     |  |  |  |
|            |  | Memory Card          | Schneider Automation S.A. | TSXMRP064P   | 1     |  |  |  |
|            |  | RS-232               |                           |              | 1     |  |  |  |
|            |  | Input Card           | Schneider Electric        | TSX DEY12A2  | 5     |  |  |  |
|            |  | INPUT TERMINAL BLOCK | Schneider Automation S.A. | TSX BLY01    | 5     |  |  |  |
|            |  | Output Card          | Schneider Electric        | TSX DSY64T2K | 1     |  |  |  |
|            |  | Output Cord          | Phoenix Contact           | 22 98 438    | 2     |  |  |  |
|            |  | Relays               | Phoenix Contact           | ABE7*        | 2     |  |  |  |
|            |  | Power Supply         | WEID MULLER               | CSA 991534   | 1     |  |  |  |
|            |  | Battery Charger      | WEID MULLER               | 991628 0024  | 1     |  |  |  |
|            |  | Batteries            | CD Technologies           | UPS12-150MR  | 2     |  |  |  |
|            |  | Backplane            |                           |              | 1     |  |  |  |
|            |  | MODEM                | MOTOROLA                  | B3600        | 1     |  |  |  |

| Enterprise | Enterprise Signal House Asset Inventory |  |                 |                             |       |  |  |  |
|------------|---|--|-----------------|-----------------------------|-------|--|--|--|
| ltem       | Image                                   | Inventory  |                 |                             |       |  |  |  |
| Sides      |   | House Side-A                                     |                 |                             |       |  |  |  |
|            |   | COMPONENT  | MANUFACTURER    | PART NUMBER                 | COUNT |  |  |  |
|            |   | FIA-Keypad Controller                            | NAPCO           | RPC3000LCDe                 | 1     |  |  |  |
|            |   | SWITCH HEATER CONTROL BOX                        |                 |                             | 1     |  |  |  |
|            |   | House  | Side-B          |                             |       |  |  |  |
|            |   | Fire Intrusion Alarm                             | NAPCO           | MA 3000                     | 1     |  |  |  |
|            |   | Battery  | Genesis         | NP7-1212V,7.0Ah             | 2     |  |  |  |
|            |   | Main Board                                       |                 |                             | 1     |  |  |  |
|            |   | Relay Boards                                     |                 |                             | 1     |  |  |  |
|            |   | House Side-C                                     |                 |                             |       |  |  |  |
|            |   |  |                 |                             |       |  |  |  |
|            |   |  |                 |                             |       |  |  |  |
|            |   | House  | Side-D          |                             |       |  |  |  |
|            |   | Double Throw Enclosed Switch 100A 240V AC/ 250V  | <b>6 5</b>      |                             |       |  |  |  |
|            |   |  | Square D        | 40274-556-01                | 1     |  |  |  |
|            |   | GENERAL Duty Safety Switch 100A 240V AC/ 250V DC | Square D        | 40275-933-01                | 1     |  |  |  |
|            |   | BATTERY SURGE ARRESTOR 4                         | US&S            | N451552-0507                | 1     |  |  |  |
|            |   | Current Monitor*                                 | NRS             | EDD C 12/40C                | 1     |  |  |  |
|            |   |  | NRS             | ERB-C 12/40C                | 1     |  |  |  |
|            |   | BATTERY  | MARATHON        | IVI12V90                    | 1     |  |  |  |
|            |   | CLCP 256 IO LED Driver Module                    | Getsos          | ASSY 227027-001<br>Rev. 806 | 1     |  |  |  |
|            |   | Power Supply CLCP 12VDC 20W                      | Getsgs          | 226609-200                  | 1     |  |  |  |
|            |   | KEY LOCK SWITCH/2-POS 2-POLE STD. LOCK           | EOA SWITCH CORP | 51-236.025D                 | 1     |  |  |  |

## **Fairview Signal House**



| Fairview | Fairview Signal House Asset Inventory |                                   |              |                       |       |  |  |
|----------|---------------------------------------|-----------------------------------|--------------|-----------------------|-------|--|--|
| ltem     | Image                                 | Inventory                         |              |                       |       |  |  |
| Rack 1   |                                       | Rack 1                            |              |                       |       |  |  |
|          |                                       | COMPONENT                         | MANUFACTURER | PART NUMBER           | COUNT |  |  |
|          |                                       | BPL-3                             | EPC          | 150-097031-013 Rev. O | 4     |  |  |
|          |                                       | ISOLATED LOOP CIRCUIT             |              |                       |       |  |  |
|          | おびき し酒 伝 丁                            | PROTECTOR                         | EDCO         | PC642C-036X           | 2     |  |  |
|          |                                       |                                   |              |                       |       |  |  |
| Rack 2   |                                       | Rack 2                            |              |                       |       |  |  |
|          |                                       | COMPONENT                         | MANUFACTURER | PART NUMBER           | COUNT |  |  |
|          |                                       | Vital Relay                       | Alstom       | A62-407 56001-745-02  | 1     |  |  |
|          |                                       | Vital Relay                       | Alstom       | A62-122 56001-921-07  | 8     |  |  |
|          |                                       | POR XFMR                          | Alstom       | 31094-000-01 Rev. F   | 1     |  |  |
|          |                                       | 28V Power Supply                  | Керсо        | PRR 28-38M24787       | 3     |  |  |
|          |                                       | Rectifier 25V .3A Selenium Type S | S Alstom     | A53-541               | 1     |  |  |
|          |                                       |                                   |              |                       |       |  |  |

| Fairview | Signal House Asset Inventory   |                               |              |                      |       |  |  |
|----------|--|-------------------------------|--------------|----------------------|-------|--|--|
| ltem     | Image  | Inventory                     |              |                      |       |  |  |
| Rack 3   |  | Rack 3                        |              |                      |       |  |  |
| Nuck 5   |  | COMPONENT                     | MANUFACTURER | PART NUMBER          | COUNT |  |  |
|          |  | 28V Power Supply              | Керсо        | PRR 28-38M24787      | 2     |  |  |
|          |  | 28V Power Supply              | Керсо        | PRM 28-17-24810      | 2     |  |  |
| l        | and the second s | BX110/NX110 - 100Hz Converter | Behlman      | RR1200-100           | 1     |  |  |
|          |  |                               |              |                      |       |  |  |
| Rack 4   |  | Rack 4                        |              |                      |       |  |  |
|          |  | COMPONENT                     | MANUFACTURER | PART NUMBER          | COUNT |  |  |
| l        |  | Rectifier 120AC/120DC Switch  |              | 250756-000           | 3     |  |  |
|          |  | Vital Relay                   | Alstom       | A62-429 56001-926-01 | 12    |  |  |
|          | C. THERE WITH THE TANK   | Vital Relay                   | Alstom       | A62-432 56001-785-01 | 6     |  |  |
|          | CHERREN CHERREN  | Vital Relay                   | Alstom       | A62-122 56001-921-07 | 8     |  |  |
| 1        |  | Vital Relay                   | Alstom       | A62-247              | 4     |  |  |
|          |  |                               |              |                      |       |  |  |

| Fairview | Signal House Asset Inventory   |                                   |              |                         |       |  |
|----------|--|-----------------------------------|--------------|-------------------------|-------|--|
| ltem     | Image  | Inventory                         |              |                         |       |  |
| Rack 5   | 122  | Rack 5                            |              |                         |       |  |
| nach s   |  | COMPONENT                         | MANUFACTURE  | R PART NUMBER           | COUNT |  |
|          |  | XFMR Loop Matching (2340 Feq.)    | EPC          | 800-088019-200          | 4     |  |
|          |  | AC Vain Relay                     | Alstom       | A62-597                 | 4     |  |
|          |  | Bal Imp                           | Alstom       | A3-117                  | 4     |  |
|          |  | 3 ohm Resistor (1XT/3XT)          | GRS          | A3-207 (01246-1)        | 4     |  |
|          |  | 25 ohm Resistor (1XTRN/3XTRN)     |              | 56105-11                | 4     |  |
|          |  |                                   |              |                         |       |  |
| Rack 6   | No. Contraction of the   |                                   | Rack 6       |                         |       |  |
|          | Contraction of the local division of the loc | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1     |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. EAO | 11    |  |
|          |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 8     |  |
|          |  | 702-1 Track Coupler (2970 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |
|          |  | 702-1 Track Coupler (3510 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |
|          |  | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |
|          |  | 702-1 Track Coupler (3510 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |
|          | A DECEMBER OF THE OWNER.   | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. D   | 1     |  |
|          |  | 703-1 Receiver Module (2970 Feq.) |              | 150-095025-047 Rev. FAO | 2     |  |
|          |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. FAO | 2     |  |
|          |  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |
|          | A Million and Million  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. FAO | 1     |  |
|          |  | Chassis AF Track XMT TTT-2        | Getsus       | 812097031-001           | 3     |  |
|          |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |
|          |  |                                   |              |                         |       |  |

| Fairview | Fairview Signal House Asset Inventory  |                                   |              |                         |       |  |  |
|----------|--|-----------------------------------|--------------|-------------------------|-------|--|--|
| ltem     | Image  | Inventory                         |              |                         |       |  |  |
| Rack 7   | Station of the   | Rack 7                            |              |                         |       |  |  |
|          | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1     |  |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. EAO | 11    |  |  |
|          |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 6     |  |  |
|          | CONTRACTOR OF THE OWNER.   | 702-1 Track Coupler (2970 Feq.)   |              | 150-095025-034 Rev. CAO | 2     |  |  |
|          | Contraction of the local division of the loc | 702-1 Track Coupler (4410 Feq.)   |              | 150-095025-034 Rev. CAO | 2     |  |  |
|          |  | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |
|          |  | 702-1 Track Coupler (3510 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |
|          | CONTRACTOR OF THE OWNER  | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. FAO | 1     |  |  |
|          | and the second s | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|          |  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. FAO | 1     |  |  |
|          |  | 703-1 Receiver Module (2970 Feq.) |              | 150-095025-047 Rev. FAO | 2     |  |  |
|          |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. FAO | 1     |  |  |
|          |  | Chassis AF Track XMT TTT-2        | Getsus       | 812097031-001           | 3     |  |  |
|          |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |
|          |  |                                   |              |                         |       |  |  |
| Rack 8   | a the suchair  |                                   | Rack 8       |                         |       |  |  |
|          |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 1     |  |  |
|          |  | 700 Amplifier Module              |              | 150-094017-022 Rev. EAO | 11    |  |  |
|          |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 8     |  |  |
|          |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |
|          | THE REAL PROPERTY OF THE REAL  | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |
|          |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. CAO | 1     |  |  |
|          |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|          |  | Chassis AF Track XMT 111-2        | Getsgs       | 812-097031-001          | 3     |  |  |
|          |  |                                   |              |                         |       |  |  |

| Fairview | Signal House Asset Inventory  |                                   |              |                         |          |
|----------|---|-----------------------------------|--------------|-------------------------|----------|
| ltem     | Image   | Inventory                         |              |                         |          |
| Rack 9   |   |                                   | Rack 9       |                         |          |
|          |   | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT    |
|          |   | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1        |
|          |   | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 1        |
|          |   | 700 Amplifier Module              |              | 150-094017-022 Rev. EAO | 10       |
|          |   | 701-2 CAB Coupler (2340 Feg.)     |              | 150-097031-010 Rev. O   | 8        |
|          |   | 702-1 Track Coupler (3690 Feg.)   |              | 150-095025-034 Rev. CAO | 2        |
|          |   | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. B   | 1        |
|          | Bid internet  | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. CAO | 1        |
|          |   | 703-1 Receiver Module (4230 Feq.) |              | 150-095025-047 Rev. E   | 2        |
|          |   | 703-1 Receiver Module (3690 Feq.) |              | 150-095025-047 Rev. E   | 1        |
|          |   | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. D   | 1        |
|          |   | 703-1 Receiver Module (3690 Feq.) |              | 150-095025-047 Rev. FAO | 2        |
|          | Contraction and   | 703-1 Receiver Module (4950 Feq.) |              | 150-095025-047 Rev. FAO | 1        |
|          |   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 3        |
|          |   | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1        |
| Deals 10 | ALC: NO.  |                                   | Dock 10      |                         |          |
| RACK TO  | CALL TO AN ANY MAKEN  | COMPONENT                         |              |                         | COUNT    |
|          | ALL AND A | 700 Amplifier Module              | MANOTACTORER | 150-09/017-022 Rev. A   | 1        |
|          |   | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 11       |
|          |   | 700 Ampliner Module               |              | 150.097021.010 Pov. O   | 7        |
|          |   | 701-2 CAB Coupler (2540 Feq.)     |              | 150-097031-010 Rev. C   | /        |
|          |   | 702-1 Track Coupler (3050 Feq.)   |              | 150-095025-034 Rev. CAO | 1        |
|          |   | 702-1 Track Coupler (4350 Feq.)   |              | 150-095025-034 Rev. B   | 1        |
|          |   | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B   | 1        |
|          |   | 702-1 Track Coupler (3690 Feg.)   |              | 150-095025-034 Rev. B   | 1        |
|          |   | 702-1 Receiver Module (4950 Feg.) |              | 150-095025-034 Rev. B   | 2        |
|          |   | 703-1 Receiver Module (3330 Feg.) |              | 150-095025-047 Rev. D   | 1        |
|          |   | 703-1 Receiver Module (4230 Feg.) |              | 150-095025-047 Rev. FAO | 2        |
|          | A ANALY A   | 703-1 Receiver Module (3330 Feg.) |              | 150-095025-047 Rev. FAO | 1        |
|          |   | 703-1 Receiver Module (3690 Feg.) |              | 150-095025-047 Rev D    | 1        |
|          |   | Chassis AF Track XMT TTT-2        | Getsøs       | 812-097031-001          | 3        |
|          |   | AF Track Receiver Chassis         | Getsøs       | 812-097031-034          | 1        |
|          |   |                                   | 0-           |                         | <u> </u> |

| Fairview | Fairview Signal House Asset Inventory  |                              |              |              |       |  |  |
|----------|--|------------------------------|--------------|--------------|-------|--|--|
| ltem     | Image  | Inventory                    | Inventory    |              |       |  |  |
| Rack 11  | Martin Washington and  | Rack 11                      |              |              |       |  |  |
|          | a state of the sta | COMPONENT                    | MANUFACTURER | PART NUMBER  | COUNT |  |  |
|          | a The Browners   | HLC Cabinet with Lexan Cover | Getsgs       | 226802-001   | 2     |  |  |
|          | Contraction of the Contraction o | VLP                          |              |              | 2     |  |  |
|          | A. H. M. H. M. A. M. M. M.   | ACP-3                        |              |              | 2     |  |  |
|          | Company of the local data and the local data   | SSM                          |              |              | 2     |  |  |
|          |  | CCI                          |              |              | 2     |  |  |
|          |  | VSD                          |              |              | 2     |  |  |
|          |  | VGPI 16                      |              |              | 2     |  |  |
|          | topi famala  | VGP I/O-12V                  |              |              | 3     |  |  |
|          |  | NV I/O                       |              |              | 4     |  |  |
|          |  | 32 NVI                       |              |              | 5     |  |  |
|          |  | CLA Board                    |              |              | 2     |  |  |
|          |  | RS-232                       |              |              | 5     |  |  |
|          |  | Modem                        |              |              | 1     |  |  |
|          | The second se  | 12V Power Supply             |              |              | 2     |  |  |
|          |  |                              |              |              | 1     |  |  |
| Rack 12  |  |                              | Rack 12      |              |       |  |  |
|          | al -   | COMPONENT                    | MANUFACTURER | PART NUMBER  | COUNT |  |  |
|          |  | HLC Cabinet with Lexan Cover | Getsgs       | 226802-001   | 1     |  |  |
|          |  | VLP                          |              |              | 1     |  |  |
|          |  | ACP-3                        |              |              | 1     |  |  |
|          | Lugi Consider  | SSM                          |              |              | 1     |  |  |
|          |  | CCI                          |              |              | 1     |  |  |
|          |  | VSD                          |              |              | 1     |  |  |
|          | and a set  | VGP I/O-12V                  |              |              | 1     |  |  |
|          | and a second   | NV I/O                       |              |              | 3     |  |  |
|          |  | NVI 32                       |              |              | 1     |  |  |
|          |  | RS-232                       |              |              | 2     |  |  |
|          |  | Modem                        |              |              | 1     |  |  |
|          |  | 12V Power Supply             |              |              | 1     |  |  |
|          |  | Hawk Event Recorder          | Getsgs       | 251210-00001 | 2     |  |  |
|          |  |                              |              |              |       |  |  |

| Fairview | Signal House Asset Inventory                      |                                      |                 |                |       |  |  |
|----------|---|--------------------------------------|-----------------|----------------|-------|--|--|
| ltem     | Image   | Inventory                            |                 |                |       |  |  |
| Rack 13  | C MARKEN C  | Rack 13                              |                 |                |       |  |  |
|          |   | COMPONENT                            | MANUFACTURER    | PART<br>NUMBER | COUNT |  |  |
|          | a supervise that a                                | Rotary Dials (Full Hemisphere-NEW)   |                 |                | 21    |  |  |
|          |   | Non-Vital Relays                     |                 |                | 76    |  |  |
|          | 1.22233333.                                       | Key Lock Switch 2-POS 2-POL STD.Lock | EAO Switch Corp | 51-236.025D    | 1     |  |  |
|          |   |                                      |                 |                |       |  |  |
| Rack 14  |   | Ra                                   | ick 14          |                |       |  |  |
|          | IN SAAA IN AND AND AND AND AND AND AND AND AND AN | COMPONENT                            | MANUFACTURER    | PART NUMBER    | COUNT |  |  |
|          |   | Rotary Dials (Full Hemisphere-NEW)   |                 |                | 16    |  |  |
|          | 10- + + + + +                                     | Non-Vital Relays                     |                 |                | 75    |  |  |
|          |   |                                      |                 |                |       |  |  |

| Fairview | Fairview Signal House Asset Inventory   |                      |                           |                  |       |  |  |
|----------|---|----------------------|---------------------------|------------------|-------|--|--|
| ltem     | Image   | Inventory            |                           |                  |       |  |  |
| SCADA    |   | SCADA                |                           |                  |       |  |  |
|          |   | COMPONENT            | MANUFACTURER              | PART NUMBER      | COUNT |  |  |
|          | Medilia-  | Power Supply         | Schneider Electric        | TSXPSY1610       | 1     |  |  |
|          |   | CPU                  | Schneider Electric        | TSXP57203        | 1     |  |  |
|          | The second s  | Memory Card          | Schneider Automation S.A. | TSXMRP064P       | 1     |  |  |
|          |   | RS-232               |                           |                  | 1     |  |  |
|          |   | Input Card           | Schneider Electric        | TSXDEY32D2K      | 6     |  |  |
|          | A DECEMBER OF A | Input Cord           | Schneider Electric        | TSXCDP203        | 12    |  |  |
|          | Towner and the state  | Output Card          | Schneider Electric        | TSXDSY32T2K      | 2     |  |  |
|          |   | Output Cord          | Phoenix Contact           | 22 98 438        | 4     |  |  |
|          | A CONTRACT OF A CONTRACT  | Input Card ABE7      | Schneider Electric        | ABE7H16C11       | 12    |  |  |
|          | ST Statement State  | Relays               | Phoenix Contact           | PLC-V8/FLK14/OUT | 8     |  |  |
|          | Building of the local division of the local | Power Supply         | Connect Power             | 992534 0024      | 1     |  |  |
|          | A Design of the second second second  | Battery Charger      | Connect Power             | 991628 0024      | 1     |  |  |
|          |   | Batteries            | CD Technologies           | UPS12-150MR      | 2     |  |  |
|          |   | TC8802/TC8800        |                           |                  | 1     |  |  |
|          |   | Backplane            |                           |                  | 1     |  |  |
|          |   | TSX Momentum/ RS-232 | Schneider Electric        | 171CCC76010      | 1     |  |  |
| L        |   |                      |                           |                  |       |  |  |

| Fairview | Signal House Asset Inventory  |   |                    |                             |       |  |
|----------|---|---|--------------------|-----------------------------|-------|--|
| ltem     | Image   | Inventory   |                    |                             |       |  |
| Sides    |   | House Side-A  |                    |                             |       |  |
|          |   | COMPONENT   | MANUFACTURE<br>R   | PART NUMBER                 | COUNT |  |
|          | The second se | FIA-Keypad Controller                                 | NAPCO              | RPC3000LCDe                 | 1     |  |
|          |   | Switch Heater Push Button Box                         |                    |                             | 1     |  |
|          |   | Hous  | e Side-B           |                             |       |  |
|          |   | Fire Intrusion Alarm                                  | NAPCO              |                             | 1     |  |
|          |   | Battery   | Genesis            | NP7-1212V,7.0Ah             | 2     |  |
|          |   | Main Board  |                    |                             | 1     |  |
|          | describes *   | Relay Boards  |                    |                             | 1     |  |
|          |   | Hous  | e Side-C           |                             |       |  |
|          |   | Hous  | e Side-D           |                             |       |  |
|          |   | Double Throw Enclosed Switch 100A 240V AC/<br>250V DC | Square D           | 40275-953-02                | 1     |  |
|          |   | GENERAL Duty Safety Switch 100A 240V AC/<br>250V DC   | Square D           | 40276-004-02                | 1     |  |
|          | 18.   | Surge Protector 18V AC 15A USSP                       | US&S               | N451552-0507                | 3     |  |
|          | A CONTRACT OF A CONTRACT OF   | Current Monitor                                       | NRS                | 16775-00                    | 2     |  |
|          |   | 12V Power Supply                                      | NRS                | ERB-C 12/501C               | 2     |  |
|          |   | 2.25V Battery   | GNB                | 50A15                       | 12    |  |
|          |   | CLCP 256 IO LED Driver Module                         | Getsgs             | Assy 227027-001<br>Rev. 806 | 2     |  |
|          |   | Power Supply CLCP 12VDC 20W                           | Getsgs             | 226609-200                  | 2     |  |
|          |   | Key Lock Switch 2-POS 2-POL STD.Lock                  | EAO Switch<br>Corp | 51-236.025D                 | 2     |  |

## **Forest Park A Signal House**



| Forest Parl | Forest Park A Signal House Asset Inventory |                      |              |                        |       |  |
|-------------|--|----------------------|--------------|------------------------|-------|--|
| ltem        | Image                                      | Inventory            |              |                        |       |  |
| Rack 1      |  | Rack 1               |              |                        |       |  |
|             |  | COMPONENT            | MANUFACTURER | PART NUMBER            | COUNT |  |
|             |  | BPL-3                | HARMON       | 150-097031-013 Rev. O  | 2     |  |
|             |  | ISOLATED LOOP CIRCUI | Т            |                        |       |  |
|             | 321  | PROTECTOR            |              | PC642C-036X            | 3     |  |
|             |  |                      |              |                        |       |  |
| Rack 2      |  | Rack 2               |              |                        |       |  |
|             |  | COMPONENT            | MANUFACTURER | PART NUMBER            | COUNT |  |
|             |  | Vital Relay          | Alstom       | A62-407 (56001-745-02) | 1     |  |
|             |  | Vital Relay          | Alstom       | A62-122 (56001-921-07) | 5     |  |
|             | THE WAY IN THE                             | XFIVIR               | Aistom       | 31094-000-01 KeV. F    | 1     |  |
| 1           | A MANANA                                   | 28V Power Supply     | Керсо        | PRN 28-17-24810        | 2     |  |
| 1           |  | Rectifier            | Alstom       | Δ53-541                | 1     |  |
|             | JUL T                                      |                      |              |                        | -     |  |

| Forest Park A Signal House Asset Inventory |  |   |                            |   |             |
|--|--|---|----------------------------|---|-------------|
| ltem                                       | Image  | Inventory                                 |                            |   |             |
| Rack 3                                     | 9  | Rack 3                                    |                            |   |             |
|  | the second second  | COMPONENT                                 | MANUFACTURER               | PART NUMBER   | COUNT       |
|  | No. al I.S.  | 28V Power Supply                          | Керсо                      | PRR 28-38M24787   | 1           |
|  | And State Root Root Read And   | 28V Power Supply                          | Керсо                      | PRM 28-17-24810   | 1           |
|  | These weeks  |   |                            |   |             |
|  |  |   |                            |   |             |
| Rack 4                                     |  | Rack 4                                    |                            |   |             |
|  | Contraction Contraction Contraction  | COMPONENT                                 | MANUFACTURER               | PART NUMBER   | COUNT       |
|  | A DECK TACHER AND A DECK AND A DE | Switch Rectifier 120AC/120D               | DC                         | 250756-000  | 2           |
|  |  | Switch Rectiller 120AC/120E               |                            |   |             |
|  |  | Vital Relay                               | Alstom                     | A62-429 (56001-926-01)                                      | 6           |
|  |  | Vital Relay<br>Vital Relay                | Alstom<br>Alstom           | A62-429 (56001-926-01)<br>A62-432 (56001-785-01)            | 6<br>3      |
|  |  | Vital Relay<br>Vital Relay<br>Vital Relay | Alstom<br>Alstom<br>Alstom | A62-429 (56001-926-01)<br>A62-432 (56001-785-01)<br>A62-247 | 6<br>3<br>2 |

| Forest Parl | k A Signal House Asset Inventory   |                               |              |                        |       |
|-------------|--|-------------------------------|--------------|------------------------|-------|
| ltem        | Image  | Inventory                     |              |                        |       |
| Rack 5      |  | Rack 5                        |              |                        |       |
|             |  | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT |
|             | The State of the second s   | XFMR Loop Matching            | EPC          | 800-088019-200         | 1     |
|             |  | AC Vain Relay                 | Alstom       | A62-486                | 1     |
|             | New State  | Bal Imp                       | Alstom       | A3-117                 | 1     |
|             |  | 3 ohm Resistor                | GRS          | A3-207 (01246-1)       | 1     |
|             | 「「「「「「「」」」 「「」」  | 25 ohm Resistor               |              | 56105-11               | 1     |
|             | And in case of the local division of the loc | XFMR                          | Alstom       | 31094-000 (A95 50)     | 1     |
|             |  | VITAL RELAY                   | Alstom       | A62-122 (56001-921-07) | 1     |
|             | 「日本」   | 700 Amplifier Module          | Harmon       | 150-094017-022 Rev. D  | 4     |
|             |  | 701-2 CAB Coupler (2340 Feq.) | Harmon       | 150-097031-010 Rev. O  | 4     |
|             |  | Chassis AF Track XMT TTT-2    | Getsgs       | 812-097031-001         | 1     |
| Back 6      |  |                               | Rack 6       |                        |       |
| Nuck o      |  | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT |
|             |  | XFMR Loop Matching            | EPC          | 800-088019-200         | 1     |
|             |  | AC Vain Relay                 | Alstom       | A62-486                | 1     |
|             |  | Bal Imp                       | Alstom       | A3-117                 | 1     |
|             |  | 3 ohm Resistor                | GRS          | A3-207 (01246-1)       | 1     |
|             |  | 25 ohm Resistor               |              | 56105-11               | 1     |
|             |  | XFMR                          | Alstom       | 31094-000 (A95 50)     | 1     |
|             |  | VITAL RELAY                   | Alstom       | A62-122 (56001-921-07) | 1     |
|             |  | 700 Amplifier Module          | Harmon       | 150-094017-022 Rev. D  | 3     |
|             |  | 701-2 CAB Coupler (2340 Feq.) | Harmon       | 150-097031-010 Rev. O  | 3     |
|             | With the and some of the   | Chassis AF Track XMT TTT-2    | Getsgs       | 812097031-001          | 1     |
|             |  |                               |              |                        |       |

| Forest Park | A Signal House Asset Inventory   |                                   |              |                         |       |  |
|-------------|--|-----------------------------------|--------------|-------------------------|-------|--|
| ltem        | Image  | Inventory                         |              |                         |       |  |
| Back 7      |  | Rack 7                            |              |                         |       |  |
| Nack 7      |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |
|             |  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 6     |  |
|             |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 3     |  |
|             |  | 702-1 Track Coupler (3510 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |
|             |  | 702-1 Track Coupler (2970 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |
|             |  | 702-1 Track Coupler (3510 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1     |  |
|             |  | 703-1 Receiver Module (2970 Feq.) | Harmon       | 150-095025-047 Rev. E   | 2     |  |
|             |  | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |
|             |  | 703-1 Receiver Module (3870 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1     |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |
|             | A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |
| Dack 9      |  |                                   | Rack &       |                         | 1     |  |
| NACK O      | A DESCRIPTION OF THE OWNER   | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |
|             | THE REAL FORMER  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 6     |  |
|             |  | 701-2 CAB Coupler (2340 Feg.)     | Harmon       | 150-097031-010 Rev. O   | 3     |  |
|             |  | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |
|             |  | 702-1 Track Coupler (3330 Feq.)   | Harmon       | 150-095025-034Rev. FAO  | 1     |  |
|             |  | 702-1 Track Coupler (4410 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1     |  |
|             |  | 703-1 Receiver Module (4410 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1     |  |
|             | MARKAN OF MARKAN AND A STATE   | 703-1 Receiver Module (4230 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1     |  |
|             |  | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |
|             |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |
|             |  |                                   |              |                         |       |  |

| Forest Park | Forest Park A Signal House Asset Inventory   |                                   |              |                         |       |  |
|-------------|--|-----------------------------------|--------------|-------------------------|-------|--|
| ltem        | Image  | Inventory                         |              |                         |       |  |
| Rack 9      | A Distance of the second designed  | Rack 9                            |              |                         |       |  |
|             | and the second se  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |
|             | Call and Approximately   | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 5     |  |
|             | A STATUTE  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. A   | 1     |  |
|             |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 4     |  |
|             | State Street Street  | 702-1 Track Coupler (3690 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1     |  |
|             | A CONTRACTOR OF A CONTRACTOR O | 702-1 Track Coupler (2970 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1     |  |
|             |  | 703-1 Receiver Module (3690 Feq.) | Harmon       | 150-095025-047 Rev. D   | 1     |  |
|             |  | 703-1 Receiver Module (4950 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |
|             |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |
| Rack 10     |  |                                   | Rack 10      |                         | ]     |  |
| NUCK 10     |  | COMPONENT                         | MANUFACTU    | RER PART NUMBER         | COUNT |  |
|             | ALC: NO DE LA COMPANY  | HLC Cabinet with Lexan Cover      | Getsgs       | 226802-001              | 2     |  |
|             | State  | VLP                               |              |                         | 2     |  |
|             | A CONTRACTOR OF  | ACP-3                             |              |                         | 2     |  |
|             | Librard M  | SSM                               |              |                         | 2     |  |
|             | San an   | CCI                               |              |                         | 2     |  |
|             | The state of the second state  | VSD                               |              |                         | 2     |  |
|             | and the second sec   | VGP I/O-12V                       |              |                         | 4     |  |
|             |  | NV I/O                            |              |                         | 4     |  |
|             | -  | 32 NVI                            |              |                         | 4     |  |
|             |  | CLA Board                         |              |                         | 2     |  |
|             |  | RS-232                            |              |                         | 4     |  |
|             |  | Niodem                            |              |                         | 3     |  |
|             |  | 12V Power Supply                  |              |                         | Z     |  |
|             |  |                                   |              |                         |       |  |

| Forest Park A Signal House Asset Inventory |  |                           |              |                          |                  |        |  |
|--|--|---------------------------|--------------|--------------------------|------------------|--------|--|
| ltem                                       | Image  | Inventory                 |              |                          |                  |        |  |
| Rack 11                                    |  | Rack 11                   |              |                          |                  |        |  |
|  | BUNG THE CAR   | COMPONENT                 |              | MANUFACTURER PART NUMBER |                  | COUNT  |  |
|  | and the second se  | Rotary Dials (Full Hemisp | here-NEW)    |                          |                  | 17     |  |
|  |  | Non-Vital Relay           | 'S           |                          |                  | 81     |  |
|  |  |                           |              |                          |                  |        |  |
| Caada                                      |  |                           |              | SCADA                    |                  | ]      |  |
| Scada                                      | Service and  | COMPONENT                 | MANUE        |                          |                  | COLINT |  |
|  |  | Power Supply              | Schneide     | er Electric              | TSXPSV1610       | 1      |  |
|  |  | CPU                       | Schneide     | er Electric              | TSP57203         | 1      |  |
|  |  | Memory Card               | Schneider Au | itomation S.A.           | TSXMRP064P       | 1      |  |
|  | A REAL PROPERTY AND A REAL | RS-232                    |              |                          |                  | 1      |  |
|  |  | Input Card                | Schneide     | er Electric              | TSXDEY32D2K      | 3      |  |
|  |  | Input Cord                | Schneide     | er Electric              | TSXCDP203        | 6      |  |
|  | A Transformer of A   | Output Card               | Schneide     | er Electric              | TSXDSY32T2K      | 2      |  |
|  |  | Output Cord               | Phoenix      | Contact                  | 22 98 438        | 4      |  |
|  |  | Input Card ABE7           | Schneide     | er Electric              | ABE7H16C11       | 6      |  |
|  |  | Relays                    | Phoenix      | Contact                  | PLC-V8/FLK14/OUT | 8      |  |
|  |  | Power Supply              | Connec       | t Power                  | 992534 0024      | 1      |  |
|  |  | Battery Charger           | Connec       | t Power                  | 991628 0024      | 1      |  |
|  | 1 - Carl   | Batteries                 | CD Tech      | nologies                 | UPS12-150MR      | 2      |  |
|  |  | Fiber Media Converter     | Garrett      | Com Inc.                 | CS14P-SST-48VDC  | 1      |  |
|  |  | Phone Line Extender       | Тс           | om                       |                  | 1      |  |
|  |  | Backplane                 |              |                          |                  | 1      |  |

| Forest Park A Signal House Asset Inventory |                           |  |                  |                      |       |  |  |
|--|---------------------------|--|------------------|----------------------|-------|--|--|
| ltem                                       | Image                     | Inventory                              |                  |                      |       |  |  |
| Sides                                      | E Logo Barrow             | House Side-A                           |                  |                      |       |  |  |
|  |                           | COMPONENT                              | MANUFACTURER     | PART NUMBER          | COUNT |  |  |
|  |                           | FIA-Keypad Controller                  | NAPCO            | RPC3000LCDe          | 1     |  |  |
|  |                           | SWITCH HEATER CONTROL BOX              |                  |                      | 1     |  |  |
|  |                           | H                                      | House Side-B     |                      |       |  |  |
|  |                           | Fire Intrusion Alarm                   | NAPCO            |                      | 1     |  |  |
|  |                           | Battery                                | Genesis          | NP7-1212V,7.0Ah      | 2     |  |  |
|  |                           | Main Board                             |                  |                      | 1     |  |  |
|  | 3 400014 (J/D) Provenue 1 | Relay Boards                           |                  |                      | 1     |  |  |
|  |                           | Expansion Modules                      |                  |                      | 1     |  |  |
|  | M                         | House Side-C                           |                  |                      |       |  |  |
|  |                           |  |                  |                      |       |  |  |
|  |                           |  |                  |                      |       |  |  |
|  |                           | ŀ                                      | House Side-D     |                      |       |  |  |
|  |                           |  |                  | Assy 227027-001 Rev. |       |  |  |
|  |                           | CLCP 256 IO LED Driver Module          | Getsgs           | 806                  | 2     |  |  |
|  |                           | Power Supply CLCP 12VDC 20W            | Getsgs           | 226609-200           | 2     |  |  |
|  |                           | Double Throw Enclosed Switch 100A 240V |                  |                      |       |  |  |
|  |                           | AC/ 250V DC                            | Square D         | 40275-953-01         | 1     |  |  |
|  |                           | Heavy Duty Safety Switch 100A 240V AC/ |                  |                      |       |  |  |
|  |                           | 250V DC                                | Square D         | 40276-003-01         | 1     |  |  |
|  |                           | TRANSIENT VOLTAGE SURGE SUPPRESSOR     | EATON ELECTRICAL | PTX160-1S101         | 1     |  |  |
|  |                           | Hawk Event Recorder                    | Getsgs           | 251210-00001         | 1     |  |  |
|  |                           | Surge Protector 18V AC 15A USSP        | US&S             | N451552-0507         | 2     |  |  |
|  |                           | Current Monitor                        | NRS              | 16775-00             | 2     |  |  |
|  |                           | 12V Power Supply                       | NRS              | ERB-C 12/501C        | 2     |  |  |
|  |                           | 2.25V Battery                          | GNB              | 50A15                | 12    |  |  |

## **Forest Park B Signal House**



| Forest Park B Signal House Asset Inventory |               |                               |              |                        |       |  |  |
|--|---------------|-------------------------------|--------------|------------------------|-------|--|--|
| ltem                                       | Image         | Inventory                     |              |                        |       |  |  |
| Rack 1                                     |               | Rack 1                        |              |                        |       |  |  |
|  | TEEL          | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT |  |  |
|  |               | BPL-3                         | HARMON       | 150-097031-013 Rev. O  | 2     |  |  |
|  |               | ISOLATED LOOP CIRCU           | IT           |                        |       |  |  |
|  | 321           | PROTECTOR                     |              | PC642C-036X            | 3     |  |  |
|  |               |                               |              |                        |       |  |  |
| Rack 2                                     |               | Rack 2                        |              |                        |       |  |  |
|  |               | COMPONENT                     | MANUFACTURER |                        | COUNT |  |  |
|  |               | Vital Relay                   | Alstom       | A62-407 (56001-745-02) |       |  |  |
|  |               | Vital Relay                   | Alstom       | A62-122 (56001-921-07) |       |  |  |
|  | THE WAY AND A | XFIVIR                        | Aistom       | 31094-000-01 Rev. F    |       |  |  |
|  | REFERE        | 28V Power Supply              | Керсо        | PRR 28-38IVI24787      | 2     |  |  |
|  |               | 200 Power Supply<br>Bectifier | Alstom       | Δ53-5/1                |       |  |  |
|  |               |                               |              |                        |       |  |  |

| Forest Parl | Forest Park B Signal House Asset Inventory |                            |              |                        |       |  |  |
|-------------|--|----------------------------|--------------|------------------------|-------|--|--|
| ltem        | Image                                      | Inventory                  | Inventory    |                        |       |  |  |
| Rack 3      | 9  | Rack 3                     |              |                        |       |  |  |
| hack o      | and the second second                      | COMPONENT                  | MANUFACTURER | PART NUMBER            | COUNT |  |  |
|             | Mart 1                                     | 28V Power Supply           | Керсо        | PRR 28-38M24787        | 1     |  |  |
|             | THE REPORT OF THE R. P. LEWIS CO.          | 28V Power Supply           | Керсо        | PRM 28-17-24810        | 1     |  |  |
|             | ALLE DE LEAR                               |                            |              |                        |       |  |  |
|             |  |                            |              |                        |       |  |  |
| Rack 4      |  | Rack 4                     |              |                        |       |  |  |
|             |  | COMPONENT                  | MANUFACTURER | PART NUMBER            | COUNT |  |  |
|             |  | Switch Rectifier 120AC/120 | DDC          | 250756-000             | 2     |  |  |
|             |  | Vital Relay                | Alstom       | A62-429 (56001-926-01) | 6     |  |  |
|             |  | Vital Relay                | Alstom       | A62-432 (56001-785-01) | 3     |  |  |
| 1           |  | Vital Relay                | Alstom       | A62-247                | 2     |  |  |
|             |  |                            |              |                        |       |  |  |

| Forest Park | k B Signal House Asset Inventory   |                               |              |                        |       |  |
|-------------|--|-------------------------------|--------------|------------------------|-------|--|
| ltem        | Image  | Inventory                     |              |                        |       |  |
| Rack 5      |  | Rack 5                        |              |                        |       |  |
|             |  | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT |  |
|             |  | XFMR Loop Matching            | EPC          | 800-088019-200         | 1     |  |
|             |  | AC Vain Relay                 | Alstom       | A62-486                | 1     |  |
|             | New State  | Bal Imp                       | Alstom       | A3-117                 | 1     |  |
|             |  | 3 ohm Resistor                | GRS          | A3-207 (01246-1)       | 1     |  |
|             |  | 25 ohm Resistor               |              | 56105-11               | 1     |  |
|             | And in case of the local division of the loc | XFMR                          | Alstom       | 31094-000 (A95 50)     | 1     |  |
|             |  | VITAL RELAY                   | Alstom       | A62-122 (56001-921-07) | 1     |  |
|             | 日本   | 700 Amplifier Module          | Harmon       | 150-094017-022 Rev. D  | 4     |  |
|             | S 28 million   | 701-2 CAB Coupler (2340 Feq.) | Harmon       | 150-097031-010 Rev. O  | 4     |  |
|             |  | Chassis AF Track XMT TTT-2    | Getsgs       | 812-097031-001         | 1     |  |
| Back 6      |  |                               | Rack 6       |                        |       |  |
| Nack 0      |  | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT |  |
|             |  | XFMR Loop Matching            | EPC          | 800-088019-200         | 1     |  |
|             |  | AC Vain Relay                 | Alstom       | A62-486                | 1     |  |
|             |  | Bal Imp                       | Alstom       | A3-117                 | 1     |  |
|             |  | 3 ohm Resistor                | GRS          | A3-207 (01246-1)       | 1     |  |
|             |  | 25 ohm Resistor               |              | 56105-11               | 1     |  |
|             |  | XFMR                          | Alstom       | 31094-000 (A95 50)     | 1     |  |
|             |  | VITAL RELAY                   | Alstom       | A62-122 (56001-921-07) | 1     |  |
|             |  | 700 Amplifier Module          | Harmon       | 150-094017-022 Rev. D  | 3     |  |
|             |  | 701-2 CAB Coupler (2340 Feq.) | Harmon       | 150-097031-010 Rev. O  | 3     |  |
|             | With the and some of the   | Chassis AF Track XMT TTT-2    | Getsgs       | 812097031-001          | 1     |  |
|             |  |                               |              |                        |       |  |

| Forest Park B Signal House Asset Inventory |  |                                   |              |                         |              |  |  |
|--|--|-----------------------------------|--------------|-------------------------|--------------|--|--|
| ltem                                       | Image  | Inventory                         |              |                         |              |  |  |
| Rack 7                                     |  | Rack 7                            |              |                         |              |  |  |
|  |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT        |  |  |
|  |  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 6            |  |  |
|  |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 3            |  |  |
|  | 2 2 3  | 702-1 Track Coupler (3510 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1            |  |  |
|  |  | 702-1 Track Coupler (2970 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1            |  |  |
|  | AND COLOR AND AND A  | 702-1 Track Coupler (3510 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1            |  |  |
|  | 3554   | 703-1 Receiver Module (2970 Feq.) | Harmon       | 150-095025-047 Rev. E   | 2            |  |  |
|  |  | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1            |  |  |
|  | <b>建设合</b> 称   | 703-1 Receiver Module (3870 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1            |  |  |
|  |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2            |  |  |
|  |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1            |  |  |
| Back 8                                     |  |                                   | Rack 8       |                         |              |  |  |
| hack o                                     | A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT        |  |  |
|  |  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | <b>COUNT</b> |  |  |
|  |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 3            |  |  |
|  |  | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1            |  |  |
|  |  | 702-1 Track Coupler (3330 Feq.)   | Harmon       | 150-095025-034Rev. FAO  | 1            |  |  |
|  |  | 702-1 Track Coupler (4410 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1            |  |  |
|  |  | 703-1 Receiver Module (4410 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1            |  |  |
|  |  | 703-1 Receiver Module (4230 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1            |  |  |
|  | - Contraction of the   | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1            |  |  |
|  | A MALINI MAL   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2            |  |  |
|  | and the second se  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1            |  |  |
|  | MARKE  |                                   |              |                         |              |  |  |

| Forest Park B Signal House Asset Inventory |  |                                   |                              |                              |       |  |  |
|--|--|-----------------------------------|------------------------------|------------------------------|-------|--|--|
| ltem                                       | Image  | Inventory                         |                              |                              |       |  |  |
| Rack 9                                     | and the second se  | Rack 9                            |                              |                              |       |  |  |
|  |  | COMPONENT                         | MANUFACTURER                 | PART NUMBER                  | COUNT |  |  |
|  |  | 700 Amplifier Module              | Harmon                       | 150-094017-022 Rev. D        | 5     |  |  |
|  |  | 700 Amplifier Module              | Harmon                       | Harmon 150-094017-022 Rev. A |       |  |  |
|  |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon 150-097031-010 Rev. O |                              | 4     |  |  |
|  | Contraction of the second  | 702-1 Track Coupler (3690 Feq.)   | Harmon                       | 150-095025-034 Rev. B        | 1     |  |  |
|  | Contraction Contraction  | 702-1 Track Coupler (2970 Feq.)   | Harmon                       | 150-095025-034 Rev. B        | 1     |  |  |
|  |  | 703-1 Receiver Module (3690 Feq.) | Harmon                       | 150-095025-047 Rev. D        | 1     |  |  |
|  |  | 703-1 Receiver Module (4950 Feq.) | Harmon                       | 150-095025-047 Rev. FAO      | 1     |  |  |
|  |  | Chassis AF Track XMT TTT-2        | Getsgs                       | 812-097031-001               | 2     |  |  |
|  | The second second  | AF Track Receiver Chassis         | Getsgs                       | 812-097031-034               | 1     |  |  |
| Back 10                                    |  | Back 10                           |                              |                              |       |  |  |
| NUCK 10                                    |  | COMPONENT                         | MANUFACTU                    | RER PART NUMBER              | COUNT |  |  |
|  |  | HLC Cabinet with Lexan Cover      | Getsgs                       | 226802-001                   | 2     |  |  |
|  | State Stat | VLP                               |                              |                              | 2     |  |  |
|  | Manager  | ACP-3                             |                              |                              | 2     |  |  |
|  | Lawrent M  | SSM                               |                              |                              | 2     |  |  |
|  | Satur  | CCI                               |                              |                              | 2     |  |  |
|  | The share of the second second   | VSD                               |                              |                              | 2     |  |  |
|  |  | VGP I/O-12V                       |                              |                              | 4     |  |  |
|  |  | NV I/O                            |                              |                              | 4     |  |  |
|  | 1  | 32 NVI                            |                              |                              | 4     |  |  |
|  |  | CLA Board                         |                              |                              | 2     |  |  |
|  |  | RS-232                            |                              |                              | 4     |  |  |
|  |  | Niddem                            |                              |                              | 3     |  |  |
|  |  | 12V Power Supply                  |                              |                              | Z     |  |  |
|  |  |                                   |                              |                              |       |  |  |

| Forest Park B Signal House Asset Inventory |  |                           |                        |                     |       |  |  |
|--|--|---------------------------|------------------------|---------------------|-------|--|--|
| ltem                                       | Image  | Inventory                 |                        |                     |       |  |  |
| Rack 11                                    |  | Rack 11                   |                        |                     |       |  |  |
|  | ETTE AND CON   | COMPONENT                 | MANUF                  | ACTURER PART NUMBER | COUNT |  |  |
|  | a and a set of a large state of the set of t | Rotary Dials (Full Hemisp | here-NEW)              |                     | 25    |  |  |
|  |  | Non-Vital Relay           | s                      |                     | 84    |  |  |
|  |  |                           |                        |                     |       |  |  |
| Scada                                      |  | SCADA                     |                        |                     |       |  |  |
|  |  | COMPONENT                 | MANUFACTURER           | PART NUMBER         | COUNT |  |  |
|  |  | Power Supply              | Schneider Electric     | TSXPSY1610          | 1     |  |  |
|  |  | CPU                       | Schneider Electric     | TSP57203            | 1     |  |  |
|  |  | Memory Card               | Schneider Automation S | .A. TSXMRP064P      | 1     |  |  |
|  |  | RS-232                    |                        |                     | 1     |  |  |
|  |  | Input Card                | Schneider Electric     | TSXDEY32D2K         | 3     |  |  |
|  |  | Input Cord                | Schneider Electric     | TSXCDP203           | 6     |  |  |
|  | And a second   | Output Card               | Schneider Electric     | TSXDSY32T2K         | 2     |  |  |
|  | A Complete Manager   | Output Cord               | Phoenix Contact        | 22 98 438           | 4     |  |  |
|  |  | Input Card ABE7           | Schneider Electric     | ABE7H16C11          | 6     |  |  |
|  | 10 - 24  | Relays                    | Phoenix Contact        | PLC-V8/FLK14/OUT    | 8     |  |  |
|  |  | Power Supply              | Connect Power          | 992534 0024         | 1     |  |  |
|  | and the second se  | Battery Charger           | Connect Power          | 991628 0024         | 1     |  |  |
|  |  | Batteries                 | CD Technologies        | UPS12-150MR         | 2     |  |  |
|  |  | Fiber Media Converter     | GarrettCom Inc.        | CS14P-SST-48VDC     | 1     |  |  |
|  |  | Phone Line Extender       | Tcom                   |                     | 1     |  |  |
|  | a second second  | Backplane                 |                        |                     | 1     |  |  |
|  |  |                           |                        |                     |       |  |  |
| Forest Park B Signal House Asset Inventory |                       |  |                  |                      |       |  |  |  |  |
|--|-----------------------|--|------------------|----------------------|-------|--|--|--|--|
| ltem                                       | Image                 | Inventory                              |                  |                      |       |  |  |  |  |
| Sides                                      | E Looph               | н                                      | ouse Side-A      |                      |       |  |  |  |  |
|  |                       | COMPONENT                              | MANUFACTURER     | PART NUMBER          | COUNT |  |  |  |  |
|  | A Theorem 199         | FIA-Keypad Controller                  | NAPCO            | RPC3000LCDe          | 1     |  |  |  |  |
|  |                       | SWITCH HEATER CONTROL BOX              |                  |                      | 1     |  |  |  |  |
|  |                       | н                                      | ouse Side-B      |                      |       |  |  |  |  |
|  |                       | Fire Intrusion Alarm                   | NAPCO            |                      | 1     |  |  |  |  |
|  |                       | Battery                                | Genesis          | NP7-1212V,7.0Ah      | 2     |  |  |  |  |
|  |                       | Main Board                             |                  |                      | 1     |  |  |  |  |
|  |                       | Relay Boards                           |                  |                      | 1     |  |  |  |  |
|  | 2 James ( James and ) | Expansion Modules                      |                  |                      | 1     |  |  |  |  |
|  |                       | НН                                     | ouse Side-C      |                      |       |  |  |  |  |
|  | 1                     |  |                  |                      |       |  |  |  |  |
|  |                       |  |                  |                      |       |  |  |  |  |
|  | N                     | н                                      | ouse Side-D      | A 227027 004 D       |       |  |  |  |  |
|  |                       |  | Catago           | Assy 22/02/-001 Rev. |       |  |  |  |  |
|  |                       | CLCP 256 IO LED DRIver Module          | Getsgs           | 806                  | 2     |  |  |  |  |
|  |                       | Double Throw Enclosed Switch 100A 240V | Getsgs           | 220009-200           | 2     |  |  |  |  |
|  |                       |  | Squaro D         | 10275 052 01         | 1     |  |  |  |  |
|  |                       | Heavy Duty Safety Switch 100A 240V AC/ | Square D         | 40275-555-01         |       |  |  |  |  |
|  |                       | 250V DC                                | Square D         | 40276-003-01         | 1     |  |  |  |  |
|  |                       | TRANSIENT VOLTAGE SURGE SUPPRESSOR     | EATON ELECTRICAL | PTX160-1S101         | 1     |  |  |  |  |
|  |                       | Hawk Event Recorder                    | Getsgs           | 251210-00001         | 1     |  |  |  |  |
|  |                       | Surge Protector 18V AC 15A USSP        | US&S             | N451552-0507         | 2     |  |  |  |  |
|  |                       | Current Monitor                        | NRS              | 16775-00             | 2     |  |  |  |  |
|  |                       | 12V Power Supply                       | NRS              | ERB-C 12/501C        | 2     |  |  |  |  |
|  |                       | 2.25V Battery                          | GNB              | 50A15                | 12    |  |  |  |  |

# **Grand Signal House**



| Grand Signal House Asset Inventory |  |                  |                        |             |       |                        |       |  |
|------------------------------------|--|------------------|------------------------|-------------|-------|------------------------|-------|--|
| ltem                               | Image  | Inventory        |                        |             |       |                        |       |  |
| Rack 1                             |  |                  | Rack 1<br>MANUFACTURER | PART NUMBER | COUNT |                        |       |  |
|                                    |  | BPL-1            | EPC                    |             | 6     | -                      |       |  |
|                                    |  |                  |                        |             | -     | -                      |       |  |
| Rack 2                             |  |                  |                        | Rack 2      |       |                        |       |  |
|                                    |  | CO               | MPONENT                | MANUFAC     | TURER | PART NUMBER            | COUNT |  |
|                                    | ANALASSA   | V                | ital Relay             | GRS         |       | A62-122 (56001-921-07) | 4     |  |
|                                    | ALL PLANT AND  | 520 Receiver     | Module (3870 Feq.)     | ) EPC       |       | 150-088019-080 Rev. B  | 1     |  |
|                                    |  | 520 Receiver     | Module (2970 Feq.)     | ) EPC       |       | 150-088019-080 Rev. B  | 3     |  |
|                                    |  | 520 Receiver     | Module (3510 Feq.)     | ) EPC       |       | 150-088019-080 Rev. F  | 1     |  |
|                                    |  | 520 Receiver     | Module (2970 Feq.)     | ) EPC       |       | 150-088019-080 Rev. F  | 1     |  |
|                                    |  | 520 Receiver     | Module (4410 Feq.)     | ) EPC       |       | 150-088019-080 Rev. B  | 1     |  |
|                                    | A REAL PROPERTY AND A DECIMAL OF A DECIMAL O | 510 Am           | plifier Module         | EPC         |       | 150-088019-050 Rev. B  | 7     |  |
|                                    |  | 530 (            | CAB Coupler            | EPC         |       | 150-088019-051 Rev. B  | 4     |  |
|                                    |  | 540 Train Detect | ion Coupler (2970 F    | eq.) EPC    |       | 150-088019-060 Rev. B  | 1     |  |
|                                    |  | 540 Train Detect | ion Coupler (3510 F    | eq.) EPC    |       | 150-088019-060 Rev. B  | 1     |  |
|                                    |  | 540 Train Detect | ion Coupler (4410 F    | eq.) EPC    |       | 150-088019-060 Rev. B  | 1     |  |
|                                    | ALC: NOT   | XM               | IT CHASSIS             | EPC         |       | 800-088019-020         | 2     |  |
|                                    |  | RECIE            | VER CHASSIS            | EPC         |       | 800-088019-030         | 1     |  |
|                                    |  |                  |                        |             |       |                        |       |  |

| Grand Signal Ho | Grand Signal House Asset Inventory  |   |              |                        |       |  |  |  |  |  |
|-----------------|---|---|--------------|------------------------|-------|--|--|--|--|--|
| ltem            | Image   | Inventory                               |              |                        |       |  |  |  |  |  |
| Rack 3          | Contraction of the  |   | Rack 3       |                        |       |  |  |  |  |  |
|                 | The second s  | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT |  |  |  |  |  |
|                 | CALCUMPTER OF STR   | Vital Relay                             | GRS          | A62-122 (56001-921-07) | 4     |  |  |  |  |  |
|                 | The second second second  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. B  | 4     |  |  |  |  |  |
|                 |   | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080 Rev. F  | 1     |  |  |  |  |  |
|                 | 63  | 520 Receiver Module (4230 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1     |  |  |  |  |  |
|                 | and a state of the second | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1     |  |  |  |  |  |
|                 | all the second second   | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 7     |  |  |  |  |  |
|                 |   | 530 CAB Coupler                         | EPC          | 150-088019-051 Rev. B  | 4     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | XMIT CHASSIS                            | EPC          | 800-088019-020         | 2     |  |  |  |  |  |
|                 |   | RECIEVER CHASSIS                        | EPC          | 800-088019-030         | 1     |  |  |  |  |  |
| Rack 4          |   |   | Rack 4       |                        |       |  |  |  |  |  |
|                 |   | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT |  |  |  |  |  |
|                 | Card Card Card Card Card Card Card Card   | AC Vain Relay                           | GRS          | A62-486                | 2     |  |  |  |  |  |
|                 | Resident A  | Bal Imp                                 |              | A3-117                 | 2     |  |  |  |  |  |
|                 | The second se   | 3 OHM ADJUSTABLE Resistor               | GRS          | A3-207 (01246-1)       | 2     |  |  |  |  |  |
|                 | A DECEMBER OF   | 25 OHM ADJUSTABLE Resistor              |              | 56105-11               | 2     |  |  |  |  |  |
|                 |   | XFMR                                    | GRS          | 31094-000 (A95 50)     | 1     |  |  |  |  |  |
|                 |   | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 8     |  |  |  |  |  |
|                 |   | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B  | 4     |  |  |  |  |  |
|                 | A DECEMBER OF   | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 |   | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |  |  |  |  |  |
|                 | and the second se   | XMIT CHASSIS                            | EPC          | 800-088019-020         | 2     |  |  |  |  |  |
|                 |   |   |              |                        |       |  |  |  |  |  |

| Grand Signal Ho | Grand Signal House Asset Inventory |                          |            |              |             |      |  |  |  |
|-----------------|------------------------------------|--------------------------|------------|--------------|-------------|------|--|--|--|
| Item            | Image                              | Inventory                |            |              |             |      |  |  |  |
| Rack 5          |                                    |                          |            | Rack 5       |             |      |  |  |  |
| Huer 5          |                                    | COMPONENT                | Г          | MANUFACTURER | PART NUMBER |      |  |  |  |
|                 |                                    | Rotary Dials (Full Hemis | phere-OLD) |              |             | 12   |  |  |  |
|                 |                                    | Non-Vital Relay          | ys         |              |             | 22   |  |  |  |
|                 | *** * * * *                        | VITAL RELAY              |            | SAFETRAN     | 400900      | 2    |  |  |  |
|                 |                                    |                          |            |              |             |      |  |  |  |
| Rack 6          |                                    |                          |            | Rack 6       |             |      |  |  |  |
|                 |                                    | COMPONENT                | MANUFACT   | URER PART N  | UMBER CO    | DUNT |  |  |  |
|                 |                                    | Vital Kelay              | GRS        | A62-122 56   | 001-921-07  | 4    |  |  |  |
|                 |                                    | Δ(Ρ-2                    |            |              |             | 1    |  |  |  |
|                 |                                    | SSM                      |            |              |             | 1    |  |  |  |
|                 |                                    | CCI                      |            |              |             | 1    |  |  |  |
|                 | States and second tool too second  | VSD                      |            |              |             | 1    |  |  |  |
|                 |                                    | VGP I/O                  |            |              |             | 2    |  |  |  |
|                 |                                    | VGP I/O-12V              |            |              |             | 1    |  |  |  |
|                 |                                    | NV I/O                   |            |              |             | 1    |  |  |  |
|                 |                                    | 32 NVI                   |            |              |             | 2    |  |  |  |
|                 |                                    | VGPI 16                  |            |              |             | 1    |  |  |  |
|                 |                                    | Surge Protector BSA-4    | Harmo      | n 250        | 597         | 1    |  |  |  |
|                 |                                    | Modem                    |            |              |             | 2    |  |  |  |
|                 |                                    | 12V Power Supply         | Llaure -   |              | 7 002       | 1    |  |  |  |
|                 |                                    | VHLC CHASSIS             | Harmo      | n 22660      | 1/=003      | 2    |  |  |  |

| Grand Signal Ho | ouse Asset Inventory   |                    |              |                     |                 |       |
|-----------------|--|--------------------|--------------|---------------------|-----------------|-------|
| ltem            | Image  | Inventory          |              |                     |                 |       |
| SCADA           |  |                    | SCADA        |                     |                 |       |
|                 | and the second s | COMPONENT          | MANUFACTURER | PART NUMB           | ER COUNT        |       |
|                 | Manual Street Stre   | Modem              |              | V3225               | 1               |       |
|                 |  | C186               |              |                     | 1               |       |
|                 |  | SBX                |              |                     | 1               |       |
|                 | CODI C   | DI                 |              |                     | 2               |       |
|                 |  | DO                 |              |                     | 1               |       |
|                 |  | REMZ               |              |                     | 1               |       |
|                 |  | Power Supply       |              |                     | 2               |       |
|                 |  | Non Vital Relays   |              |                     | 19              |       |
| l               |  | Batteries          | GENESIS      | NP7-12 12V,7.       | .0Ah 2          |       |
| Sides           |  | COMPONENT          | Hous         | se Side-A<br>CTURER | PART NUMBER     | COUNT |
|                 |  |                    |              |                     |                 |       |
|                 |  |                    | Hou          | se Side-B           |                 |       |
|                 | A CONTRACTOR   | DIODE BOARD        |              |                     |                 | 1     |
|                 | 2  | 28V Power Suppl    | y Lamar      | che                 | A29-40-24V-A1   | 1     |
|                 | 8  | 28V Power Suppl    | y Lamar      | che                 | A29-10-24V-A1   | 1     |
|                 |  | 12V/ Devuer Course | HOUS         |                     | 420 20 121/ 44  | 1     |
|                 | - Carlos   | 12V Power Suppl    | y Lamar      | cne                 | A29-20-12V-A1   | 1     |
|                 |  | 12V Battery        |              |                     | 12V 155F5       | 1     |
|                 |  | SUKGE SUPPRESSO    |              |                     | PIX 160         | 1     |
|                 |  | Koupad             | Pavelie      |                     |                 | 1     |
|                 |  | Omega Alarm        | Ravdio       |                     | 030010          | 1     |
|                 |  | Modem              | Rayulu       |                     | D8129           | 1     |
|                 |  | Batterv            |              |                     | NP7-1212V.7.0Ah | 1     |
|                 | and the second of the second s |                    | I            |                     | 2222.),,        |       |

### Hall Park A Signal House



| Hall Park A Signal House Asset Inventory |                      |                                 |             |                       |       |  |  |
|--|----------------------|---------------------------------|-------------|-----------------------|-------|--|--|
| ltem                                     | Image                | Inventory                       |             |                       |       |  |  |
| Rack 1                                   |                      |                                 | Rack 1      |                       |       |  |  |
|  | <b>展建具 - 13 148日</b> | COMPONENT N                     | ANUFACTURER | PART NUMBER           | COUNT |  |  |
|  |                      | BPL-3                           | HARMON      | 150-097031-013 Rev. O | 4     |  |  |
|  |                      | CARRIER SURGE ARRESTOR          | HARMON      | 250197-001            | 2     |  |  |
|  |                      |                                 |             |                       |       |  |  |
| Rack 2                                   |                      |                                 | Rack 2      |                       |       |  |  |
|  |                      | COMPONENT                       | MANUFACTU   | RER PART NUMBER       | COUNT |  |  |
|  |                      | Vital Relay                     | Alstom      | A62-407 56001-745     | 02 1  |  |  |
|  | Participant Parties  | Vital Relay                     | Alstom      | A62-122 56001-921-    | 07 5  |  |  |
|  | THERE THERE          | POR XFMR                        | Alstom      | 31094-000-01 Rev.     | F 1   |  |  |
|  |                      | 28V Power Supply                | Керсо       | PRR 28-38M2478        | ' 2   |  |  |
|  |                      | 28V Power Supply                | Керсо       | PRM 28-17-24810       | 2     |  |  |
|  | The C. Town          | Rectifier 25V .3A Selenium Type | e S Alstom  | A53-541               | 1     |  |  |
|  |                      |                                 |             |                       |       |  |  |

| Hall Par | k A Signal House Asset Inventory |   |              |                                       |                 |
|----------|----------------------------------|---|--------------|---------------------------------------|-----------------|
| ltem     | Image                            | Inventory   |              |                                       |                 |
| Rack 3   |                                  |   | Rack 3       |                                       |                 |
| Nuck 5   | A Same of the                    | COMPONENT   | MANUFACTURER | PART NUMBER                           | COUNT           |
|          |                                  | Rectifier 120AC/120DC Switch                                |              | 250756-000                            | 2               |
|          |                                  | Vital Relay   | Alstom       | A62-429 56001-926-01                  | 8               |
|          |                                  | Vital Relay   | Alstom       | A62-432 56001-785-01                  | 4               |
|          |                                  | Vital Relay   | Alstom       | A62-247                               | 4               |
|          |                                  | Vital Relay   | Alstom       | A62-122 56001-921-07                  | 1               |
|          |                                  |   | Deck 4       |                                       |                 |
| каск 4   |                                  | CONADONIENT   |              |                                       | COUNT           |
|          |                                  | VEMB Matching Bail Coupler                                  |              | 810.099010.211                        |                 |
|          |                                  | XFMR Loop Matching (2340 Fee                                | ) EPC        | 810-088019-311                        | 1               |
|          |                                  | AC Vain Relay   | Alstom       | A62-486                               | 2               |
|          |                                  | Bal Imp   | Alstom       | A3-117                                | 2               |
|          |                                  | 1 ohm Resistor (1XT/3XT)                                    | GRS          | A3-207 (01246-1)                      | 2               |
|          |                                  | 2.5 ohm Resistor (1XTRN/3XTRN                               | J)           | 56105-11                              | 2               |
|          |                                  | 1T/1XT XFMR   | Alstom       | 31094-000 (A95 50)                    | 1               |
|          |                                  | VITAL RELAY   | Alstom       | A62-122 56001-921-0                   | 7 1             |
|          |                                  | 700 Amplifier Module  |              | 150-094017-022 Rev.                   | D 3             |
|          |                                  | 701-2 CAB Coupler (2340 Feq.)                               |              | 150-097031-010 Rev.                   | 0 3             |
|          |                                  | Chassis AF Track XMT TTT-2                                  | Getsgs       | 812-097031-001                        | 1               |
|          |                                  | 701-2 CAB Coupler (2340 Feq.)<br>Chassis AF Track XMT TTT-2 | Getsgs       | 150-097031-010 Rev.<br>812-097031-001 | 0 <u>3</u><br>1 |

| em   | Image  | Inventory   |   |  |                           |
|------|--|---|---|--|---------------------------|
| :k 5 |  |   | Rack 5  |  |                           |
|      |  | COMPONENT   | MANUFACTURER                                      | PART NUMBER  | COUN                      |
|      | The second second  | XFMR Loop Matching (2340 Feg.)  | EPC   | 800-088019-200   | 1                         |
|      |  | XFMR Matching Rail Coupler  | EPC   | 810-088019-311   | 2                         |
|      |  | AC Vain Relay   | Alstom  | A62-486  | 2                         |
|      |  | Bal Imp   | Alstom  | A3-117   | 2                         |
|      |  | 1 ohm Resistor (1XT/3XT)  | GRS   | A3-207 (01246-1)   | 2                         |
|      |  | 2.5 ohm Resistor (1XTRN/3XTRN)  |   | 56105-11   | 2                         |
|      |  | 5T/5XT XFMR   | Alstom  | 31094-000 (A95 50)   | 1                         |
|      | and the second s | 700 Amplifier Module  |   | 150-094017-022 Rev. A  | A 1                       |
|      | Fight Comments   | 700 Amplifier Module  |   | 150-094017-022 Rev. 0  | 2 1                       |
|      |  | 700 Amplifier Module  |   | 150-094017-022 Rev. D  | ) 1                       |
|      | 2  | 701-2 CAB Coupler (2340 Feq.)   |   | 150-097031-010 Rev. C  | ) 3                       |
|      |  | Chassis AF Track XMT TTT-2  | Getsgs  | 812097031-001  | 1                         |
|      |  |   |   |  |                           |
|      |  |   |   |  |                           |
| k 6  |  |   | Rack 6  |  |                           |
| 6    |  | COMPONENT   | Rack 6<br>MANUFACTURER                            | PART NUMBER  |                           |
| 6    |  | COMPONENT<br>AC Vain Relay  | Rack 6<br>MANUFACTURER<br>Alstom                  | PART NUMBER  | COUNT<br>3                |
| 6    |  | COMPONENT<br>AC Vain Relay<br>Bal Imp   | Rack 6<br>MANUFACTURER<br>Alstom<br>Alstom        | PART NUMBER<br>A62-486<br>A3-117                                 | COUNT<br>3<br>3           |
| < 6  |  | COMPONENT<br>AC Vain Relay<br>Bal Imp<br>1 ohm Resistor (1XT/3XT)                                   | Rack 6<br>MANUFACTURER<br>Alstom<br>Alstom<br>GRS | PART NUMBER<br>A62-486<br>A3-117<br>A3-207 (01246-1)             | COUNT<br>3<br>3<br>3      |
| 6    |  | COMPONENT<br>AC Vain Relay<br>Bal Imp<br>1 ohm Resistor (1XT/3XT)<br>2.5 ohm Resistor (1XTRN/3XTRN) | Rack 6<br>MANUFACTURER<br>Alstom<br>GRS           | PART NUMBER<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11 | COUNT<br>3<br>3<br>3<br>3 |

|        | k A Signal House Asset Inventory |   |                                  |  |   |
|--------|----------------------------------|---|----------------------------------|--|---|
| ltem   | Image                            | Inventory   |                                  |  |   |
| Rack 7 |                                  |   | Rack 7                           |  |   |
|        | THE REAL PROPERTY AND A DECK     | COMPONENT   | MANUFACTURER                     | PART NUMBER  | COUNT   |
|        |                                  | 700 Amplifier Module  |                                  | 150-094017-022 Rev. D  | 6   |
|        |                                  | 700 Amplifier Module  |                                  | 150-094017-022 Rev. C  | 1   |
|        |                                  | 701-2 CAB Coupler (2340 Feq.)   |                                  | 150-097031-010 Rev. O  | 4   |
|        |                                  | 702-1 Track Coupler (2970 Feq.)   |                                  | 150-095025-034 Rev. B  | 1   |
|        |                                  | 702-1 Track Coupler (4410 Feq.)   |                                  | 150-095025-034 Rev. B  | 1   |
|        |                                  | 702-1 Track Coupler (3870 Feq.)   |                                  | 150-095025-034 Rev. B  | 1   |
|        | The second second                | Chassis AF Track XMT TTT-2  | Getsgs                           | 812-097031-001   | 2   |
|        |                                  | 703-1 Receiver Module (3870 Feq.)   |                                  | 150-095025-047 Rev. D  | 1   |
|        |                                  | 703-1 Receiver Module (2970 Feq.)   |                                  | 150-095025-047 Rev. E  | 1   |
|        |                                  | 703-1 Receiver Module (4410 Feq.)   |                                  | 150-095025-047 Rev. D  | 1   |
|        |                                  | AF Track Receiver Chassis   | Getsgs                           | 812-097031-034   | 1   |
|        |                                  |   |                                  |  |   |
| Rack 8 |                                  |   | Rack 8                           |  |   |
| ack 8  |                                  | COMPONENT   | Rack 8<br>MANUFACTURER           | PART NUMBER  | COUNT   |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module   | Rack 8<br>MANUFACTURER           | <b>PART NUMBER</b><br>150-094017-022 Rev. D  | <b>COUNT</b><br>6   |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module   | Rack 8<br>MANUFACTURER           | <b>PART NUMBER</b><br>150-094017-022 Rev. D<br>150-094017-022 Rev. C   | <b>COUNT</b><br>6<br>1  |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)  | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O   | COUNT<br>6<br>1<br>4  |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)   | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B  | COUNT<br>6<br>1<br>4<br>1   |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)  | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B   | COUNT<br>6<br>1<br>4<br>1<br>1  |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)   | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B   | COUNT<br>6<br>1<br>4<br>1<br>1<br>1<br>1  |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>Chassis AF Track XMT TTT-2   | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001  | COUNT           6           1           4           1           1           2   |
| ick 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3690 Feq.)  | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D   | COUNT<br>6<br>1<br>4<br>1<br>1<br>1<br>1<br>2<br>2<br>2   |
| ck 8   |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3690 Feq.)   | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D<br>150-095025-047 Rev. E                              | COUNT<br>6<br>1<br>4<br>1<br>1<br>1<br>2<br>2<br>2<br>1   |
| ack 8  |                                  | COMPONENT700 Amplifier Module700 Amplifier Module701-2 CAB Coupler (2340 Feq.)702-1 Track Coupler (4230 Feq.)702-1 Track Coupler (3690 Feq.)702-1 Track Coupler (3330 Feq.)Chassis AF Track XMT TTT-2703-1 Receiver Module (3690 Feq.)703-1 Receiver Module (3690 Feq.)703-1 Receiver Module (3330 Feq.)703-1 Receiver Module (3330 Feq.)   | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D<br>150-095025-047 Rev. E<br>150-095025-047 Rev. D                              | COUNT<br>6<br>1<br>4<br>1<br>1<br>1<br>2<br>2<br>2<br>1<br>1<br>1   |
| ack 8  |                                  | COMPONENT700 Amplifier Module700 Amplifier Module701-2 CAB Coupler (2340 Feq.)702-1 Track Coupler (4230 Feq.)702-1 Track Coupler (3690 Feq.)702-1 Track Coupler (3330 Feq.)Chassis AF Track XMT TTT-2703-1 Receiver Module (3690 Feq.)703-1 Receiver Module (3330 Feq.)703-1 Receiver Module (3330 Feq.)703-1 Receiver Module (3330 Feq.)703-1 Receiver Module (3230 Feq.)703-1 Receiver Module (4230 Feq.)   | Rack 8<br>MANUFACTURER<br>Getsgs | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D<br>150-095025-047 Rev. D<br>150-095025-047 Rev. FAC                            | COUNT           6           1           4           1           2           2           1           0   |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4230 Feq.)                                      | Rack 8<br>MANUFACTURER<br>Getsgs | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D<br>150-095025-047 Rev. E<br>150-095025-047 Rev. FAC<br>150-095025-047 Rev. FAC | COUNT           6           1           4           1           2           2           1           0           1   |
| ack 8  |                                  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4230 Feq.) | Rack 8<br>MANUFACTURER           | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>812-097031-001<br>150-095025-047 Rev. D<br>150-095025-047 Rev. D<br>150-095025-047 Rev. FAC<br>150-095025-047 Rev. FAC | COUNT           6           1           4           1           2           2           1           1           1           1           1           1           1           1           1           1           1           1           1           1           1           1           1           1 |

| Hall Par | k A Signal House Asset Inventory   |                  |                      |                 |        |             |       |  |
|----------|--|------------------|----------------------|-----------------|--------|-------------|-------|--|
| ltem     | Image  | Inventory        |                      |                 |        |             |       |  |
| Rack     | 学生である  |                  | Rack 10              |                 |        | ]           |       |  |
| 10       | action 1   | COMPONENT        | MANUFACTURER         | PART NUMBER     | COUNT  |             |       |  |
|          | Statistical Designation of the local distance of the local distanc | VLP              |                      |                 | 2      |             |       |  |
|          | A State of the second s | ACP-2            |                      |                 | 2      |             |       |  |
|          | Martin and Martin  | SSM              |                      |                 | 2      |             |       |  |
|          |  | CCI              |                      |                 | 2      |             |       |  |
|          |  | VSD              |                      |                 | 2      |             |       |  |
|          |  | VGP I/O          |                      |                 | 3      |             |       |  |
|          | and the second second  | VGP 16           |                      |                 | 2      |             |       |  |
|          | ALL PAR  | NV I/O           |                      |                 | 3      |             |       |  |
|          |  | 32 NVI           |                      |                 | 3      |             |       |  |
|          |  | CLA Board        |                      |                 | 2      |             |       |  |
|          |  | RS-232           |                      |                 | 2      |             |       |  |
|          |  | Modem            |                      |                 | 2      |             |       |  |
|          |  | 12V Power Supply |                      |                 | 2      |             |       |  |
|          |  |                  |                      |                 |        |             |       |  |
| Rack     |  |                  |                      | Rack 11         |        |             |       |  |
| 11       |  | CON              | IPONENT              | MANUFAC         | TURER  | PART NUMBER | COUNT |  |
|          |  | Rotary Dials (HA | LF Hemisphere-NEW    | )               |        |             | 14    |  |
|          |  | Non-\            | /ital Relays         |                 |        |             | 154   |  |
|          | CA   | KEY LOCK SWITCH/ | 2-POS 2-POLE STD. LO | DCK   EOA SWITC | H CORP | 51-236.025D | 1     |  |
|          |  |                  |                      |                 |        |             |       |  |

| Hall Par | k A Signal House Asset Inventory  |                      |                           |              |       |
|----------|---|----------------------|---------------------------|--------------|-------|
| ltem     | Image   | Inventory            |                           |              |       |
| SCADA    |   |                      | SCADA                     |              |       |
|          | CONTRACTOR OF THE REAL  | COMPONENT            | MANUFACTURER              | PART NUMBER  | COUNT |
|          |   | Power Supply         | Schneider Electric        | TSXPSY1610   | 1     |
|          |   | CPU                  | Schneider Electric        | TSXP57202    | 1     |
|          | State and a state of the state | Memory Card          | Schneider Automation S.A. | TSXMRP064P   | 1     |
|          |   | RS-232               |                           |              | 1     |
|          |   | Input Card           | Schneider Electric        | TSX DEY16A2  | 9     |
|          | A CONTRACTOR OF   | INPUT TERMINAL BLOCK | Schneider Automation S.A. | TSX BLY01    | 9     |
|          | The second second second  | Output Card          | Schneider Electric        | TSX DSY64T2K | 1     |
|          |   | Output Cord          | Phoenix Contact           | 22 98 438    | 4     |
|          | 1 a   | Relays               | Phoenix Contact           | ABE7*        | 4     |
|          |   | Power Supply         | WEID MULLER               | CSA 991534   | 1     |
|          |   | Battery Charger      | WEID MULLER               | 991628 0024  | 1     |
|          |   | Batteries            | CD Technologies           | UPS12-150MR  | 2     |
|          |   | Backplane            |                           |              | 1     |
|          |   | MODEM                | MOTOROLA                  | V3600        | 1     |
|          |   |                      |                           |              |       |

| Hall Park A Signal House Asset Inventory |                                 |   |                 |                 |       |  |  |  |
|--|---------------------------------|---|-----------------|-----------------|-------|--|--|--|
| ltem                                     | Image                           | Inventory                                     |                 |                 |       |  |  |  |
| Sides                                    |                                 | House   | Side-A          |                 |       |  |  |  |
|  |                                 | COMPONENT                                     | MANUFACTURER    | PART NUMBER     | COUNT |  |  |  |
|  |                                 | FIA-Keypad Controller                         | NAPCO           | RPC3000LCDe     | 1     |  |  |  |
|  |                                 | SWITCH HEATER CONTROL BOX                     |                 |                 | 2     |  |  |  |
|  |                                 | House   | Side-B          |                 |       |  |  |  |
|  |                                 | Fire Intrusion Alarm                          | NAPCO           |                 | 1     |  |  |  |
|  |                                 | Battery                                       | Genesis         | NP7-1212V,7.0Ah | 2     |  |  |  |
|  |                                 | Main Board                                    |                 |                 | 1     |  |  |  |
|  | · ·                             | Relay Boards                                  |                 |                 | 1     |  |  |  |
|  |                                 | House   | Side-C          |                 |       |  |  |  |
|  | the second second second second |   |                 |                 |       |  |  |  |
|  |                                 |   |                 |                 |       |  |  |  |
|  |                                 | House   | Side-D          | l .             |       |  |  |  |
|  |                                 |   |                 | Assy 227027-001 |       |  |  |  |
|  |                                 | CLCP 256 IO LED Driver Module                 | Getsgs          | Rev. 806        | 2     |  |  |  |
|  | - C I function                  | Power Supply CLCP 12VDC 20W                   | Getsgs          | 226609-200      | 2     |  |  |  |
|  |                                 | Double Throw NOT FUSEABLE Switch 100A 240V    |                 |                 |       |  |  |  |
|  |                                 | AC/ 250V DC                                   | Square D        | 40274-556-01    | 1     |  |  |  |
|  |                                 | GENERAL Duty Safety Switch 100A 240V AC/ 250V | <b>C D</b>      | 40075 000 04    |       |  |  |  |
|  |                                 |   | Square D        | 40275-933-01    | 1     |  |  |  |
|  |                                 |   | INKS            | 16//5-00        | 2     |  |  |  |
|  |                                 | BATTERY ARRESTOR 4                            | HAKMUN          | 250597          |       |  |  |  |
|  |                                 | 12V Power Supply                              | NKS<br>MARATUON | EKB-C 12/40     | 2     |  |  |  |
|  |                                 | 12V Battery                                   | IVIAKATHUN      | IVI12V90        | 3     |  |  |  |

### Hall Park B Signal House



| Hall Pa | Hall Park B Signal House Asset Inventory |                                 |             |                       |        |   |
|---------|--|---------------------------------|-------------|-----------------------|--------|---|
| ltem    | Image                                    | Inventory                       |             |                       |        |   |
| Rack    |  | Rack 1                          |             |                       |        |   |
| 1       | 「「「「「「「」」「「」」                            | COMPONENT M                     | ANUFACTURER | PART NUMBER           | COUNT  |   |
| -       | 「「「「「「「「」」」                              | BPL-3                           | HARMON      | 150-097031-013 Rev. O | 9      |   |
|         |  | CARRIER SURGE ARRESTOR          | HARMON      | 250197-001            | 2      |   |
|         |  |                                 |             |                       |        |   |
| Rack    |  |                                 | Rack 2      |                       |        |   |
| 2       |  | COMPONENT                       | MANUFACTU   | RER PART NUMBER       | COUNT  |   |
|         |  | Vital Relay                     | Alstom      | A62-407 56001-74      | 5-02 1 | _ |
|         | THE REAL PROPERTY AND                    | Vital Relay                     | Alstom      | A62-122 56001-92      | 1-07 4 | _ |
|         | THERE AND A                              | POR XFMR                        | Alstom      | 31094-000-01 Rev      | /.F 1  | _ |
|         |  | 28V Power Supply                | Керсо       | PRR 28-38M247         | 37 2   |   |
|         | The Address                              | 28V Power Supply                | Керсо       | PRM 28-17-2481        | .0 2   | 4 |
|         | L C.L.                                   | Rectifier 25V .3A Selenium Type | S Alstom    | A53-541               | 1      |   |
|         |  |                                 |             |                       |        |   |

| Hall Par | Hall Park B Signal House Asset Inventory   |                                |              |                       |       |
|----------|--|--------------------------------|--------------|-----------------------|-------|
| ltem     | Image  | Inventory                      |              |                       |       |
| Rack     |  |                                | Rack 3       |                       |       |
| 3        | A Contractor   | COMPONENT                      | MANUFACTURER | PART NUMBER           | COUNT |
| J        |  | Rectifier 120AC/120DC Switch   |              | 250756-000            | 2     |
|          |  | Vital Relay                    | Alstom       | A62-429 56001-926-01  | 8     |
|          |  | Vital Relay                    | Alstom       | A62-432 56001-785-01  | 4     |
|          |  | Vital Relay                    | Alstom       | A62-247               | 4     |
|          |  | Vital Relay                    | Alstom       | A62-122 56001-921-07  | 2     |
| Back     |  |                                | Rack 4       |                       |       |
| 1        |  | COMPONENT                      | MANUFACTURE  | R PART NUMBER         | COUNT |
| -        | THE R. LAND & CO.  | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 2     |
|          |  | XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 1     |
|          |  | AC Vain Relay                  | Alstom       | A62-486               | 2     |
|          |  | Bal Imp                        | Alstom       | A3-117                | 2     |
|          | State of the local division of the local div | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |
|          |  | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |
|          |  | 1T/1XT XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |
|          |  | VITAL RELAY                    | Alstom       | A62-122 56001-921-07  | 1     |
|          |  | 700 Amplifier Module           |              | 150-094017-022 Rev. D | ) 3   |
|          |  | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. C | ) 3   |
|          |  | Chassis AF Track XMT TTT-2     | Getsgs       | 812-097031-001        | 1     |
|          |  |                                |              |                       |       |

| Hall Park B Signal House Asset Inventory |  |                                |              |                       |       |
|--|--|--------------------------------|--------------|-----------------------|-------|
| ltem                                     | Image  | Inventory                      |              |                       |       |
| Rack                                     |  | Rack 5                         |              |                       |       |
| 5  |  | COMPONENT                      | MANUFACTURER | PART NUMBER           | COUNT |
| 5  | Stand Barrier  | XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 1     |
|  |  | XFMR Matching Rail Coupler     | EPC          | 810-088019-311        | 2     |
|  | TRANSF IN THE R.   | AC Vain Relay                  | Alstom       | A62-486               | 2     |
|  |  | Bal Imp                        | Alstom       | A3-117                | 2     |
|  | Section 1  | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 2     |
|  |  | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 2     |
|  |  | 5T/5XT XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |
|  |  | 700 Amplifier Module           |              | 150-094017-022 Rev. A | 3     |
|  |  | 700 Amplifier Module           |              | 150-094017-022 Rev. C | 3     |
|  |  | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 1     |
|  | LINE & State of State | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 2     |
|  |  | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 2     |
| Rack                                     |  |                                | Rack 6       |                       |       |
| 6  |  | COMPONENT                      | MANUFACTUROR | PART NUMBER           | COUNT |
|  |  | XFMR Loop Matching (2340 Feq.) | EPC          | 800-088019-200        | 1     |
|  |  | AC Vain Relay                  | Alstom       | A62-486               | 1     |
|  |  | Bal Imp                        | Alstom       | A3-117                | 1     |
|  |  | 1 ohm Resistor (1XT/3XT)       | GRS          | A3-207 (01246-1)      | 1     |
|  |  | 2.5 ohm Resistor (1XTRN/3XTRN) |              | 56105-11              | 1     |
|  |  | 9XT/SP XFMR                    | Alstom       | 31094-000 (A95 50)    | 1     |
|  |  | 700 Amplifier Module           |              | 150-094017-022 Rev. D | 1     |
|  |  | 701-2 CAB Coupler (2340 Feq.)  |              | 150-097031-010 Rev. O | 1     |
|  |  | Chassis AF Track XMT TTT-2     | Getsgs       | 812097031-001         | 1     |
|  |  |                                |              |                       |       |

| Hall Park B Signal House Asset Inventory |  |   |                        |   |   |
|--|--|---|------------------------|---|---|
| ltem                                     | Image  | Inventory   |                        |   |   |
| Rack                                     | A DECEMBER OF THE OWNER OF   |   | Rack 7                 |   |   |
| 7  |  | COMPONENT   | MANUFACTUROR           | PART NUMBER   | COUNT   |
| /  | A CONTRACTOR OF  | AC Vain Relay   | Alstom                 | A62-486   | 2   |
|  | ALL AND A DESCRIPTION OF A DESCRIPTION O | Bal Imp   | Alstom                 | A3-117  | 2   |
|  | THE REAL PROPERTY AND INCOMENTS  | 1 ohm Resistor (1XT/3XT)  | GRS                    | A3-207 (01246-1)  | 2   |
|  | A DECEMBER OF  | 2.5 ohm Resistor (1XTRN/3XTRN)  |                        | 56105-11  | 2   |
| 1  |  | YD201T/YD214T XFMR  | Alstom                 | 31094-000 (A95 50)  | 1   |
|  |  |   |                        |   |   |
| Deel                                     |  |   | Dock 9                 |   |   |
| Rack                                     |  | COMPONENT   | Rack 8                 |   | COUNT   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module   | Rack 8<br>MANUFACTURER | PART NUMBER   |   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module   | Rack 8<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev.<br>150-094017-022 Rev.   | COUNT   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feg.)  | Rack 8<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev.<br>150-094017-022 Rev.<br>150-097031-010 Rev   | COUNT           D         7           C         2           O         5   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feg.)   | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.   | COUNT           D         7           C         2           O         5           B         1   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)  | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.           150-095025-034 Rev.   | COUNT           D         7           C         2           O         5           B         1           B         1   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)   | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           150-095025-034 Rev.   | COUNT           D         7           C         2           O         5           B         1           B         1           B         1   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>Chassis AF Track XMT TTT-2   | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.   | COUNT           D         7           C         2           O         5           B         1           B         1           B         1           I         1   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3870 Feq.)  | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           150-097031-001           150-097031-001           150-095025-034 Rev.   | COUNT           D         7           C         2           O         5           B         1           B         1           B         1           D         3   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (2970 Feq.)   | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev. | COUNT           D         7           C         2           O         5           B         1           B         1           B         1           D         3           E         7   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (2970 Feq.)<br>703-1 Receiver Module (4410 Feq.)                              | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           150-095025-034 Rev.           812-097031-001           150-095025-047 Rev.           150-095025-047 Rev.           150-095025-047 Rev.  | COUNT           D         7           C         2           O         5           B         1           B         1           D         3           E         7           D         2   |
| Rack<br>8                                |  | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>Chassis AF Track XMT TTT-2<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (2970 Feq.)<br>703-1 Receiver Module (4410 Feq.)<br>AF Track Receiver Chassis | Rack 8<br>MANUFACTURER | PART NUMBER           150-094017-022 Rev.           150-094017-022 Rev.           150-097031-010 Rev.           150-095025-034 Rev.           150-095025-047 Rev.           150-095025-047 Rev.           150-095025-047 Rev.           812-097031-034      | COUNT           D         7           C         2           O         5           B         1           B         1           B         1           D         3           E         7           D         2           S         5 |

| Hall Park B Signal House Asset Inventory |  |                                   |              |                       |       |
|--|--|-----------------------------------|--------------|-----------------------|-------|
| ltem                                     | Image  | Inventory                         |              |                       |       |
| Rack                                     | A REAL PROPERTY OF THE PARTY OF |                                   | Rack 9       |                       |       |
| 9  | A Designation of the second se | COMPONENT                         | MANUFACTUROR | PART NUMBER           | COUN  |
| 5  | 140 240  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev.   | ) 2   |
|  | The Prage  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. I | 1     |
|  |  | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. [ | ) 2   |
|  |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. I | 1     |
|  |  | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. [ | ) 2   |
|  |  | 703-1 Receiver Module (2970 Feq.) |              | 150-095025-047 Rev. [ | ) 1   |
|  |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034        | 2     |
| Rack                                     | Balla Para Tana Tana Tana Tana Tana  |                                   | Rack 10      |                       | ]     |
| 10                                       | A A A  | COMPONENT                         | MANUFACTUROR | PART NUMBER           | COUNT |
|  |  | 700 Amplifier Module              |              | 150-094017-022 Rev. C | 3     |
|  | Division of the local division of the  | 700 Amplifier Module              |              | 150-094017-022 Rev. D | 7     |
|  |  | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O | 5     |
|  |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. B | 1     |
|  |  | 702-1 Track Coupler (3690 Feq.)   |              | 150-095025-034 Rev. B | 1     |
|  | A CONTRACTOR OF A PARTY OF   | 702-1 Track Coupler (4950 Feq.)   |              | 150-095025-034 Rev. A | 1     |
|  |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B | 1     |
|  |  | 702-1 Track Coupler (4230 Feq.)   |              | 150-095025-034 Rev. B | 1     |
|  |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 3     |
|  |  |                                   |              |                       |       |
|  |  |                                   |              |                       |       |

| Hall Park B Signal House Asset Inventory |  |                    |                  |               |           |               |       |
|--|--|--------------------|------------------|---------------|-----------|---------------|-------|
| ltem                                     | Image  | Inventory          |                  |               |           |               |       |
| Rack                                     | All the Providence of the second   |                    |                  | Rack 11       |           |               |       |
| 11                                       | Statement State Statement  | COMPON             | NENT             | MANUFACTUROR  | PART      | NUMBER        | COUNT |
|  |  | 703-1 Receiver Mod | dule (4950 Feq.) |               | 150-09502 | 25-047 Rev. D | 1     |
|  |  | 703-1 Receiver Mod | dule (4950 Feq.) |               | 150-0950  | 25-047 Rev. E | 2     |
|  |  | 703-1 Receiver Mod | dule (3690 Feq.) |               | 150-0950  | 25-047 Rev. E | 1     |
|  |  | 703-1 Receiver Mod | dule (3330 Feq.) |               | 150-0950  | 25-047 Rev. E | 1     |
|  |  | 703-1 Receiver Mod | dule (4230 Feq.) |               | 150-0950  | 25-047 Rev. E | 2     |
|  |  | 703-1 Receiver Mod | dule (3690 Feq.) |               | 150-0950  | 25-047 Rev. D | 1     |
|  |  | AF Track Receiv    | ver Chassis      | Getsgs        | 812-09    | 7031-034      | 2     |
| Rack                                     | State State  |                    | Rack 12          | 2             |           |               |       |
| 12                                       | The start of the s | COMPONENT          | MANUFACTURO      | R PART NUMBER | COUNT     |               |       |
|  | Statistical Contraction of the local division of the local divisio | VLP                |                  |               | 2         |               |       |
|  |  | ACP-2              |                  |               | 2         |               |       |
|  | Marity -   | SSM                |                  |               | 2         |               |       |
|  | Contraction of the   | CCI                |                  |               | 2         |               |       |
|  |  | VSD                |                  |               | 2         |               |       |
|  | A REAL PROPERTY AND A REAL | VGP I/O            |                  |               | 3         |               |       |
|  |  | VGP 16             |                  |               | 3         |               |       |
|  |  | NV 1/0             |                  |               | 4         |               |       |
|  |  | 32 NVI             |                  |               | 2         |               |       |
|  |  | RC. 222            |                  |               | 2         |               |       |
|  | AND  | Modem              |                  |               | 2         |               |       |
|  |  | 12V Power Supply   |                  |               | 2         |               |       |
|  |  |                    | l                | I             |           | l             |       |
|  |  |                    |                  |               |           |               |       |

| Hall Pa | rk B Signal House Asset Inventory |  |           |             |                      |       |
|---------|-----------------------------------|--|-----------|-------------|----------------------|-------|
| ltem    | Image                             | Inventory                                |           |             |                      |       |
| Back    |                                   | Rack 13                                  | 3         |             |                      |       |
| 13      |                                   | COMPONENT MANU                           | UFACTURER | PART NUMBER | COUNT                |       |
| 15      | BELL                              | Rotary Dials (HALF Hemisphere-NEW)       |           |             | 17                   |       |
|         |                                   | Non-Vital Relays                         |           |             | 52                   |       |
|         |                                   |  |           |             |                      |       |
| Sides   |                                   |  | House     | Side-A      |                      |       |
| Jucs    |                                   | COMPONENT                                |           | MANUFACTURE | PART NUMBER          | COUNT |
|         |                                   | FIA-Keypad Controller                    |           | NAPCO       | RPC3000LCDe          | 1     |
|         |                                   | SWITCH HEATER CONTROL BOX                |           |             |                      | 2     |
|         |                                   | House Side-B                             |           |             |                      |       |
|         |                                   | Fire Intrusion Alarm                     |           | NAPCO       |                      | 1     |
|         |                                   | Battery                                  |           | Genesis     | NP7-1212V,7.0Ah      | 2     |
|         | i manufacture i series and        | Main Board                               |           |             |                      | 1     |
|         |                                   | Relay Boards                             |           |             |                      | 1     |
|         |                                   |  | House     | Side-C      |                      |       |
|         |                                   |  |           |             |                      |       |
|         |                                   |  | House     | Side-D      | Accu 227027 004 D-0  |       |
|         |                                   | CLCP 256 IO LED Driver Medule            |           | Coteas      | ASSY 227027-001 Rev. | 2     |
|         |                                   | Power Supply CLCP 12/DC 20W              |           | Getsgs      | 226609-200           | 2     |
|         |                                   | Double Throw NOT FUSEABLE Switch 100A 2  | 240V AC/  | Getses      | 220003 200           | 2     |
|         |                                   | 250V DC                                  |           | Square D    | 40274-556-01         | 1     |
|         |                                   | GENERAL Duty Safety Switch 100A 240V AC/ | / 250V DC | Square D    | 40275-933-01         | 1     |
|         |                                   | Current Monitor                          | ľ         | NRS         | 16775-00             | 2     |
|         |                                   | BATTERY ARRESTOR 4                       |           | HARMON      | 250597               | 1     |
|         |                                   | 12V Power Supply                         |           | NRS         | ERB-C 12/40          | 2     |
|         |                                   | 12V Battery                              |           | MARATHON    | M12V90               | 3     |

# I-70 Signal House



Photo

| I-70 Signal Ho | -70 Signal House Asset Inventory |   |   |  |   |  |  |
|----------------|----------------------------------|---|---|--|---|--|--|
| ltem           | Image                            | Inventory   |   |  |   |  |  |
| Rack 1         |                                  | Rack 1COMPONENTMANUFACTURERPARBPL-1EPC  | T NUMBER COUN<br>3  |  |   |  |  |
|                |                                  |   |   |  |   |  |  |
| Rack 2         |                                  | COMPONENT   |   |  | COUNT   |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay  | Rack 2<br>MANUFACTURER  | PART NUMBER  | COUNT   |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feg.)   | Rack 2<br>MANUFACTURER<br>GRS<br>FPC  | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B   | COUNT<br>2  |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)  | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>FPC   | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B  | COUNT<br>2<br>1   |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)   | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC  | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B   | COUNT<br>2<br>1<br>1<br>1   |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (4410 Feq.)  | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC   | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B  | COUNT<br>2<br>1<br>1<br>1<br>1<br>1   |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (4410 Feq.)<br>520 Receiver Module (3870 Feq.)   | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC                             | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1                                    |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (4410 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module   | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC                      | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B  | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>8                               |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (4410 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module<br>530 CAB Coupler  | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC        | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B  | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>8<br>4                          |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (3410 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module<br>530 CAB Coupler<br>540 Train Detection Coupler (2970 Feq.)   | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B<br>150-088019-051 Rev. B   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>8<br>4<br>4<br>1                |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (4410 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module<br>530 CAB Coupler<br>540 Train Detection Coupler (2970 Feq.)<br>540 Train Detection Coupler (3510 Feq.)  | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B<br>150-088019-051 Rev. B<br>150-088019-060 Rev. B                          | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>8<br>4<br>1<br>1<br>1           |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module<br>530 CAB Coupler<br>540 Train Detection Coupler (2970 Feq.)<br>540 Train Detection Coupler (3510 Feq.)<br>540 Train Detection Coupler (4410 Feq.)   | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B<br>150-088019-051 Rev. B<br>150-088019-060 Rev. B<br>150-088019-060 Rev. B | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>8<br>4<br>1<br>1<br>1<br>1<br>1 |  |  |
| Rack 2         |                                  | COMPONENT<br>Vital Relay<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (2970 Feq.)<br>520 Receiver Module (3510 Feq.)<br>520 Receiver Module (3410 Feq.)<br>520 Receiver Module (3870 Feq.)<br>520 Receiver Module (3870 Feq.)<br>510 Amplifier Module<br>530 CAB Coupler<br>540 Train Detection Coupler (2970 Feq.)<br>540 Train Detection Coupler (3510 Feq.)<br>540 Train Detection Coupler (3870 Feq.)<br>540 Train Detection Coupler (3870 Feq.) | Rack 2<br>MANUFACTURER<br>GRS<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC | PART NUMBER<br>A62-122 (56001-921-07)<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. B<br>150-088019-080 Rev. F<br>150-088019-050 Rev. B<br>150-088019-060 Rev. B<br>150-088019-060 Rev. B<br>150-088019-060 Rev. B | COUNT 2 1 1 1 1 1 1 8 4 1 1 1 1 1 1 1 1 1 1 1 1                             |  |  |

| I-70 Signal Ho | use Asset Inventory   |                                       |                |                        |       |
|----------------|---|---------------------------------------|----------------|------------------------|-------|
| ltem           | Image   | Inventory                             |                |                        |       |
| Rack 3         | and the second se |                                       | Rack 3         |                        |       |
| Hack o         |   | COMPONENT                             | MANUFACTURE    | PART NUMBER            | COUNT |
|                | The second se   | Vital Relay                           | GRS            | A62-122 (56001-921-07) | 3     |
|                |   | 520 Receiver Module (3690 Feq.)       | EPC            | 150-088019-080 Rev. B  | 1     |
|                |   | 520 Receiver Module (4950 Feq.)       | EPC            | 150-088019-080 Rev. B  | 1     |
|                | A STATE AND A STATE OF  | 520 Receiver Module (3330 Feq.)       | EPC            | 150-088019-080 Rev. F  | 1     |
|                |   | 520 Receiver Module (3330 Feq.)       | EPC            | 150-088019-080 Rev. B  | 2     |
|                |   | 520 Receiver Module (4230 Feq.)       | EPC            | 150-088019-080 Rev. F  | 1     |
|                |   | 510 Amplifier Module                  | EPC            | 150-088019-050 Rev. B  | 8     |
|                | A DECEMBER 21   | 530 CAB Coupler                       | EPC            | 150-088019-051 Rev. B  | 4     |
|                |   | 540 Train Detection Coupler (4230 Fee | .) EPC         | 150-088019-060 Rev. B  | 1     |
|                |   | 540 Train Detection Coupler (3690 Fec | .) EPC         | 150-088019-060 Rev. B  | 1     |
|                |   | 540 Train Detection Coupler (4950 Fec | .) EPC         | 150-088019-060 Rev. B  | 1     |
|                |   | 540 Train Detection Coupler (3330 Fee | .) EPC         | 150-088019-060 Rev. B  | 1     |
|                |   |                                       |                |                        |       |
| Rack 5         |   |                                       | Rack 5         |                        |       |
|                | An us has not been up the up  | COMPONENT                             | MANUFACTURER P | ART NUMBER COUNT       |       |
|                | · · · · · · · · · · · · · · · · · · ·   | Rotary Dials (Full Hemisphere-OLD)    |                | 8                      |       |
| 1              |   | Non-Vital Relays                      |                | 5                      |       |
|                |   |                                       |                |                        |       |

| I-70 Signal House Asset Inventory |  |                       |              |             |       |
|-----------------------------------|--|-----------------------|--------------|-------------|-------|
| ltem                              | Image  | Inventory             |              |             |       |
| Rack 6                            | WORKS IN   |                       | Rack 6       |             |       |
|                                   | THE OTAL   | COMPONENT             | MANUFACTURER | PART NUMBER | COUNT |
|                                   |  | Vital Relay           | SafeTran     | 400900      | 2     |
|                                   |  | VLP                   |              |             | 1     |
|                                   |  | ACP-2                 |              |             | 1     |
|                                   | In the second se | SSM                   |              |             | 1     |
|                                   |  | CCI                   |              |             | 1     |
|                                   |  | VGP I/O-12V           |              |             | 2     |
|                                   |  | NV I/O                |              |             | 1     |
|                                   |  | NVI                   |              |             | 1     |
|                                   |  | VGPI 16               |              |             | 1     |
|                                   |  | Surge Protector BSA-4 | Harmon       | 250597      | 1     |
|                                   |  | Modem                 |              |             | 2     |
|                                   |  | 12V Power Supply      |              |             | 1     |

| I-70 Signal House Asset Inventory |       |                             |                      |                 |       |  |  |
|-----------------------------------|-------|-----------------------------|----------------------|-----------------|-------|--|--|
| ltem                              | Image | Inventory                   |                      |                 |       |  |  |
| Sides                             | 1     |                             | House Side-A         |                 |       |  |  |
|                                   |       | COMPONENT                   | MANUFACTURER         | PART NUMBER     | COUNT |  |  |
|                                   | 0000  | Window Unit Air Conditioner |                      |                 | 1     |  |  |
| - R. C. S. S. S. S.               |       | House Side-B                |                      |                 |       |  |  |
|                                   |       | 28V Power Supply            | NRS                  | ERV-C 24/30     | 1     |  |  |
|                                   |       | Current Monitor             | NRS                  | 16775-00        | 1     |  |  |
|                                   |       |                             | House Side-C         |                 |       |  |  |
|                                   |       | 12V Power Supply            | Lamarche             | A29B-20-12V-A1  | 1     |  |  |
|                                   |       | 2.25 Battery                | PowerSafe            | DDr 50-17       | 14    |  |  |
|                                   |       | 12V Battery                 | Odyssey              | PC2150          | 1     |  |  |
|                                   |       | House                       | Side-D (Fire Control | Panel)          |       |  |  |
|                                   |       | Keypad                      | Radionics            | D360TD          | 1     |  |  |
|                                   |       | Omega Alarm                 | Radionics            | D8112           | 1     |  |  |
|                                   |       | Modem                       |                      | D8129           | 1     |  |  |
|                                   |       | Battery                     |                      | NP7-1212V,7.0Ah | 1     |  |  |
|                                   |       |                             | SCADA Control Box    |                 |       |  |  |
|                                   |       | Modem                       |                      |                 | 1     |  |  |
|                                   |       | SBX                         |                      |                 | 1     |  |  |
|                                   |       | Baseboard                   |                      |                 | 1     |  |  |
|                                   |       | DI                          |                      |                 | 1     |  |  |
|                                   |       | Power Supply                |                      |                 | 2     |  |  |
|                                   |       | Non-Vital                   |                      |                 | 1     |  |  |
|                                   |       | Battery                     | Genesis              | NP7-1212V,7.0Ah | 2     |  |  |

## Laclede's Landing Signal House



Side D

| Laclede's Landing Signal House Asset Inventory |       |   |  |  |  |  |
|--|-------|---|--|--|--|--|
| ltem   | Image | Inventory   |  |  |  |  |
| Rack 1   |       | Rack 1       COMPONENT     MANUFACTURER     PART NUMBER     COUNT       BPL-1     EPC     5   |  |  |  |  |
| Rack 2   |       | Rack 2COMPONENTMANUFACTURERPART NUMBERCOUNTRectifier 120AC/120DC SwitchHarmon250756-0002Vital RelayGRSA62-429 56001-926-018Vital RelayGRSA62-432 56001-785-014Vital RelayGRSA62-122 56001-921-072 |  |  |  |  |

| Laclede's Land | ling Signal House Asset Inventory  |   |              |                       |        |  |  |  |
|----------------|--|---|--------------|-----------------------|--------|--|--|--|
| ltem           | Image  | Inventory                               |              |                       |        |  |  |  |
| Rack 3         |  |   | Rack 3       |                       |        |  |  |  |
|                |  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT  |  |  |  |
|                |  | Vital Relay                             | ALSTOM       | A62-612               | 1      |  |  |  |
|                |  | Vital Relay                             | GRS          | A62-407 56001-745-02  | 1      |  |  |  |
|                | The second s   | 520 Receiver Module (3870 Feq.)         | EPC          | 150-088019-080 Rev. B | 2      |  |  |  |
|                | THE REAL PROPERTY OF A   | 520 Receiver Module (2970 Feq.) EPC     |              | 150-088019-080 Rev. B | 1      |  |  |  |
|                |  | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Rev. B | 1      |  |  |  |
|                |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. B | 1      |  |  |  |
|                |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 7      |  |  |  |
|                |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4      |  |  |  |
|                |  | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B | 1      |  |  |  |
|                |  | 540 Train Detection Coupler (3510Feq.)  | EPC          | 150-088019-060 Rev. B | 1      |  |  |  |
|                |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev. B | 1      |  |  |  |
|                |  |   |              |                       |        |  |  |  |
| Rack 4         |  |   | Rack 4       |                       |        |  |  |  |
|                |  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT  |  |  |  |
|                | A CONTRACTOR OF STREET   | 520 Receiver Module (2970 Feq.)         | EPC          | 150-088019-080 Rev. B | 2      |  |  |  |
|                |  | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Kev. B | 1      |  |  |  |
|                |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Kev. B | b<br>2 |  |  |  |
|                |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Kev. B | 3      |  |  |  |
|                | A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWNE | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Kev. B | 1      |  |  |  |
|                |  | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Kev. B | 1      |  |  |  |
|                |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Kev. B | 1      |  |  |  |
|                |  |   |              |                       |        |  |  |  |

| Laclede's Landi | ng Signal House Asset Inventory   |   |  |   |  |  |  |
|-----------------|---|---|--|---|--|--|--|
| ltem            | Image   | Inventory   |  |   |  |  |  |
| Rack 5          |   | Rack 5  |  |   |  |  |  |
| Noek 5          |   | COMPONENT   | MANUFACTURER   | PART NUMBER   | COUNT  |  |  |
|                 | - and the second se  | XFMR Matching Rail Coupler  | EPC  | 800-088019-300  | 2  |  |  |
|                 |   | XFMR Loop Matching  | EPC  | 800-088019-200  | 1  |  |  |
|                 |   | AC Vain Relay   | GRS  | A62-486   | 2  |  |  |
|                 |   | Bal Imp   |  | A3-117  | 2  |  |  |
|                 | Manual Provent  | 3 OHM ADJUSTABLE Resistor   | GRS  | A3-207 (01246-1)  | RT NUMBER         COUNT           088019-300         2           088019-200         1           A62-486         2           A3-117         2           07 (01246-1)         2           66105-11         2           -000 (A95 50)         1           3019-050 Rev. B         3           3019-051 Rev. B         3           S019-051 Rev. B         3 |  |  |
|                 | The second se | 25 OHM ADJUSTABLE Resistor  |  | 56105-11  | 2  |  |  |
|                 |   | XFMR  | GRS  | 31094-000 (A95 50)  | 1  |  |  |
|                 |   | 510 Amplifier Module  | EPC  | 150-088019-050 Rev. B   | 3  |  |  |
|                 | ALL STREET, ST  | 530 CAB Coupler (2340 Feq.)   | EPC  | 150-088019-051 Rev. B   | 3  |  |  |
|                 |   |   |  |   |  |  |  |
| Rack 6          |   |   | Rack 6   |   |  |  |  |
| Rack 6          |   | COMPONENT   | Rack 6<br>MANUFACTURER   | PART NUMBER   | COUNT  |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler   | Rack 6<br>MANUFACTURER<br>EPC  | PART NUMBER<br>800-088019-300   | COUNT<br>2   |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching   | Rack 6<br>MANUFACTURER<br>EPC<br>EPC   | PART NUMBER<br>800-088019-300<br>800-088019-200   | <b>COUNT</b><br>2<br>1   |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay  | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486  | COUNT<br>2<br>1<br>1   |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp   | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117  | COUNT<br>2<br>1<br>1<br>1  |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM Resistor   | Rack 6<br>MANUFACTURER<br>EPC<br>GRS<br>GRS  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)  | COUNT<br>2<br>1<br>1<br>1<br>1<br>1  |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM Resistor<br>25 OHM RESISTOR  | Rack 6<br>MANUFACTURER<br>EPC<br>GRS<br>GRS<br>Dale  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11  | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1  |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM Resistor<br>25 OHM RESISTOR<br>XFMR  | Rack 6         MANUFACTURER         EPC         EPC         GRS         GRS         Dale         GRS   | PART NUMBER           800-088019-300           800-088019-200           A62-486           A3-117           A3-207 (01246-1)           56105-11           31094-000 (A95 50)   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1   |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM Resistor<br>25 OHM RESISTOR<br>XFMR<br>510 Amplifier Module                                | Rack 6         MANUFACTURER         EPC         EPC         GRS         GRS         Dale         GRS         EPC         EPC         EPC         EPC         EPC         EPC         EPC         EPC         EPC | PART NUMBER           800-088019-300           800-088019-200           A62-486           A3-117           A3-207 (01246-1)           56105-11           31094-000 (A95 50)           150-088019-050 Rev. B                                 | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>3   |  |  |
| Rack 6          |   | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 OHM Resistor<br>25 OHM RESISTOR<br>XFMR<br>510 Amplifier Module<br>530 CAB Coupler (2340 Feq.) | Rack 6MANUFACTUREREPCEPCGRSGRSDaleGRSEPCEPC  | PART NUMBER           800-088019-300           800-088019-200           A62-486           A3-117           A3-207 (01246-1)           56105-11           31094-000 (A95 50)           150-088019-050 Rev. B           150-088019-051 Rev. B | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>3<br>3<br>3   |  |  |

| Rack 7   |  |   |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
| Rack 7   |  | entory  |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
| WANUFACIURER   | PART NUMBER  | COUNT   |  |  |  |  |  |
| SafeTran   | 400900   | 4   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. B  | 3   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. B  | 1   |  |  |  |  |  |
| 520 Receiver Module (3330 Feq.) EPC 150-088019-080 Rev. B  |  | 1   |  |  |  |  |  |
| 510 Amplifier Module EPC 150-088019-050 Rev. B   |  | 8   |  |  |  |  |  |
| EPC  | 150-088019-051 Rev. B  | 4   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| Rack 8   |  |   |  |  |  |  |  |
| S10 Attribute         EPC         130-088019-050 Rev. B           530 CAB Coupler (2340 Feq.)         EPC         150-088019-051 Rev. B           540 Train Detection Coupler (4230 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3690Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (4950 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3330 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3330 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3330 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3330 Feq.)         EPC         150-088019-060 Rev. B           540 Train Detection Coupler (3330 Feq.)         EPC         150-088019-060 Rev. B | COUNT  |   |  |  |  |  |  |
| GRS  | A62-122 56001-921-07   | 1   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. F  | 1   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-080 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-050 Rev. B  | 6   |  |  |  |  |  |
| EPC  | 150-088019-051 Rev. B  | 3   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
| EPC  | 150-088019-060 Rev. B  | 1   |  |  |  |  |  |
|  | EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC<br>EPC | EPC       150-088019-080 Rev. B         EPC       150-088019-050 Rev. B         EPC       150-088019-050 Rev. B         EPC       150-088019-050 Rev. B         EPC       150-088019-060 Rev. B         EPC       150-088019-080 Rev. F         EPC       150-088019-080 Rev. B         EPC       150-088019-050 Rev. B         EPC       150-088019-050 Rev. B         EPC       150-088019-060 Rev. B |  |  |  |  |  |

| Laclede's Landi | ng Signal House Asset Inventory  |                                    |              |               |             |       |  |  |
|-----------------|--|------------------------------------|--------------|---------------|-------------|-------|--|--|
| ltem            | Image  | Inventory                          |              |               |             |       |  |  |
| Rack 9          | Rack 9   |                                    |              |               |             |       |  |  |
| Noten 5         | In Including   | COMPONENT MANUFACTURER P           |              |               | PART NUMBER | COUNT |  |  |
|                 |  | Rotary Dials (Full Hemisphere-OLD) |              |               |             | 20    |  |  |
|                 |  | Non-Vital Relays                   |              |               |             | 2     |  |  |
|                 | Treese I   | IMBEDDED COMPUTER                  |              | MOXA          | IA240       | 2     |  |  |
|                 |  | MAGNUM CS14H CONV                  | ERTER SWITCH | GARRET COM    | CS14H       | 1     |  |  |
|                 |  |                                    |              |               |             |       |  |  |
| Rack 10         | A State of the sta | Rack 10                            |              |               |             |       |  |  |
|                 |  | COMPONENT                          | MANUFACTUR   | ER PART NUM   | BER COUN    | Т     |  |  |
|                 |  | Vital Relay                        | GRS          | A62-122 56001 | -921-07 3   |       |  |  |
|                 | Langer Career  | VLP                                |              |               | 2           |       |  |  |
|                 | Particular Automatic   | ACP-2                              |              |               | 2           |       |  |  |
|                 | THE WORKS  | SSM                                |              |               | 2           |       |  |  |
|                 |  |                                    |              |               | 2           | _     |  |  |
|                 | · Manual Sciences I  | VSD<br>VCD VC                      |              |               | 1           |       |  |  |
|                 |  |                                    |              |               | 3           |       |  |  |
|                 | Contract of Contraction of the   |                                    |              |               | 3           | _     |  |  |
|                 | AND DESCRIPTION OF TAXABLE PARTY.  |                                    |              |               | 4           | _     |  |  |
|                 |  | VUPI 10                            | Harmon       | 250507        | 2<br>1      | _     |  |  |
|                 | - State of the second second   |                                    | IIdIIIUII    | 250597        |             |       |  |  |
|                 | The state of the second | BS-232                             |              |               | 2           | _     |  |  |
|                 |  | Modem                              |              |               | 2           | _     |  |  |
|                 |  | 12V Power Supply                   |              |               | 2           |       |  |  |
|                 |  |                                    |              | I             |             | ]     |  |  |

| Laclede's Land | ing Signal House Asset Inventory |                  |               |                        |       |  |
|----------------|----------------------------------|------------------|---------------|------------------------|-------|--|
| Item           | Image                            | Inventory        |               |                        |       |  |
| SCADA          |                                  |                  | SCA           | DA                     |       |  |
|                |                                  | COMPONENT        | MANUFACTURER  | PART NUMBER            | COUNT |  |
|                |                                  | Modem            | MOTOROLA      | V3225                  | 1     |  |
|                |                                  | SPX              |               |                        | 1     |  |
|                |                                  | C186             |               |                        | 1     |  |
|                |                                  | DI               |               |                        | 2     |  |
|                |                                  | DO               |               |                        | 2     |  |
|                |                                  | REMZ             |               |                        | 1     |  |
|                |                                  | Power Supply     |               |                        | 2     |  |
|                |                                  | Non Vital Relays |               |                        | 25    |  |
|                |                                  | Batteries        | Genesis       | NP7-12 12V, 7.0 Ah     | 2     |  |
|                |                                  | SCADA Case       | Eurobec Metal | N.Cat.N: 9500 DA722436 | 1     |  |
|                |                                  |                  |               |                        |       |  |

| Laclede's Landi | ng Signal House Asset Inventory |  |   |                          |       |  |  |  |  |  |
|-----------------|---------------------------------|--|---|--------------------------|-------|--|--|--|--|--|
| ltem            | Image                           | Inventory  |   |                          |       |  |  |  |  |  |
| Sides           |                                 | House Side-A   |   |                          |       |  |  |  |  |  |
|                 |                                 | COMPONENT  | MANUFACTURER                            | PART NUMBER              | COUNT |  |  |  |  |  |
|                 |                                 | Switch Heater Push Button Box                          |   |                          | 1     |  |  |  |  |  |
|                 |                                 |  |   |                          |       |  |  |  |  |  |
|                 |                                 | House Side-B   |   |                          |       |  |  |  |  |  |
|                 | Trans.                          | CLCP 256 IO LED Driver Module Getsgs Assy 22702        |   | Assy 227027-001 Rev. 806 | 1     |  |  |  |  |  |
|                 |                                 | Power Supply CLCP 12VDC 20W                            | Power Supply CLCP 12VDC 20W Getsgs 2266 |                          | 1     |  |  |  |  |  |
|                 |                                 | Battery PowerSafe 12V1                                 |   | 12V155FS                 | 1     |  |  |  |  |  |
|                 |                                 | 28V Power Supply Lamarche                              |   | A12B-40-24V-A1           | 1     |  |  |  |  |  |
|                 |                                 | 12V Power Supply                                       | NRS                                     | ERB-CERB-C 12/40         | 1     |  |  |  |  |  |
|                 |                                 | CURRENT MONITOR  | NRS                                     |                          | 1     |  |  |  |  |  |
|                 |                                 | Heavy Duty Double Throw Safety Switch 100 A            |   |                          |       |  |  |  |  |  |
|                 |                                 | 240V/250DC   | Siemens                                 |                          | 1     |  |  |  |  |  |
|                 |                                 | General Duty Safety Switch 100A 240V AC/250V           |   |                          |       |  |  |  |  |  |
|                 |                                 | DC   | Square D                                |                          | 1     |  |  |  |  |  |
|                 |                                 | Automatic Transfer Switch                              | Kohler                                  | KSS-DFNC-0100S           | 1     |  |  |  |  |  |
|                 |                                 | House Side-C   |   |                          |       |  |  |  |  |  |
|                 |                                 | 28V Power Supply                                       | Lamarche                                | A29-20-24V-A1            | 1     |  |  |  |  |  |
|                 |                                 | Heavy Duty Safety Switch 100A 240V AC/250V DC Square D |   | 40276-003-02             | 1     |  |  |  |  |  |
|                 |                                 | House Side-D (Fire Control Panel)                      |   |                          |       |  |  |  |  |  |
|                 |                                 | Keypad   | Raydioncs                               | D360TD                   | 1     |  |  |  |  |  |
|                 |                                 | Omega Alarm  | Raydioncs                               | D8112                    | 1     |  |  |  |  |  |
|                 |                                 | Modem  |   | D8129                    | 1     |  |  |  |  |  |
|                 |                                 | Battery  |   | NP7-1212V,7.0Ah          | 2     |  |  |  |  |  |

## North Hanley Signal House


| North Hanley Sig | nal House Asset Inventory     |                 |               |               |                        |       |
|------------------|-------------------------------|-----------------|---------------|---------------|------------------------|-------|
| ltem             | Image                         | Inventory       |               |               |                        |       |
| Rack 1           | and the set of the set        |                 | Rack          | 1             |                        |       |
|                  |                               | COMPONENT       | MANUFACTURE   | R PART NUMBER | COUNT                  |       |
|                  |                               | BPL-1           | EPC           |               | 4                      |       |
|                  |                               |                 |               |               |                        |       |
| Rack 2           | THE REAL PROPERTY AND ADDRESS |                 |               | Rack 2        |                        |       |
|                  | an on the star of the         | COMPO           | ONENT         | MANUFACTURER  | PART NUMBER            | COUNT |
|                  |                               | Vital           | Relay         | GRS           | A62-429 (56001-926-01) | 8     |
|                  |                               | Vital           | Relay         | GRS           | A62-432 (56001-785-01) | 4     |
|                  | - ALANNE                      | Vital           | Relay         | GRS           | A62-122 (56001-921-07) | 2     |
|                  |                               | Switch Rectifie | r 120AC/120DC | Harmon        | 250756-000             | 2     |
|                  |                               |                 |               |               |                        |       |

| North Hanley Sig | nal House Asset Inventory  |   |              |                       |   |
|------------------|--|---|--------------|-----------------------|---|
| ltem             | Image  | Inventory                               |              |                       |   |
| Rack 3           |  |   | Rack 3       |                       |   |
|                  |  | COMPONENT                               | MANUFACTURE  | PART NUMBER           | COUNT   |
|                  |  | Vital Relay                             | GRS          | A62-122 (56001-921-0  | )7) 2   |
|                  |  | 520 Receiver Module (2970 Feq.)         | EPC          | 150-088019-080 Rev.   | F 1   |
|                  |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev.   | B 1   |
|                  |  | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Rev.   | B 1   |
|                  |  | 520 Receiver Module (3870 Feq.)         | EPC          | 150-088019-080 Rev.   | B 1   |
|                  |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev.   | B 7   |
|                  |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev.   | B 4   |
|                  |  | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev.   | B 1   |
|                  | Bin.   | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev.   | B 1   |
|                  |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev.   | B 1   |
|                  |  |   |              |                       |   |
| Rack 4           |  |   | Rack 4       |                       |   |
|                  |  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT   |
|                  |  | 520 Receiver Module (3510 Feq.)         | EPC          | 150-088019-080 Rev. B | 2   |
|                  | Statement in the second se | 520 Receiver Module (2970 Feq.)         | EPC          | 150-088019-080 Rev. B | 2   |
|                  |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. B | 1   |
|                  |  | 520 Receiver Module (4410 Feq.)         | EPC          | 150-088019-080 Rev. F | 1   |
|                  |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 8   |
|                  |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B | 4   |
|                  | States and the second second   | 540 Train Detection Coupler (2510 Feq.) | EPC          | 150-088019-060 Rev. B |   |
|                  |  | 540 Train Detection Coupler (4410 Feq.) | EPC          | 150-088019-060 Rev. B | R COUNT   1-07) 2   ev. F 1   ev. B 1   a 1   b 1   a 1   b 1   b 1   b 1   b 1   b 1   b 1   b 1   b 1 |
|                  |  | 540 Train Detection Coupler (3870 Feg.) | FPC          | 150-088019-060 Rev. B | 1   |
|                  |  |   |              |                       |   |

|        | hal House Asset Inventory  |   |  |  |  |
|--------|--|---|--|--|--|
| Item   | Image  | Inventory   |  |  |  |
| Rack 5 | The second of many second s  |   | Rack 5   |  |  |
|        | Y and an in the second   | COMPONENT   | MANUFACTURER   | PART NUMBER  | COUNT  |
|        |  | XFMR Matching Rail Coupler  | EPC  | 800-088019-300   | 2  |
|        | A CONTRACTOR OF  | XFMR Loop Matching  | EPC  | 800-088019-200   | 1  |
|        | A DE CONTRACTOR OF A DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CON  | AC Vain Relay   | GRS  | A62-486  | 2  |
|        | A REAL PROPERTY AND A REAL PROPERTY A REAL PRO | Bal Imp   |  | A3-117   | 2  |
|        | 3 rates 12 64 - O+   | 3 ohm Resistor ADJ  | GRS  | A3-207 (01246-1)   | 2  |
|        |  | 25 ohm Resistor ADJ   |  | 56105-11   | 2  |
|        |  | XFMR  | GRS  | 31094-000 (A95 50)   | 1  |
|        | 97-16  | 510 Amplifier Module  | EPC  | 150-088019-050 Rev. B  | 3  |
|        | Contraction of the second second second  | 530 CAB Coupler (2340 Feq.)   | EPC  | 150-088019-051 Rev. B  | 3  |
|        |  |   |  |  |  |
| Rack 6 |  |   | Rack 6   |  |  |
| Rack 6 |  | COMPONENT   | Rack 6<br>MANUFACTURER   | PART NUMBER  | COUNT  |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler   | Rack 6<br>MANUFACTURER<br>EPC  | <b>PART NUMBER</b><br>800-088019-300   | COUNT<br>2   |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching   | Rack 6<br>MANUFACTURER<br>EPC<br>EPC   | PART NUMBER<br>800-088019-300<br>800-088019-200  | <b>COUNT</b><br>2<br>1                                       |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay  | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486   | <b>COUNT</b><br>2<br>1<br>1                                  |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp   | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS  | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117   | <b>COUNT</b><br>2<br>1<br>1<br>1                             |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 ohm Resistor ADJ   | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS<br>GRS   | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1                          |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 ohm Resistor ADJ<br>25 ohm Resistor ADJ  | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS<br>GRS<br>Dale                                     | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1                     |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 ohm Resistor ADJ<br>25 ohm Resistor ADJ<br>XFMR  | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS<br>GRS<br>Dale<br>GRS                              | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)   | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1           |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 ohm Resistor ADJ<br>25 ohm Resistor ADJ<br>XFMR<br>510 Amplifier Module                                | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS<br>GRS<br>Dale<br>GRS<br>EPC                       | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)<br>150-088019-050 Rev. B                          | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>3<br>3      |
| Rack 6 |  | COMPONENT<br>XFMR Matching Rail Coupler<br>XFMR Loop Matching<br>AC Vain Relay<br>Bal Imp<br>3 ohm Resistor ADJ<br>25 ohm Resistor ADJ<br>XFMR<br>510 Amplifier Module<br>530 CAB Coupler (2340 Feq.) | Rack 6<br>MANUFACTURER<br>EPC<br>EPC<br>GRS<br>GRS<br>Dale<br>GRS<br>Dale<br>GRS<br>EPC<br>EPC | PART NUMBER<br>800-088019-300<br>800-088019-200<br>A62-486<br>A3-117<br>A3-207 (01246-1)<br>56105-11<br>31094-000 (A95 50)<br>150-088019-050 Rev. B<br>150-088019-051 Rev. B | COUNT<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>3<br>3<br>3 |

| North Hanley Sig | nal House Asset Inventory  |   |              |                        |         |
|------------------|--|---|--------------|------------------------|---------|
| ltem             | Image  | Inventory                               |              |                        |         |
| Rack 7           |  |   | Rack 7       |                        |         |
|                  | · · · · · · · · · · · · · · · · · · ·  | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT   |
|                  | a state to be a set of the set of | Vital Relay                             | SafeTran     | 400900                 | 4       |
|                  |  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1       |
|                  | A REPORT OF THE PARTY OF THE PA | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1       |
|                  |  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080 Rev. B  | 2       |
|                  |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 8       |
|                  |  | 530 CAB Coupler (2340 Feq.)             | EPC          | 150-088019-051 Rev. B  | 4       |
|                  |  | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  | A DECEMBER OF THE OWNER OWNER OF THE OWNER OWNE   | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  |  | 540 Train Detection Coupler (4950 Feq.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  |  | <u>г</u>                                |              |                        |         |
| Rack 8           | Course and and a second second   | COMPONENT                               |              |                        | COLINIT |
|                  |  | Vital Bolov                             |              | PART NUIVIDER          |         |
|                  | A REAL PROPERTY IN LARD FUR  | F20 Possiver Medule (2600 Feg.)         | GRS          | A62-122 (56001-921-07) | 2<br>1  |
|                  | State of Sta | 520 Receiver Module (3050 Feq.)         | EPC          | 150-066019-060 Rev. B  | 1       |
|                  | and a subscription of the second second  | 520 Receiver Module (4950 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1       |
|                  |  | 520 Receiver Module (3330 Feq.)         | EPC          | 150-088019-080 Rev. B  | 1       |
|                  | MAX MILLS  | 510 Amplifier Module                    | EPC          | 150-088019-080 Rev. B  | 7       |
|                  |  | 530 CAB Coupler (2340 Feg.)             | FPC          | 150-088019-051 Rev. B  | 4       |
|                  |  | 540 Train Detection Coupler (3690 Feg.) | FPC          | 150-088019-060 Rev. B  | 1       |
|                  |  | 540 Train Detection Coupler (4950 Feg.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  | A Distance of the second se  | 540 Train Detection Coupler (3330 Feg.) | EPC          | 150-088019-060 Rev. B  | 1       |
|                  |  |   | -            |                        |         |

| North Hanley Sig | nal House Asset Inventory  |                          |            |              |             |          |   |
|------------------|--|--------------------------|------------|--------------|-------------|----------|---|
| ltem             | Image  | Inventory                |            |              |             |          |   |
| Rack 9           |  |                          |            | Rack 9       |             |          | ] |
|                  |  | COMPONENT                |            | MANUFACTURER | PART NUMBE  | R COUNT  |   |
|                  |  | Rotary Dials (Full Hemis | ohere-OLD) |              |             | 22       |   |
|                  |  | Non-Vital Relay          | ys         |              |             | 67       | ] |
|                  |  |                          |            |              |             |          |   |
| Rack 10          | - In the second s  |                          | R          | Rack 10      |             |          |   |
|                  |  | COMPONENT                | MANUFACT   | URER PART N  | UMBER       | COUNT    |   |
|                  | Rec. out of  | Vital Relay              | GRS        | A62-122 (56  | 001-921-07) | 3        |   |
|                  | ILLING HIM   | VLP                      |            |              |             | 2        |   |
|                  | These one of the state of the  | ACP-2                    |            |              |             | 2        |   |
|                  | IL REAL PROPERTY OF A  | SSM                      |            |              |             | 2        |   |
|                  |  | CCI                      |            |              |             | 2        |   |
|                  |  | VSD                      |            |              |             | 1        |   |
|                  |  |                          |            |              |             | 2        |   |
|                  | A CONTRACTOR OF A CONTRACTOR O | VGP 1/0-12V              |            |              |             | 1        |   |
|                  | A STREET OF THE OWNER WATER OF THE OWNER OWNER OF THE OWNER   |                          |            |              |             | 3        |   |
|                  |  |                          |            |              |             | 4        |   |
|                  |  | Surge Protector BSA-A    | Harmor     | n 250        | 597         | <u> </u> |   |
|                  |  | RS-727                   | narmu      | . 230        |             | 2        |   |
|                  |  | Modem                    |            |              |             | 2        |   |
|                  |  | 12V Power Supply         |            |              |             | 2        |   |
|                  |  |                          |            | I            |             |          |   |

| North Hanley Sig | nal House Asset Inventory  |                  |              |                    |       |
|------------------|--|------------------|--------------|--------------------|-------|
| ltem             | Image  | Inventory        |              |                    |       |
| SCADA            | And in case of the local division of the loc |                  | SCADA        |                    |       |
|                  |  | COMPONENT        | MANUFACTURER | PART NUMBER        | COUNT |
|                  |  | Modem            |              |                    | 1     |
|                  |  | SPX              |              |                    | 1     |
|                  |  | C186             |              |                    | 1     |
|                  | DI   |                  |              | 2                  |       |
|                  | DO   |                  |              | 1                  |       |
|                  |  | REMZ             |              |                    | 1     |
|                  |  | Power Supply     |              |                    | 2     |
|                  |  | Non Vital Relays |              |                    | 29    |
|                  |  | Batteries        | Genesis      | NP7-12 12V, 7.0 Ah | 2     |
|                  | At a second second   | SCADA Case       |              |                    | 1     |
|                  |  |                  |              |                    |       |

| North Hanley Sig | nal House Asset Inventory  |   |                |                 |       |
|------------------|--|---|----------------|-----------------|-------|
| Item             | Image  | Inventory                                     |                |                 |       |
| Sides            |  | House S                                       | ide-A          |                 |       |
|                  |  | COMPONENT                                     | MANUFACTURER   | PART NUMBER     | COUNT |
|                  |  | Switch Heater Push Button Box                 |                |                 | 1     |
|                  |  |   |                |                 |       |
|                  |  | House S                                       | ide-B          |                 |       |
|                  | Rent Carl  | Diode Board (Control Panel)                   | Harmon         |                 | 1     |
|                  |  | Battery                                       | PowerSafe      | 12V 155FS       | 1     |
|                  |  | 28V Power Supply                              | Lamarche       | A29-60-24V-A1   | 1     |
|                  |  | 12V Power Supply                              | Lamarche       | A29-30-12V-A1   | 1     |
|                  | Print Soluce   | Heavy Duty Double Throw Safety Switch 100 A   |                |                 |       |
|                  |  | 240V/250DC                                    | Siemens        |                 | 1     |
|                  | and the second se  | General Duty Safety Switch 100A 240V AC/250V  |                |                 |       |
|                  | serva marcha ina surraite  | DC  | Square D       | 40276-004-02    | 1     |
|                  | provide the second seco | Automatic Transfer Switch                     | Kohler         | KSS-DFNC-0100S  | 1     |
|                  |  | House S                                       | ide-C          |                 |       |
|                  |  | 28V Power Supply                              | Lamarche       | A29-20-24V-A1   | 1     |
|                  |  | Heavy Duty Safety Switch 100A 240V AC/250V DC | Square D       | 40276-003-02    | 1     |
|                  | ( ) · ( ) ·  | House Side-D (Fire                            | Control Panel) |                 |       |
|                  |  | Keypad  | Radionics      | D360TD          | 1     |
|                  |  | Omega Alarm                                   | Radionics      | D8112           | 1     |
|                  |  | Modem   |                | D8129           | 1     |
|                  |  | Battery                                       |                | NP7-1212V,7.0Ah | 1     |

## **Royal Signal House**



| Royal Sig | Royal Signal House Asset Inventory   |                               |             |          |               |         |       |
|-----------|--|-------------------------------|-------------|----------|---------------|---------|-------|
| ltem      | Image  | Inventory                     |             |          |               |         |       |
| Rack 1    |  | Rack 1                        |             |          |               |         |       |
| Nack 1    |  |                               |             | PAR      |               | COUNT   |       |
|           |  | BPI-3                         | HARMON      | 150-0970 | 031-013 Rev O | 13      | -     |
| 1         |  | Carrier Surge Arrester 1      | HARMON      | 250      | 0197-001      | 2       | -     |
|           |  |                               |             |          |               |         |       |
| Rack 2    | Contraction of the second seco | Rack 2                        |             |          |               |         |       |
|           |  | COMPONENT                     | MANUFA      | CTURER   | PART NUM      | BER     | COUNT |
|           | TI BERNER IN   | Vital Relay                   | Alste       | om       | A62-407 56001 | -745-02 | 1     |
|           |  | Vital Relay                   | Alste       | om       | A62-122 56001 | -921-07 | 3     |
|           |  | POR XFMR                      | Alste       | om       | 31094-000-01  | Rev. F  | 1     |
|           |  | 28V Power Supply              | Кер         | со       | PRR 28-38M2   | 24787   | 2     |
|           |  | 28V Power Supply              | Кер         | 000      | PRM 28-17-2   | 4810    | 2     |
|           | A DECEMBER OF A  | Rectifier 25V .3A Selenium Ty | ype S Alste | om       | A53-541       |         | 1     |
|           |  |                               |             |          |               |         |       |

| Royal Sig | Royal Signal House Asset Inventory |                              |              |                      |          |  |  |
|-----------|------------------------------------|------------------------------|--------------|----------------------|----------|--|--|
| ltem      | Image                              | Inventory                    |              |                      |          |  |  |
| Rack 3    |                                    | Rack 3                       |              |                      |          |  |  |
| Hack 5    |                                    | COMPONENT                    | MANUFACTURER | PART NUMBER          | COUNT    |  |  |
|           |                                    | Rectifier 120AC/120DC Switch |              | 250756-000           | 2        |  |  |
|           | IN COMMENSAL                       | Vital Relay                  | Alstom       | A62-429 56001-926-01 | 8        |  |  |
|           |                                    | Vital Relay                  | Alstom       | A62-432 56001-785-01 | 4        |  |  |
|           |                                    | Vital Relay                  | Alstom       | A62-247              | 4        |  |  |
| 1         |                                    | Vital Relay                  | GRS          | A62-122 56001-921-07 | 1        |  |  |
| Rack 4    |                                    |                              | Rack 4       |                      |          |  |  |
|           |                                    | COMPONENT                    | MANUFACTUR   | ER PART NUMBER       | COUN     |  |  |
|           |                                    | XFMR Loop Matching (2340 Fee | ι.) EPC      | 800-088019-200       | 1        |  |  |
|           |                                    | XFMR Matching Rail Coupler   | EPC          | 800-088019-300       | 2        |  |  |
|           |                                    | AC Vain Relay                | Alstom       | A62-486              | 2        |  |  |
|           |                                    | Bal Imp                      | Alstom       | A3-117               | 2        |  |  |
|           |                                    | 1 ohm Resistor (1XT/3XT)     | GRS          | A3-207 (01246-1)     | 2        |  |  |
| 1         |                                    |                              | 1)" Alstons  | 21004 000 (405 50    | 2        |  |  |
|           |                                    | 700 Amplifier Medule         | AISLOM       | 150-004017 022 PA    |          |  |  |
|           |                                    | 700 Amplifier Module         |              | 150-094017-022 Rev   | <u> </u> |  |  |
|           |                                    | 701-2 CAB Coupler (2340 Feg  | )            | 150-097031-010 Rev   | .0 3     |  |  |
|           |                                    | Chassis AF Track XMT TTT-2   | , Getses     | 812-097031-001       | 1        |  |  |
|           |                                    |                              |              |                      |          |  |  |

| Royal Signal House Asset Inventory |  |                                   |               |                       |       |  |
|------------------------------------|--|-----------------------------------|---------------|-----------------------|-------|--|
| ltem                               | Image  | Inventory                         |               |                       |       |  |
| Rack 5                             |  |                                   | Rack 5        |                       |       |  |
| nack b                             |  | COMPONENT                         | MANUFACTURER  | PART NUMBER           | COUNT |  |
|                                    |  | XFMR Loop Matching (2340 Feq.)    | EPC           | 800-088019-200        | 1     |  |
|                                    |  | XFMR Matching Rail Coupler        | EPC           | 800-088019-300        | 2     |  |
|                                    | Car was Sharen   | AC Vain Relay                     | Alstom        | A62-486               | 2     |  |
|                                    |  | Bal Imp                           | Alstom        | A3-117                | 2     |  |
|                                    |  | 1 ohm Resistor (1XT/3XT)          | GRS           | A3-207 (01246-1)      | 2     |  |
|                                    | 2.5 ohm Resistor (1XTRN/3XTRN)   |                                   | 56105-11      | 2                     |       |  |
|                                    |  | 3T/3XT XFMR                       | Alstom        | 31094-000 (A95 50)    | 1     |  |
|                                    |  | 700 Amplifier Module              |               | 150-094017-022 Rev. A | 1     |  |
|                                    |  | 700 Amplifier Module              |               | 150-094017-022 Rev. C | 1     |  |
|                                    |  | 700 Amplifier Module              |               | 150-094017-022 Rev. D | 1     |  |
|                                    |  | 701-2 CAB Coupler (2340 Feq.)     |               | 150-097031-010 Rev. O | 3     |  |
| A MARKET MARKET                    | Chassis AF Track XMT TTT-2   | Getsgs                            | 812097031-001 | 1                     |       |  |
|                                    |  |                                   |               |                       |       |  |
| Rack 6                             |  |                                   | Rack 6        |                       |       |  |
|                                    | COLUMN 2 IN COLUMN 2   | COMPONENT                         | MANUFACTURER  | PART NUMBER           | COUNT |  |
|                                    |  | 700 Amplifier Module              |               | 150-094017-022 Rev. A | 2     |  |
|                                    |  | 700 Amplifier Module              |               | 150-094017-022 Rev. C | 3     |  |
|                                    |  | 701-2 CAB Coupler (2340 Feq.)     |               | 150-09/031-010 Rev. O | 3     |  |
|                                    | Contraction of the   | 702-1 Track Coupler (4410 Feq.)   |               | 150-095025-034 Rev. B | 1     |  |
|                                    |  | 702-1 Track Coupler (3870 Feq.)   |               | 150-095025-034 Rev. B | 1     |  |
|                                    |  | 703-1 Receiver Module (4410 Feq.) |               | 150-095025-047 Rev. E | 2     |  |
|                                    |  | 703-1 Receiver Module (3510 Feq.) |               | 150-095025-047 Rev. D | 1     |  |
|                                    |  | 703-1 Receiver Module (4410 Feq.) |               | 150-095025-047 Rev. D | 1     |  |
|                                    | A REAL PROPERTY OF A REAL PROPER | 703-1 Receiver Module (3870 Feq.) | C             | 150-095025-047 Rev. D | 2     |  |
|                                    | Ballin and A   | Chassis AF Track XIVIT 111-2      | Getsgs        | 812-09/031-001        | 2     |  |
|                                    |  | AF I rack keceiver Chassis        | Getsgs        | 812-09/031-034        | 1     |  |
|                                    | Constant No.   |                                   |               |                       |       |  |

| Royal Sig       | nal House Asset Inventory       |                                   |              |                         |       |  |  |
|-----------------|---------------------------------|-----------------------------------|--------------|-------------------------|-------|--|--|
| ltem            | Image                           | Inventory                         |              |                         |       |  |  |
| Rack 7          |                                 | Rack 7                            |              |                         |       |  |  |
|                 |                                 | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |
|                 |                                 | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 3     |  |  |
|                 |                                 | 700 Amplifier Module              |              | 150-094017-022 Rev. A   | 1     |  |  |
|                 |                                 | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 2     |  |  |
|                 |                                 | 701-2 CAB Coupler (2340 Feq.)     |              | 150-097031-010 Rev. O   | 3     |  |  |
|                 | A REPORT AND A REAL PROPERTY OF | 702-1 Track Coupler (3510 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|                 |                                 | 702-1 Track Coupler (4410 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
| LINA DATA SALES |                                 | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|                 |                                 | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. D   | 2     |  |  |
|                 |                                 | 703-1 Receiver Module (3510 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|                 |                                 | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|                 |                                 | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. E   | 1     |  |  |
|                 |                                 | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |
|                 |                                 | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |
|                 |                                 |                                   |              |                         |       |  |  |
| Rack 8          | CARLES & CONTRACTOR             |                                   | Rack 8       |                         |       |  |  |
|                 |                                 |                                   | MANUFACIURER | PART NUMBER             |       |  |  |
|                 |                                 | 700 Amplifier Module              |              | 150-094017-022 Rev. D   | 2     |  |  |
|                 |                                 | 700 Amplifier Module              |              | 150-094017-022 Rev. C   | 1     |  |  |
|                 |                                 | 700 Ampliner Module               |              | 150-094017-022 Rev. A   | 2     |  |  |
|                 | HALLAN HIM                      | 701-2 CAB Coupler (2540 Feq.)     |              | 150-097051-010 Rev. 0   | ) 1   |  |  |
|                 |                                 | 702-1 Track Coupler (3050 Feq.)   |              | 150 005025-034 Rev. CAC | 1     |  |  |
|                 |                                 | 702-1 Track Coupler (4350 Feq.)   |              | 150-095025-034 Rev. B   | 1     |  |  |
|                 |                                 | 702-1 Receiver Module (3690 Feg.) |              | 150-095025-034 Rev. B   | 1     |  |  |
|                 |                                 | 703-1 Receiver Module (3050 Feq.) |              | 150-095025-047 Rev. D   | 3     |  |  |
|                 |                                 | 703-1 Receiver Module (3330 Feg.) |              | 150-095025-047 Rev. D   | 2     |  |  |
|                 |                                 | Chassis AF Track XMT TTT-2        | Getsøs       | 812-097031-001          | 2     |  |  |
|                 | COLUMN THE OWNER                | AF Track Receiver Chassis         | Getsøs       | 812-097031-034          | 1     |  |  |
|                 |                                 |                                   |              |                         |       |  |  |

| Royal Sigr | nal House Asset Inventory   |   |                  |              |                       |               |       |
|------------|---|---|------------------|--------------|-----------------------|---------------|-------|
| ltem       | Image   | Inventory                                     |                  |              |                       |               |       |
| Rack 9     | and the second se | Rack 9  |                  |              |                       |               |       |
|            |   | COMPON  | NENT             | MANUFACTURER | PART                  | NUMBER        | COUNT |
|            |   | 700 Amplifier                                 | r Module         |              | 150-09402             | 17-022 Rev. D | 3     |
|            |   | 700 Amplifier                                 | r Module         |              | 150-09402             | 17-022 Rev. A | 1     |
|            |   | 700 Amplifier                                 | r Module         |              | 150-094017-022 Rev. C |               | 1     |
|            | MARLING BARRIER   | 701-2 CAB Couple                              | er (2340 Feq.)   |              | 150-097031-010 Rev. O |               | 3     |
|            | and the second se | 702-1 Track Coupl                             | er (3690 Feq.)   |              | 150-09502             | 25-034 Rev. B | 1     |
|            |   | 702-1 Track Coupl                             | er (4950 Feq.)   |              | 150-09502             | 25-034 Rev. B | 1     |
|            |   | 703-1 Receiver Moc                            | tule (3690 Feq.) |              | 150-09502             | 25-047 Rev. D | 1     |
|            |   | 703-1 Receiver Mod                            | dule (4950 Feq.) |              | 150-09502             | 25-047 Rev. D | 3     |
|            | ALL PROPERTY AND A DESCRIPTION OF   | 703-1 Receiver Mod                            | ule (4950 Feq.)  |              | 150-0950              | 25-047 Rev. E | 1     |
|            |   | Chassis AF Track                              | XMT TTT_2        | Getsas       | 130-09302<br>812-00   | 23-047 KeV. D | 2     |
|            |   | AF Track Receiver Chassis Getsgs 812-097031-0 |                  | 7031-034     | 1                     |               |       |
| Rack 10    |   |   | Rack 1           | )            |                       |               |       |
|            |   | COMPONENT                                     | MANUFACTURE      |              | COUNT                 |               |       |
|            |   | VLP   |                  |              | 2                     |               |       |
|            | The second se   | ACP-2   |                  |              | 2                     |               |       |
|            | INCOMPANY AND A DOG   | SSM   |                  |              | 2                     |               |       |
|            |   | CCI   |                  |              | 2                     |               |       |
|            |   | VSD   |                  |              | 1                     |               |       |
|            |   | VGPI 16                                       |                  |              | 2                     |               |       |
|            | A LINE  | VGP I/O-12V                                   |                  |              | 2                     |               |       |
|            |   |   |                  |              | 3                     |               |       |
|            |   | 32 NV/I                                       |                  |              | 3                     |               |       |
|            | State and a state   | CLA Board                                     |                  |              | 1                     |               |       |
|            |   | RS-232  |                  |              | 2                     |               |       |
|            |   | Modem   |                  |              | 2                     |               |       |
|            | The second s  | 12V Power Supply                              |                  |              | 2                     |               |       |

| Royal Sigr | nal House Asset Inventory  |                        |                  |            |          |             |       |
|------------|--|------------------------|------------------|------------|----------|-------------|-------|
| ltem       | Image  | Inventory              |                  |            |          |             |       |
| Rack 11    |  | Rack 11                |                  |            |          |             |       |
| NOCK II    |  | COMPONENT              |                  | MANUFA     | ACTURER  | PART NUMBER | COUNT |
|            |  | Rotary Dials (HALF Hen | nisphere-NEW)    |            |          |             | 18    |
|            |  | Non-Vital Re           | lays             |            |          |             | 58    |
|            | and the second s | KEY LOCK SWITCH/2-POS  | 2-POLE STD. LOCK | EOA SWIT   | ICH CORP | 51-236.025D | 1     |
|            |  |                        |                  |            |          |             |       |
| SCADA      |  |                        | SCADA            |            |          |             |       |
|            | State  | COMPONENT              | MANUFACTU        | IRER       | PART NUM | ABER COUNT  |       |
|            | Edward Frank   | Power Supply           | Schneider Ele    | ctric      | TSXPSY1  | 610 1       |       |
|            |  | CPU                    | Schneider Ele    | ctric      | TSP572   | 03 1        |       |
|            |  | Memory Card            | Schneider Automa | ation S.A. | TSXMRPO  | 64P 1       |       |
|            |  | RS-232                 |                  |            |          | 1           |       |
|            |  | Input Card             | Schneider Ele    | ctric      | TSX DEY1 | 2A2 5       |       |
|            |  | INPUT TERMINAL BLOCK   | Schneider Automa | ation S.A. | TSX BLY  | 01 5        |       |
|            |  | Output Card            | Schneider Ele    | ctric      | TSX DSY6 | 4T2K 1      |       |
|            |  | Output Cord            | Phoenix Con      | tact       | 22 98 4  | 38 2        |       |
|            |  | Relays                 | Phoenix Con      | tact       | ABE7     | * 2         |       |
|            |  | Power Supply           | WEID MULL        | .ER        | CSA 991  | 534 1       |       |
|            |  | Battery Charger        | WEID MULL        | .ER        | 9916280  | 024 1       |       |
|            |  | Batteries              | CD Technolo      | gies       | UPS12-15 | OMR 2       |       |
|            |  | Backplane              |                  |            |          | 1           |       |
|            |  | MODEM                  | MOTOROL          | A          | B3600    | ) 1         |       |

| Royal Sig | nal House Asset Inventory |  |                 |                      |       |  |  |
|-----------|---------------------------|--|-----------------|----------------------|-------|--|--|
| ltem      | Image                     | Inventory  |                 |                      |       |  |  |
| Sides     |                           | House  | e Side-A        |                      |       |  |  |
|           |                           | COMPONENT  | MANUFACTURER    | PART NUMBER          | COUNT |  |  |
|           |                           | FIA-Keypad Controller                              | NAPCO           | RPC3000LCDe          | 1     |  |  |
|           |                           | SWITCH HEATER CONTROL BOX                          |                 |                      | 1     |  |  |
|           |                           | House  | e Side-B        |                      |       |  |  |
|           |                           | Fire Intrusion Alarm                               | NAPCO           | MA 3000              | 1     |  |  |
|           |                           | Battery  | Genesis         | NP7-1212V,7.0Ah      | 2     |  |  |
|           |                           | Main Board   |                 |                      | 1     |  |  |
|           |                           | Relay Boards                                       |                 |                      | 1     |  |  |
|           |                           | House Side-C                                       |                 |                      |       |  |  |
|           |                           |  |                 |                      |       |  |  |
|           |                           |  |                 |                      |       |  |  |
|           |                           | House Side-D                                       |                 |                      |       |  |  |
|           |                           | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D        | 40274-556-01         | 1     |  |  |
|           |                           | GENERAL Duty Safety Switch 100A 240V AC/ 250V DC   | Square D        | 40275-933-01         | 1     |  |  |
|           |                           | BATTERY SURGE ARRESTOR 4                           | US&S            | N451552-0507         | 1     |  |  |
|           |                           | Current Monitor*                                   | NRS             |                      | 1     |  |  |
|           |                           | 12V Power Supply                                   | NRS             | ERB-C 12/40C         | 1     |  |  |
|           |                           | BATTERY  | MARATHON        | M12V90               | 1     |  |  |
|           |                           |  |                 | Assy 227027-001 Rev. |       |  |  |
|           |                           | CLCP 256 IO LED Driver Module                      | Getsgs          | 806                  | 1     |  |  |
|           |                           | Power Supply CLCP 12VDC 20W                        | Getsgs          | 226609-200           | 1     |  |  |
|           |                           | KEY LOCK SWITCH/2-POS 2-POLE STD. LOCK             | EOA SWITCH CORP | 51-236.025D          | 1     |  |  |
|           |                           |  |                 |                      |       |  |  |

# Shiloh-Scott Signal House



| Shiloh-Scot | t Signal House Asset Inventory   |                            |  |         |                |         |       |  |
|-------------|--|----------------------------|--|---------|----------------|---------|-------|--|
| ltem        | Image  | Inventory                  |  |         |                |         |       |  |
| Rack 1      |  | Rack 1                     |  |         |                |         |       |  |
| NOCK 1      |  | COMPONENT                  | MANUFACTURER                                 | PAR     | T NUMBER       | COUNT   |       |  |
|             |  | BPL-3                      | HARMON                                       | 150-097 | 031-013 Rev. O | 2       |       |  |
|             |  | Carrier Surge Arrester 1   | Carrier Surge Arrester 1 HARMON 250197-001 1 |         |                |         |       |  |
|             |  |                            |  |         |                |         |       |  |
| Rack 2      | and the second s |                            | Ra   | ck 2    |                |         |       |  |
|             |  | COMPONENT                  | MANUF  | ACTURER | PART NUM       | BER     | COUNT |  |
|             |  | Vital Relay                | Als  | tom     | A62-407 56001  | -745-02 | 1     |  |
|             |  | Vital Relay                | Als  | tom     | A62-122 56001  | -921-07 | 4     |  |
|             | A DECEMBER OF A  | POR XFMR                   | Als  | tom     | 31094-000-01   | Rev. F  | 1     |  |
|             |  | 28V Power Supply           | Ke   | рсо     | PRR 28-38M2    | 24787   | 2     |  |
|             | Contraction of the local division of the loc | 28V Power Supply           | Ke   | рсо     | PRM 28-17-2    | 4810    | 2     |  |
|             | Service and States   | Rectifier 25V .3A Selenium | Type S Als                                   | tom     | A53-541        |         | 1     |  |
|             | LTTT.  |                            |  |         |                |         |       |  |

| Shiloh-Scot | tt Signal House Asset Inventory  |                               |              |                      |       |  |  |
|-------------|--|-------------------------------|--------------|----------------------|-------|--|--|
| Item        | Image  | Inventory                     |              |                      |       |  |  |
| Rack 3      | and the second of the second s | Rack 3                        |              |                      |       |  |  |
| index o     | Di La constante da   | COMPONENT                     | MANUFACTURER | PART NUMBER          | COUNT |  |  |
|             |  | Rectifier 120AC/120DC Switch  |              | 250756-000           | 2     |  |  |
|             | 4  | Vital Relay                   | Alstom       | A62-429 56001-926-01 | 8     |  |  |
|             | THE PARTY OF THE P | Vital Relay                   | Alstom       | A62-432 56001-785-01 | 4     |  |  |
|             |  | Vital Relay                   | Alstom       | A62-247              | 2     |  |  |
|             |  | Vital Relay                   | GRS          | A62-122 56001-921-07 | 1     |  |  |
| Back 4      |  |                               | Rack 4       |                      |       |  |  |
| Nack 4      | A CONTRACTOR OF A CONTRACTOR O | COMPONENT                     | MANUFACTURE  | R PART NUMBER        | COUNT |  |  |
|             |  | XFMR Loop Matching (2340 Feg  | ) EPC        | 800-088019-200       | 1     |  |  |
|             | and the second se  | XFMR Matching Rail Coupler    | , EPC        | 800-088019-300       | 2     |  |  |
|             | 10 S   | AC Vain Relay                 | Alstom       | A62-486              | 2     |  |  |
|             |  | Bal Imp                       | Alstom       | A3-117               | 2     |  |  |
|             | AND INC. STRATE OF   | 3 ohm Resistor (1XT/3XT)      | GRS          | A3-207 (01246-1)     | 2     |  |  |
|             |  | 25 ohm Resistor (1XTRN/3XTRN  | )            | 56105-11             | 2     |  |  |
|             | THE REPORT OF  | 1T/1XT XFMR                   | Alstom       | 31094-000 (A95 50)   | 1     |  |  |
|             |  | 700 Amplifier Module          |              | 150-094017-022 Rev.  | D 3   |  |  |
|             |  | 701-2 CAB Coupler (2340 Feq.) |              | 150-097031-010 Rev.  | 0 3   |  |  |
|             | Contraction of the Contraction o | Chassis AE Track VMT TTT 2    | Getsøs       | 812-097031-001       | 1     |  |  |
|             | a pin to the second  |                               | Cettaga      | 012 007001 001       |       |  |  |

| Shilon-Sco | tt Signal House Asset Inventory |  |                        |   |   |  |
|------------|---------------------------------|--|------------------------|---|---|--|
| ltem       | Image                           | Inventory  |                        |   |   |  |
| Rack 5     |                                 | Rack 5   |                        |   |   |  |
|            | the local day of the            | COMPONENT  | MANUFACTURER           | PART NUMBER   | COUNT   |  |
|            |                                 | XFMR Loop Matching (2340 Feq.)   | EPC                    | 800-088019-200  | 1   |  |
|            |                                 | XFMR Matching Rail Coupler   | EPC                    | 800-088019-300  | 2   |  |
|            |                                 | AC Vain Relay  | Alstom                 | A62-486   | 1   |  |
|            |                                 | Bal Imp  | Alstom                 | A3-117  | 1   |  |
|            | THE ADD TO THE ADD              | 3 ohm Resistor (1XT/3XT)   | GRS                    | A3-207 (01246-1)  | 1   |  |
|            |                                 | 25 ohm Resistor (1XTRN/3XTRN)  |                        | 56105-11  | 1   |  |
|            |                                 | 3XT XFMR   | Alstom                 | 31094-000 (A95 50)  | 1   |  |
|            |                                 | 700 Amplifier Module   |                        | 150-094017-022 Rev. D   | 3   |  |
|            |                                 | 701-2 CAB Coupler (2340 Feq.)  |                        | 150-097031-010 Rev. O   | 3   |  |
|            |                                 | Chassis AF Track XMT TTT-2   | Getsgs                 | 812097031-001   | 1   |  |
|            |                                 |  |                        |   |   |  |
| Rack 6     |                                 |  | Rack 6                 |   |   |  |
| Rack 6     | 6                               | COMPONENT  | Rack 6<br>MANUFACTURER | PART NUMBER   | COUNT   |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER | <b>PART NUMBER</b><br>150-094017-022 Rev. D   | COUNT<br>9                                    |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O   | <b>COUNT</b><br>9<br>5                        |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4410 Feq.)  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B  | <b>COUNT</b><br>9<br>5<br>1                   |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B   | <b>COUNT</b><br>9<br>5<br>1<br>1              |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>702-1 Track Coupler (2970 Feq.)  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B  | COUNT<br>9<br>5<br>1<br>1<br>1<br>1           |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (3510 Feq.)                               | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B   | COUNT<br>9<br>5<br>1<br>1<br>1<br>1<br>1      |  |
| Rack 6     |                                 | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>702-1 Track Coupler (3870 Feq.)<br>702-1 Track Coupler (2970 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>Chassis AF Track XMT TTT-2 | Rack 6<br>MANUFACTURER | PART NUMBER     150-094017-022 Rev. D     150-097031-010 Rev. O     150-095025-034 Rev. B     150-095025-034 Rev. B | COUNT<br>9<br>5<br>1<br>1<br>1<br>1<br>1<br>3 |  |

| Shiloh-Scot | t Signal House Asset Inventory   |                                   |              |                       |         |  |
|-------------|--|-----------------------------------|--------------|-----------------------|---------|--|
| ltem        | Image  | Inventory                         |              |                       |         |  |
| Rack 7      |  | Rack 7                            |              |                       |         |  |
|             | all -  | COMPONENT                         | MANUFACTURER | PART NUMBER           | COUNT   |  |
|             |  | 700 Amplifier Module              |              | 150-094017-022 Rev. D | 3       |  |
|             | Musicial -   | 701-2 CAB Coupler (2340 Feg.)     |              | 150-097031-010 Rev. O | 1       |  |
|             | Service and the service of   | 702-1 Track Coupler (3870 Feq.)   |              | 150-095025-034 Rev. B | 1       |  |
|             | Pond I   | 702-1 Track Coupler (2970 Feg.)   |              | 150-095025-034Rev. B  | 1       |  |
|             | AND ADDRESS OF   | 703-1 Receiver Module (3510 Feg.) |              | 150-095025-047 Rev. E | 3       |  |
|             |  | 703-1 Receiver Module (4410 Feq.) |              | 150-095025-047 Rev. E | 1       |  |
|             |  | 703-1 Receiver Module (3870 Feq.) |              | 150-095025-047 Rev. E | 2       |  |
|             |  | 703-1 Receiver Module (2970 Feq.) |              | 150-095025-047 Rev. E | 2       |  |
|             | HAR ANALY INC.   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 1       |  |
|             | E  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034        | 2       |  |
|             |  |                                   | Deals 10     |                       |         |  |
| Rack 10     | THE STREET, ST | COMPONENT                         |              |                       | COLINIT |  |
|             |  | 700 Amplifier Medule              | WANUFACTURER | 150 004017 022 Boy D  | 0       |  |
|             |  | 700 Ampliner Module               |              | 150-094017-022 Rev. D | 0       |  |
|             |  | 701-2 CAB Coupler (2540 Feq.)     |              | 150-097031-010 Rev. 0 | 4       |  |
|             |  | 702-1 Track Coupler (4350 Feq.)   |              | 150-095025-034 Rev. B | 1       |  |
|             |  | 702-1 Track Coupler (3330 Feq.)   |              | 150-095025-034 Rev. B | 1       |  |
|             | State of the local division of the local div | 702-1 Track Coupler (3690 Feg.)   |              | 150-095025-034 Rev. B | 1       |  |
|             |  | 703-1 Receiver Module (3330 Feg.) |              | 150-095025-047 Rev. E | 1       |  |
|             |  | 703-1 Receiver Module (4230 Feg.) |              | 150-095025-047 Rev. E | 2       |  |
|             |  | 703-1 Receiver Module (3690 Feg.) |              | 150-095025-047 Rev. E | 1       |  |
|             |  | 703-1 Receiver Module (4950 Feg.) |              | 150-095025-047 Rev. F | 2       |  |
|             |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001        | 2       |  |
|             |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034        | 1       |  |
|             |  |                                   |              |                       |         |  |

| Shiloh-Scot | t Signal House Asset Inventory   |                                 |                  |               |                       |                |       |
|-------------|--|---------------------------------|------------------|---------------|-----------------------|----------------|-------|
| ltem        | Image  | Inventory                       | nventory         |               |                       |                |       |
| Rack 11     | I SHARE AND A BALL   | Rack 11                         |                  |               |                       |                |       |
|             |  | COMPON                          | IENT             | MANUFACTURER  | PART                  | NUMBER         | COUNT |
|             |  | 700 Amplifier                   | r Module         |               | 150-094017            | 7-022 Rev. EAO | 1     |
|             |  | 700 Amplifier                   | r Module         |               | 150-09402             | 17-022 Rev. D  | 4     |
|             |  | 701-2 CAB Couple                | er (2340 Feq.)   |               | 150-09703             | 31-010 Rev. O  | 2     |
|             |  | 702-1 Track Coupl               | er (4950 Feq.)   |               | 150-09502             | 25-034 Rev. B  | 1     |
|             |  | 702-1 Track Coupler (4230 Feq.) |                  |               | 150-095025-034 Rev. B |                | 1     |
|             | IN COMPANY AND AND AND A REAL PROPERTY.  | 702-1 Track Coupl               | er (3690 Feq.)   |               | 150-09502             | 25-034 Rev. B  | 1     |
|             |  | 703-1 Receiver Mod              | lule (4230 Feq.) |               | 150-09502             | 25-047 Rev. E  | 1     |
|             |  | 703-1 Receiver Mod              | lule (3690 Feq.) |               | 150-09502             | 25-047 Rev. E  | 1     |
|             |  | Chassis AF Track                | XMT TTT-2        | Getsgs        | 812-09                | 97031-001      | 2     |
|             |  | AF Track Receiv                 | ver Chassis      | Getsgs        | 812-09                | 97031-034      | 1     |
| Rack 14     |  | Rack 14                         | 1                |               |                       |                |       |
|             | 1 Comments II  | COMPONENT                       | MANUFACTURE      | R PART NUMBER | COUNT                 |                |       |
|             | States and   | VLP                             |                  |               | 2                     |                |       |
|             | E  | ACP-2                           |                  |               | 2                     |                |       |
|             | CONTRACTOR DE TO   | SSM                             |                  |               | 2                     |                |       |
|             | STO A  | CCI                             |                  |               | 2                     |                |       |
|             | E .  | VSD                             |                  |               | 2                     |                |       |
|             | and the second of the  | VGP I/O-12V                     |                  |               | 3                     |                |       |
|             | Broad and and and and and and and and and a  | NV I/U                          |                  |               | 3                     |                |       |
|             | Aug.   | 32 INVI                         |                  |               | 4                     |                |       |
|             |  | CLA Board                       |                  |               | 1                     |                |       |
|             |  | RS-232                          |                  |               | 2                     |                |       |
|             | The second secon | Modem                           |                  |               | 1                     |                |       |
|             | Sector Sector  | 12V Power Supply                |                  |               | 2                     |                |       |
|             |  |                                 |                  |               |                       |                |       |

| Shiloh-Scot | tt Signal House Asset Inventory       |                 |                           |                 |             |       |  |
|-------------|---------------------------------------|-----------------|---------------------------|-----------------|-------------|-------|--|
| ltem        | Image                                 | Inventory       | nventory                  |                 |             |       |  |
| Rack 15     |                                       | Rack 15         |                           |                 |             |       |  |
| Hack 15     |                                       | COMPONENT MANU  |                           | MANUFACTURER    | PART NUMBER | COUNT |  |
|             | - add the and                         | Rotary Dials (  | Full Hemisphere-NEW)      |                 |             | 18    |  |
|             |                                       | Nor             | n-Vital Relays            |                 |             | 70    |  |
|             |                                       | KEY LOCK SWITCH | H/2-POS 2-POLE STD. LOCK  | EOA SWITCH CORP | 51-236.025D | 1     |  |
|             |                                       |                 |                           |                 |             |       |  |
| SCADA       |                                       |                 | SCADA                     |                 |             |       |  |
|             |                                       | COMPONENT       | MANUFACTURER              | PART NUMBER     | COUNT       |       |  |
|             | A A A A A A A A A A A A A A A A A A A | Power Supply    | Schneider Electric        | TSXPSY1610      | 1           |       |  |
|             | Charles El                            | CPU             | Schneider Electric        | TSP57203        | 1           |       |  |
|             |                                       | Memory Card     | Schneider Automation S.A. | TSXMRP064P      | 1           |       |  |
|             |                                       | RS-232          |                           |                 | 1           |       |  |
|             |                                       | Input Card      | Schneider Electric        | TSX DEY12A2     | 8           |       |  |
|             |                                       | Output Card     | Schneider Electric        | TSX DSY64T2K    | 1           |       |  |
|             |                                       | Output Cord     | Phoenix Contact           | 22 98 438       | 4           |       |  |
|             |                                       | Relays          | Phoenix Contact           | ABE7*           | 3*          |       |  |
|             |                                       | Power Supply    | Connect Power             | 992534 0024     | 1           |       |  |
|             |                                       | Battery Charger | Connect Power             | 991628 0024     | 1           |       |  |
|             | the fam and the second of             | Batteries       | CD Technologies           | UPS12-150MR     | 2           |       |  |
|             |                                       | Backplane       |                           |                 | 1           |       |  |
|             |                                       | MODEM           | MOTOROLA                  | B3600           | 1           |       |  |

| Shiloh-Scot  | t Signal House Asset Inventory   |  |                 |                          |       |  |  |  |  |
|--|--|--|-----------------|--------------------------|-------|--|--|--|--|
| ltem   | Image  | Inventory  |                 |                          |       |  |  |  |  |
| Sides  | to   | House Side-A                                       |                 |                          |       |  |  |  |  |
|  | and the second s | COMPONENT  | MANUFACTURER    | PART NUMBER              | COUNT |  |  |  |  |
|  |  | FIA-Keypad Controller                              | NAPCO           | RPC3000LCDe              | 1     |  |  |  |  |
|  |  | SWITCH HEATER CONTROL BOX                          |                 |                          | 1     |  |  |  |  |
|  | Contrast I and I should be   | Hous   | e Side-B        |                          |       |  |  |  |  |
|  |  | Fire Intrusion Alarm                               | NAPCO           |                          | 1     |  |  |  |  |
|  |  | Battery  | Genesis         | NP7-1212V,7.0Ah          | 2     |  |  |  |  |
|  |  | Main Board   |                 |                          | 1     |  |  |  |  |
| Lange and the second se | Relay Boards   |  |                 | 1                        |       |  |  |  |  |
|  | Expansion Modules  |  |                 | 1                        |       |  |  |  |  |
|  |  | House Side-C                                       |                 |                          |       |  |  |  |  |
|  |  |  |                 |                          |       |  |  |  |  |
|  |  |  |                 |                          |       |  |  |  |  |
|  | · · · · · · · · · · · · · · · · · · ·  | House  | e Side-D        |                          |       |  |  |  |  |
|  |  | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D        | 40275-951-01             | 1     |  |  |  |  |
|  |  | GENERAL Duty Safety Switch 100A 240V AC/ 250V DC   | Square D        | 40276-004-01             | 1     |  |  |  |  |
|  |  | BATTERY SURGE ARRESTOR 4                           | US&S            | N451552-0507             | 1     |  |  |  |  |
|  |  | Current Monitor                                    | NRS             |                          | 2     |  |  |  |  |
|  |  | 12V Power Supply                                   | NRS             | ERB-C 12/40              | 2     |  |  |  |  |
|  |  | 2.25V Battery                                      | MARATHON        | M12V90                   | 3     |  |  |  |  |
|  |  | CLCP 256 IO LED Driver Module                      | Getsgs          | Assy 227027-001 Rev. 806 | 2     |  |  |  |  |
|  |  | Power Supply CLCP 12VDC 20W                        | Getsgs          | 226609-200               | 2     |  |  |  |  |
|  |  | KEY LOCK SWITCH/2-POS 2-POLE STD. LOCK             | EOA SWITCH CORP | 51-236.025D              | 1     |  |  |  |  |

### **Shrewsbury Signal House**



| Shrewsbu | rry Signal House Asset Inventory |  |  |  |                                    |  |
|----------|----------------------------------|--|--|--|------------------------------------|--|
| ltem     | Image                            | Inventory  |  |  |                                    |  |
| Rack 1   |                                  | Rack 1   |  |  |                                    |  |
|          |                                  | COMPONENT M  | ANUFACTURER  | PART NUMBER CO   | DUNT                               |  |
|          |                                  | BPL-3  | Harmon 15  | 0-097031-013 Rev. O  | 2                                  |  |
|          |                                  |  |  |  |                                    |  |
|          |                                  |  |  |  |                                    |  |
| Back 2   |                                  |  | Rack   | 2  |                                    |  |
| Rack 2   |                                  | COMPONENT  | Rack   | 2<br>PART NUMBER   | COUN                               |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay   | Rack<br>MANUFACTURER<br>Alstom   | 2<br>PART NUMBER<br>A62-407 (56001-745-02)   | COUN<br>1                          |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay<br>Vital Relay  | Rack<br>MANUFACTURER<br>Alstom<br>Alstom                                       | 2 PART NUMBER<br>A62-407 (56001-745-02)<br>A62-122 (56001-921-07)  | COUN<br>1<br>4                     |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR  | Rack<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom                             | 2<br>PART NUMBER<br>A62-407 (56001-745-02)<br>A62-122 (56001-921-07)<br>31094-000-01 Rev. F  | COUN<br>1<br>4<br>1                |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply                                  | Rack<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom<br>Kepco                    | 2<br>PART NUMBER<br>A62-407 (56001-745-02)<br>A62-122 (56001-921-07)<br>31094-000-01 Rev. F<br>PRR 28-38M24787                               | COUN<br>1<br>4<br>1<br>2           |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply<br>28V Power Supply              | Rack<br>MANUFACTURER<br>Alstom<br>Alstom<br>Kepco<br>Kepco                     | 2<br>PART NUMBER<br>A62-407 (56001-745-02)<br>A62-122 (56001-921-07)<br>31094-000-01 Rev. F<br>PRR 28-38M24787<br>PRM 28-17-24810            | COUN<br>1<br>4<br>1<br>2<br>2      |  |
| Rack 2   |                                  | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply<br>28V Power Supply<br>Rectifier | Rack<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom<br>Kepco<br>Kepco<br>Alstom | 2<br>PART NUMBER<br>A62-407 (56001-745-02)<br>A62-122 (56001-921-07)<br>31094-000-01 Rev. F<br>PRR 28-38M24787<br>PRM 28-17-24810<br>A53-541 | COUN<br>1<br>4<br>1<br>2<br>2<br>1 |  |

| Shrewsbu | ıry Signal House Asset Inventory        |                                 |              |                        |       |  |  |  |
|----------|---|---------------------------------|--------------|------------------------|-------|--|--|--|
| ltem     | Image                                   | Inventory                       |              |                        |       |  |  |  |
| Rack 3   |   | Rack 3                          |              |                        |       |  |  |  |
| hadre o  | Council Council Section 2               | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUNT |  |  |  |
|          |   | Switch Rectifier 120AC/120DC    |              | 250756-000             | 2     |  |  |  |
|          |   | XFMR Loop Matching              | EPC          | 800-088019-200         | 1     |  |  |  |
|          | D D D D D D D D D D D D D D D D D D D   | Vital Relay                     | Alstom       | A62-429 (56001-926-01) | 8     |  |  |  |
|          |   | Vital Relay                     | Alstom       | A62-432 (56001-785-01) | 4     |  |  |  |
|          | 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Vital Relay                     | Alstom       | A62-12 (56001-921-07)  | 3     |  |  |  |
|          |   | Vital Relay                     | Alstom       | A62-247                | 2     |  |  |  |
|          |   |                                 |              |                        |       |  |  |  |
| Rack 4   |   | COMPONENT                       |              |                        | COUNT |  |  |  |
|          |   | XEMB Loop Matching              | FDC          | 800-088019-200         | 1     |  |  |  |
| 1        |   | AC Vain Relay                   | Alstom       | Δ62-486                | 1     |  |  |  |
| 1        |   | Bal Imp                         | Alstom       | A3-117                 | 1     |  |  |  |
|          |   | 3 ohm Resistor                  | GRS          | A3-207 (01246-1)       | 1     |  |  |  |
|          |   | 25 ohm Resistor                 |              | 56105-11               | 1     |  |  |  |
|          |   | XFMR                            | Alstom       | 31094-000 (A95 50)     | 1     |  |  |  |
|          |   | 700 Amplifier Module            | Harmon       | 150-094017-022 Rev. D  | 4     |  |  |  |
|          |   | 701-2 CAB Coupler (2340 Feq.)   | Harmon       | 150-097031-010 Rev. C  | 2     |  |  |  |
|          |   | 702-1 Track Coupler (4410 Feq.) | Harmon       | 150-095025-034 Rev. CA | 0 1   |  |  |  |
|          |   | 702-1 Track Coupler (3510 Feq.) | Harmon       | 150-095025-034 Rev. CA | 0 1   |  |  |  |
|          | San Harrison (                          | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001          | 1     |  |  |  |
|          |   |                                 |              |                        |       |  |  |  |

| Shrewsbu | rry Signal House Asset Inventory   |                                   |              |                         |       |
|----------|--|-----------------------------------|--------------|-------------------------|-------|
| ltem     | Image  | Inventory                         |              |                         |       |
| Rack 5   |  |                                   | Rack 5       |                         |       |
| Hack 5   | A CONTRACTOR OF THE OWNER  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |
|          | WEATT AND AND  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 12    |
|          | Links Ranger   | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 8     |
|          |  | 702-1 Track Coupler (3870 Feq.)   | Harmon       | 150-095025-034 Rev. CA  | ) 1   |
|          |  | 702-1 Track Coupler (4410 Feq.)   | Harmon       | 150-095025-034 Rev. B   | 1     |
|          | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 702-1 Track Coupler (2970 Feq.)   | Harmon       | 150-095025-034 Rev. CA  | 0 1   |
|          | 151 19 18 1 19 1 19 1 19 1 19 1 19 1 19  | 702-1 Track Coupler (3870 Feq.)   | Harmon       | 150-095025-034 Rev. CA  | 0 1   |
|          |  | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. E   | 1     |
|          |  | 703-1 Receiver Module (2970 Feq.) | Harmon       | 150-095025-047 Rev. FA0 | ) 1   |
|          |  | 703-1 Receiver Module (3870 Feq.) | Harmon       | 150-095025-047 Rev. FA0 | ) 3   |
|          |  | 703-1 Receiver Module (4410 Feq.) | Harmon       | 150-095025-047 Rev. FA0 | ) 3   |
|          |  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 3     |
|          |  | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |
|          |  |                                   |              |                         |       |
| Rack 6   | A CONTRACTOR OF THE  |                                   | Rack 6       |                         |       |
|          |  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |
|          |  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 15    |
|          |  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 10    |
|          | CALLS AND A  | 702-1 Track Coupler (3690 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |
|          | Contraction of the local division of the loc | 702-1 Track Coupler (4950 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |
|          |  | 702-1 Track Coupler (3330 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 2     |
|          |  | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |
|          | The second se  | Chassis AF Track XMT 111-2        | Getsgs       | 812-09/031-001          | 4     |
|          |  |                                   |              |                         |       |

| Shrewsbury Signal House Asset Inventory |  |                                |              |             |                |   |  |  |  |
|---|--|--------------------------------|--------------|-------------|----------------|---|--|--|--|
| ltem                                    | Image  | Inventory                      |              |             |                |   |  |  |  |
| Rack 7                                  |  |                                | Rack 7       |             |                |   |  |  |  |
| nack /                                  | The Party of the P | COMPONENT                      | MANUFACTUR   | ER PART     | ER PART NUMBER |   |  |  |  |
|   | Carlos De C  | 700 Amplifier Module           | Harmon       | 150-0940    | 17-022 Rev. D  | 2 |  |  |  |
|   |  | 701-2 CAB Coupler (2340 Feq.   | ) Harmon     | 150-09703   | 31-010 Rev. O  | 1 |  |  |  |
|   |  | 702-1 Track Coupler (2970 Feq  | .) Harmon    | 150-095025  | 5-034 Rev. CAO | 1 |  |  |  |
|   | CARLES CONTRACTOR OF THE PARTY OF  | 703-1 Receiver Module (4950 Fe | q.) Harmon   | 150-09502   | 5-047 Rev. FAO | 1 |  |  |  |
|   | THE PARTY NAMES OF TAXABLE PARTY.  | 703-1 Receiver Module (3330 Fe | q.) Harmon   | 150-09502   | 5-047 Rev. FAO | 1 |  |  |  |
|   |  | 703-1 Receiver Module (4230 Fe | q.) Harmon   | 150-09502   | 5-047 Rev. FAO | 2 |  |  |  |
|   |  | 703-1 Receiver Module (3330 Fe | q.) Harmon   | 150-0950    | 25-047 Rev. E  | 1 |  |  |  |
|   |  | 703-1 Receiver Module (3690 Fe | q.) Harmon   | 150-09502   | 5-047 Rev. FAO | 1 |  |  |  |
|   |  | Chassis AF Track XMT TTT-2     | Getsgs       | 812-09      | 97031-001      | 1 |  |  |  |
|   |  | AF Track Receiver Chassis      | Getsgs       | 812-09      | 97031-034      | 1 |  |  |  |
| Rack 8                                  |  |                                | Rack 8       |             |                |   |  |  |  |
|   | E  | COMPONENT                      | MANUFACTURER | PART NUMBER | COUNT          |   |  |  |  |
|   | The second second  | HLC Cabinet with Lexan Cover   | Getsgs       | 226802-001  | 2              |   |  |  |  |
|   | and the second se  | VLP                            |              |             | 2              |   |  |  |  |
|   |  | ACP-3                          |              |             | 2              |   |  |  |  |
|   |  | SSM                            |              |             | 2              |   |  |  |  |
|   |  | CCI                            |              |             | 2              |   |  |  |  |
|   | A DECEMBER OF  | VSD                            |              |             | 2              |   |  |  |  |
|   | 000  | VGP I/O-12V                    |              |             | 2              |   |  |  |  |
|   |  | NV 1/O                         |              |             | 3              |   |  |  |  |
|   |  | 32 NVI                         |              |             | 4              |   |  |  |  |
|   | and the second se  | VGPI 16                        |              |             | 2              |   |  |  |  |
|   |  | CLA BOARD                      |              |             |                |   |  |  |  |
|   |  | K5-232                         |              |             | 4              |   |  |  |  |
|   |  | 12V Power Supply               |              |             |                |   |  |  |  |
|   |  |                                |              |             |                |   |  |  |  |
|   |  |                                |              |             |                |   |  |  |  |

| Shrewsbury Signal House Asset Inventory |  |                          |  |              |                 |       |  |  |  |
|---|--|--------------------------|--|--------------|-----------------|-------|--|--|--|
| ltem                                    | Image  | Inventory                |  |              |                 |       |  |  |  |
| Rack 9                                  |  |                          |  | Rack 9       |                 |       |  |  |  |
| Hack 5                                  | The second secon | COMPONEN                 | T I  | MANUFACTURER | PART NUMBER     | COUNT |  |  |  |
|   | The state of the second  | Rotary Dials (Full Hemis | phere-NEW)   |              |                 | 21    |  |  |  |
|   | 1999   | Non-Vital Rela           | iys  |              |                 | 85    |  |  |  |
|   |  |                          |  |              |                 |       |  |  |  |
| SCADA                                   | and the second second  |                          | S  | CADA         |                 |       |  |  |  |
|   |  | COMPONENT                | MANUFA   | CTURER       | PART NUMBER     | COUNT |  |  |  |
|   |  | Power Supply             | Schneider  | Electric     | TSXPSY1610      | 1     |  |  |  |
|   |  | CPU                      | Schneider  | Electric     | TSP57203        | 1     |  |  |  |
|   | - V C CA: A CA - 0 V   | Memory Card              | Schneider Aut  | omation S.A. | TSXMRP064P      | 1     |  |  |  |
|   |  | Input Card               | Schneider  | Electric     | TSXDEY32D2K     | 3     |  |  |  |
|   |  | Input Cord               | Schneider  | Electric     | TSXCDP203       | 6     |  |  |  |
|   |  | Output Card              | Schneider  | Electric     | TSXDSY32T2K     | 2     |  |  |  |
|   |  | Output Cord              | Phoenix (  | Contact      | 22 98 438       | 4     |  |  |  |
|   |  | Input Card ABE7          | Schneider  | Electric     | ABE7H16C11      | 6     |  |  |  |
|   |  | Relays                   | Phoenix (  | Contact P    | LC-V8/FLK14/OUT | 8     |  |  |  |
|   |  | Power Supply             | Connect  | Power        | 992534 0024     | 1     |  |  |  |
|   |  | Battery Charger          | Connect  | Power        | 991628 0024     | 1     |  |  |  |
|   |  | Batteries                | CD Techn   | ologies      | UPS12-150MR     | 2     |  |  |  |
|   |  | Fiber Media Converter    | GarrettC   | om Inc. C    | CS14P-SST-48VDC | 1     |  |  |  |
|   |  | Phone Line Extender      | SCADACOMPONENTMANUFACTURERPART NUMBERCOUNTPower SupplySchneider ElectricTSXPSY16101CPUSchneider ElectricTSP572031Memory CardSchneider Automation S.A.TSXMRP064P1Input CardSchneider ElectricTSXDEY32D2K3Input CordSchneider ElectricTSXDEY32D2K3Output CardSchneider ElectricTSXDDY32T2K2Output CardSchneider ElectricTSXDSY32T2K2Output CordPhoenix Contact22 98 4384Input Card ABE7Schneider ElectricABE7H16C116RelaysPhoenix ContactPLC-V8/FLK14/OUT8Power SupplyConnect Power992534 00241BatteriesCD TechnologiesUPS12-150MR2ber Media ConverterGarrettCom Inc.CS14P-SST-48VDC1Phone Line ExtenderTcom11 |              |                 |       |  |  |  |
|   |  | Backplane                |  |              |                 | 1     |  |  |  |
|   |  |                          |  |              |                 |       |  |  |  |

| Shrewsb | ury Signal House Asset Inventory                  |  |              |                      |       |  |  |  |  |
|---------|---|--|--------------|----------------------|-------|--|--|--|--|
| ltem    | Image   | Inventory                                  |              |                      |       |  |  |  |  |
| Sides   |   | House Side-A                               |              |                      |       |  |  |  |  |
|         |   | COMPONENT                                  | MANUFACTURER | PART NUMBER          | COUNT |  |  |  |  |
|         | The Total The | FIA-Keypad Controller                      | NAPCO        | RPC3000LCDe          | 1     |  |  |  |  |
|         |   | Switch Heater Push Button Box              |              |                      | 1     |  |  |  |  |
|         |   |  | louse Side-B |                      |       |  |  |  |  |
|         |   | Fire Intrusion Alarm                       | NAPCO        |                      | 1     |  |  |  |  |
|         |   | Battery                                    | Genesis      | NP7-1212V,7.0Ah      | 2     |  |  |  |  |
|         | HIMPS   | Main Board                                 |              |                      | 1     |  |  |  |  |
|         | Antonio Antonio                                   | Relay Boards                               |              |                      | 1     |  |  |  |  |
|         | Contraction of the second                         | Expansion Modules                          |              |                      |       |  |  |  |  |
|         |   | House Side-C                               |              |                      |       |  |  |  |  |
|         |   |  |              |                      |       |  |  |  |  |
|         |   |  |              |                      |       |  |  |  |  |
|         |   | House Side-D                               |              |                      |       |  |  |  |  |
|         |   |  |              | Assy 227027-001 Rev. |       |  |  |  |  |
|         |   | CLCP 256 IO LED Driver Module              | Getsgs       | 806                  | 1     |  |  |  |  |
|         |   | Power Supply CLCP 12VDC 20W                | Getsgs       | 226609-200           | 1     |  |  |  |  |
|         |   | Double Throw Enclosed Switch 100A 240V AC/ |              |                      |       |  |  |  |  |
|         |   | 250V DC                                    | Square D     | 40275-953-01         | 1     |  |  |  |  |
|         |   | Heavy Duty Safety Switch 100A 240V AC/     |              |                      |       |  |  |  |  |
|         |   | 250V DC                                    | Square D     | 40276-003-01         | 1     |  |  |  |  |
|         |   | Heavy Duty Safety Switch 100A 240V AC/     |              |                      |       |  |  |  |  |
|         |   | 250V DC                                    | Square D     | 40276-003-02         | 1     |  |  |  |  |
|         |   | Automatic Transfer Switch                  | Kohler       | KCT-AFNA-0104S       | 1     |  |  |  |  |
|         |   | Hawk Event Recorder                        | Getsgs       | 251210-00001         | 1     |  |  |  |  |
|         |   | Surge Protector 18V AC 15A USSP            | US&S         | N451552-0507         | 2     |  |  |  |  |
|         |   | Current Monitor                            | NRS          | 16775-00             | 2     |  |  |  |  |
|         |   | 12V Power Supply                           | NRS          | ERB-C 12/501C        | 2     |  |  |  |  |
|         |   | Battery                                    | GNB          | 50A15                | 12    |  |  |  |  |

### **Sunnen Signal House**



| Sunnen Signal House Asset Inventory |       |  |  |  |  |  |
|-------------------------------------|-------|--|--|--|--|--|
| ltem                                | Image | Inventory  |  |  |  |  |
| Rack 1                              |       | Rack 1COMPONENTMANUFACTURERPART NUMBERCOUNTBPL-3Harmon150-097031-013 Rev. 06   |  |  |  |  |
| Rack 2                              |       | Rack 2COMPONENTMANUFACTURERPART NUMBERCOUNTVital RelayAlstomA62-407 (56001-745-02)2XFMRGRS31094-000-01 Rev. F1XFMRGRS31094-000-01 Rev. F1XB12 Battery MonitorCragg520603-1V121 |  |  |  |  |

| Sunnen Signal House Asset Inventory |                    |                                   |           |             |                         |           |        |  |  |
|-------------------------------------|--------------------|-----------------------------------|-----------|-------------|-------------------------|-----------|--------|--|--|
| ltem                                | Image              | Inventory                         |           |             |                         |           |        |  |  |
| Rack 3                              |                    | Rack 3                            |           |             |                         |           |        |  |  |
| Nuck 5                              |                    | COMPONENT                         | MANUFACTU | JRER PAF    | T NUMBER                | COUNT     |        |  |  |
|                                     |                    | Vital Relay                       | Alstom    | A62-671     | (56001-985-01)          | 2         |        |  |  |
|                                     |                    | Vital Relay                       | Alstom    | A62-580     | A62-580 (56001-951-01)  |           |        |  |  |
|                                     |                    | Vital Relay                       | Alstom    | A62-360     | (56001-774-01)          | 2         |        |  |  |
|                                     |                    | Vital Relay                       | Alstom    | A62-122     | (56001-921-07)          | 2         |        |  |  |
|                                     |                    | Vital Relay                       | Alstom    |             | A62-247                 | 2         |        |  |  |
|                                     |                    | Microchron II Vital Timer         | Alstom    |             | A62-691                 | 2         |        |  |  |
| 1                                   | 2. Martin Barriera | Relay Flasher                     | Alstom    | 30          | 733-003-01              | 2         |        |  |  |
| Rack 4                              |                    |                                   |           |             |                         |           |        |  |  |
|                                     |                    | COMPONENT                         | MA        | ANUFACTURER | PART NUN                | 1BER      | COUNT  |  |  |
|                                     |                    | 700 Amplifier Module              |           | Harmon      | 150-094017-02           | 22 Rev. D | 12     |  |  |
|                                     |                    | 701-2 CAB Coupler (2340 Feq.)     |           | Harmon      | 150-097031-01           | LO Rev. O | 6      |  |  |
|                                     |                    | 702-1 Track Coupler (3510 Feq.)   |           | Harmon      | 150-095025-034          | Rev. CAO  | 2      |  |  |
|                                     |                    | 702-1 Track Coupler (4410 Feq.)   |           | Harmon      | 150-095025-034 Rev. CAC |           | 2      |  |  |
|                                     |                    | 702-1 Track Coupler (3870 Feq.)   |           | Harmon      | 150-095025-034 Rev. CAO |           | 1      |  |  |
|                                     |                    | 702-1 Track Coupler (2970 Feq.)   |           | Harmon      | 150-095025-034 Rev. CAO |           | 1      |  |  |
|                                     |                    | 703-1 Receiver Module (29         | 70 Feq.)  | Harmon      | 150-095025-04           | Rev. FAO  | 3      |  |  |
|                                     |                    | 703-1 Receiver Module (4410 Feq.) |           | Harmon      | 150-095025-047 Rev. FAO |           | 2<br>1 |  |  |
|                                     |                    | 703-1 Receiver Module (3510 Feq.) |           | Harmon      | 150-095025-047 KeV. FAU |           | 1      |  |  |
|                                     |                    | 703-1 Receiver Module (38         | 70 Feg.)  | Harmon      | 150-095025-047 Rev. D   |           | 1      |  |  |
|                                     |                    | Chassis AF Track XMT TTT-2        |           | Getsgs      | 812097031-001           |           | 3      |  |  |
|                                     |                    | AF Track Receiver Chassis         |           | Getsgs      | 812-09703               | 1-034     | 1      |  |  |
|                                     |                    |                                   |           |             | •                       |           |        |  |  |

| Sunnen Signal House Asset Inventory |  |                                   |              |                         |       |  |  |  |
|-------------------------------------|--|-----------------------------------|--------------|-------------------------|-------|--|--|--|
| ltem                                | Image  | nventory                          |              |                         |       |  |  |  |
| Rack 5                              |  |                                   | Rack 5       |                         |       |  |  |  |
| nack 5                              | A DESCRIPTION OF A DESC | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |
|                                     | Transfill of arts  | 700 Amplifier Module              | Harmon       | 150-094017-022 Rev. D   | 12    |  |  |  |
|                                     | 100 470  | 701-2 CAB Coupler (2340 Feq.)     | Harmon       | 150-097031-010 Rev. O   | 6     |  |  |  |
|                                     |  | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |
|                                     | 10.2   | 702-1 Track Coupler (3690 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 2     |  |  |  |
|                                     |  | 702-1 Track Coupler (4950 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |
|                                     | COLUMN TWO IS NOT  | 702-1 Track Coupler (3330 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |
|                                     |  | 702-1 Track Coupler (4230 Feq.)   | Harmon       | 150-095025-034 Rev. CAO | 1     |  |  |  |
|                                     |  | 703-1 Receiver Module (3690 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 3     |  |  |  |
|                                     | A CONTRACTOR OF THE OWNER OF THE   | 703-1 Receiver Module (4950 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 2     |  |  |  |
|                                     |  | 703-1 Receiver Module (3330 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 2     |  |  |  |
|                                     |  | 703-1 Receiver Module (4230 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |  |  |
| 1                                   | Contraction of the second s  | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 3     |  |  |  |
|                                     | Line of the local division of the local divi | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1     |  |  |  |
| Rack 6                              |  |                                   | Rack 6       |                         | ]     |  |  |  |
|                                     | ALL  | COMPONENT                         | MANUFACTURER | PART NUMBER             | COUNT |  |  |  |
|                                     | THE PARTY PARTY  | 703-1 Receiver Module (3510 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |  |  |
|                                     | COLORADO DE COLORADO   | 703-1 Receiver Module (4950 Feq.) | Harmon       | 150-095025-047 Rev. FAO | 1     |  |  |  |
|                                     | Addition of the second   | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2     |  |  |  |
|                                     |  |                                   |              |                         |       |  |  |  |

| Sunnen Signal House Asset Inventory |  |                       |               |              |           |    |  |
|-------------------------------------|--|-----------------------|---------------|--------------|-----------|----|--|
| ltem                                | Image  | Inventory             |               |              |           |    |  |
| Rack 7                              |  |                       | Rack 7        |              |           |    |  |
|                                     | A REAL AND   | COMPONENT             | MANUFACTURER  | PART NUMBER  | COUNT     |    |  |
|                                     | No. of Concession, Name  | VHLC Chassis          | Harmon        | 226607-03    | 1         |    |  |
|                                     |  | VLP                   |               |              | 1         |    |  |
|                                     | TAXAN VARAMENTARY I  | ACP-2                 |               |              | 1         |    |  |
|                                     |  | SSM                   |               |              | 1         |    |  |
|                                     | The Party of the P | CCI                   |               |              | 1         |    |  |
|                                     |  | VGP I/O-12V           |               |              | 2         |    |  |
|                                     | This is a second second second   | NV I/O                |               |              | 1         |    |  |
|                                     | the second se  | 32 NVI                |               |              | 2         |    |  |
|                                     |  | VGPI 16               |               |              | 2         |    |  |
|                                     | ing  | CLA Board             |               |              | 1         |    |  |
|                                     |  | KS-232                |               |              | 1         |    |  |
|                                     |  | 12V Power Supply      |               |              | 2         |    |  |
|                                     |  | 120 Power Suppry      |               |              | 1         |    |  |
|                                     |  |                       |               |              |           |    |  |
| Pack 9                              |  | Pack 8                |               |              |           |    |  |
| RACK O                              | English and a state of the state   | СОМРО                 | NENT          | MANUFACTURER | PART NUMB |    |  |
|                                     | MARKAN STATE NEWS  | Rotary Dials (Full He | misphere-NFW) |              |           | 12 |  |
|                                     | NY ITEL 740 IF MANUAL  | Non-Vital             | Relavs        |              |           | 16 |  |
|                                     |  |                       |               |              |           |    |  |
|                                     | B D D D D D D  |                       |               |              |           |    |  |
|                                     | and a second a second  |                       |               |              |           |    |  |
|                                     |  |                       |               |              |           |    |  |
|                                     | A REAL PROPERTY AND A REAL |                       |               |              |           |    |  |
|                                     | PROPERTY OF THE OWNER.   |                       |               |              |           |    |  |
|                                     |  |                       |               |              |           |    |  |
|                                     | <b>这些一些</b> 自己的意思。他们就是我们的问题。   |                       |               |              |           |    |  |
|                                     | Callenting and the second second second  |                       |               |              |           |    |  |
|                                     |  |                       |               |              |           |    |  |
|                                     | 2/25227577777777   |                       |               |              |           |    |  |
|                                     |  |                       |               |              |           |    |  |

#### **Sunnen Signal House Asset Inventory** Image Inventory Item SCADA SCADA COMPONENT MANUFACTURER PART NUMBER COUNT Power Supply Schneider Electric TSXPSY1610 1 -CPU Schneider Electric TSP57203 1 Memory Card TSXMRP064P Schneider Automation S.A. 1 Input Card Schneider Electric TSXDEY32D2K 2 Input Cord Schneider Electric TSXCDP203 4 **Output Card** Schneider Electric TSXDSY32T2K 1 Output Cord **Phoenix Contact** 22 98 438 2 Input Card ABE7 Schneider Electric ABE7H16C11 4 Relays **Phoenix Contact** PLC-V8/FLK14/OUT 4 Power Supply **Connect Power** 992534 0024 1 **Battery Charger Connect Power** 991628 0024 1 Batteries **CD** Technologies UPS12-150MR 2 Fiber Media Converter GarrettCom Inc. CS14P-SST-48VDC 1 Phone Line Extender Tcom 1 animation i Backplane 1
| Sunnen | Signal House Asset Inventory   |  |              |                          |       |
|--------|--|--|--------------|--------------------------|-------|
| ltem   | Image  | Inventory  |              |                          |       |
| Sides  |  | House  | e Side-A     |                          |       |
| 51465  |  | COMPONENT  | MANUFACTURER | PART NUMBER              | COUNT |
|        | and the second s | FIA-Keypad Controller                              | NAPCO        | RPC3000LCDe              | 1     |
|        |  | Push Button Box Assembly (2 Buttons)               |              |                          | 2     |
|        |  |  |              |                          |       |
|        |  | House  | e Side-B     |                          |       |
|        |  | Fire Intrusion Alarm                               | NAPCO        |                          | 1     |
|        |  | Battery  | Genesis      | NP7-1212V,7.0Ah          | 2     |
|        |  | Main Board   |              |                          | 1     |
|        |  | Relay Boards                                       |              |                          | 1     |
|        |  | Expansion Modules                                  |              |                          | 1     |
|        | and the second s |  |              |                          | 1     |
|        | The second se  | 12V Power Supply                                   | NRS          | ERB-C 12/501C            | 1     |
|        |  | Current Monitor                                    | NRS          | 16775-00                 | 1     |
|        | and Anno Station of the  | Surge Protector 18V AC 15A USSP                    | US&S         | N451552-0507             | 1     |
|        | The second se  | Battery  | GNB          | 50A15                    | 6     |
|        |  | House  | e Side-C     | I                        | 1     |
|        |  |  |              |                          |       |
|        | 8  |  |              |                          |       |
|        |  | House  | e Side-D     | I                        | 1     |
|        |  | CLCP 256 IO LED Driver Module                      | Getsgs       | Assy 227027-001 Rev. 806 | 1     |
|        | And A manual   | Power Supply CLCP 12VDC 20W                        | Getsgs       | 226609-200               | 1     |
|        |  | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D     | 40275-953-02             | 1     |
|        | A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O | Heavy Duty Safety Switch 100A 240V AC/ 250V DC     | Square D     | 40276-003-01             | 1     |
|        |  | Heavy Duty Safety Switch 100A 240V AC/ 250V DC     | Square D     | 40276-003-02             | 1     |
|        |  | Hawk Event Recorder                                | Getsgs       | 251210-00001             | 1     |
|        |  | Current Monitor                                    | NRS          | 16775-00                 | 2     |
|        |  | 12V Power Supply                                   | NRS          | ERB-C 12/501C            | 1     |
|        |  | Battery  | GNB          | 50A15                    | 21    |
|        |  | 24V Charger  | NRS          | 1N02405010020000         | 1     |
|        |  | Resistor (adjustable)                              |              | 029603-2                 | 20    |

# **Tucker Signal House**



| Tucker Signal House Asset Inventory |  |                   |              |            |                 |        |      |  |
|-------------------------------------|--|-------------------|--------------|------------|-----------------|--------|------|--|
| ltem                                | Image                                    | Inventory         |              |            |                 |        |      |  |
| Rack 1                              |  |                   | R            | ack 1      |                 |        |      |  |
|                                     |  | COMPONENT         | MANUFAC      | TURER      | PART NUMBE      | ER (   | OUNT |  |
|                                     |  | BPL-3             | HARM         | ON 15      | 50-097031-013 I | Rev. O | 5    |  |
|                                     |  | CARRIER SURGE ARE | RESTER GE    | Ĩ          | 250197-001 REV  | /. KOJ | 2    |  |
|                                     |  |                   |              |            |                 |        |      |  |
| Rack 2                              |  |                   | Rack         | 2          |                 |        |      |  |
|                                     |  | COMPONENT         | MANUFACTURER | PART       | NUMBER          | COUNT  |      |  |
|                                     |  | Vital Relay       | Alstom       | A62-407 (5 | 56001-745-02)   | 1      | -    |  |
|                                     |  | Vital Relay       | Alstom       | A62-122 (5 | 56001-921-07)   | 3      |      |  |
|                                     |  | XFMR              | Alstom       | 31094-0    | 000-01 Rev. F   | 1      | 4    |  |
|                                     |  | 28V Power Supply  | Керсо        | PRR 28-    | -38M24787       | 2      | 4    |  |
|                                     | AND THE OWNER AND A DECIMAL OF THE OWNER | 28V Power Supply  | Керсо        | PRM 28     | 8-17-24810      | 2      | 4    |  |
|                                     |  | Rectifier         | Alstom       | A5         | 53-541          | 1      | J    |  |
|                                     |  |                   |              |            |                 |        |      |  |

| Tucker Sig | gnal House Asset Inventory |                               |              |                        |        |
|------------|----------------------------|-------------------------------|--------------|------------------------|--------|
| ltem       | Image                      | Inventory                     |              |                        |        |
| Rack 3     |                            |                               | Rack 3       |                        |        |
| Nack 5     |                            | COMPONENT                     | MANUFACTURER | PART NUMBER            | COUNT  |
|            |                            | Switch Rectifier 120AC/120DC  |              | 250756-000             | 2      |
|            | THE THE PARTY              | Vital Relay                   | Alstom       | A62-429 (56001-926-01) | 8      |
|            |                            | Vital Relay                   | Alstom       | A62-432 (56001-785-01) | 4      |
|            | Real Transmission of The   | Vital Relay                   | Alstom       | A62-122 (56001-921-07) | 1      |
|            |                            | Vital Relay                   | Alstom       | A62-247                | 4      |
| Pack 4     |                            |                               | Pack 4       |                        |        |
| Rack 4     |                            | COMPONENT                     |              |                        | COLINT |
|            |                            | XEMB Loop Matching            | FPC          | 800-088019-200         | 1      |
|            |                            | RAIL MATCHING COUPLER BRC-1   |              | 800-088-019-300        | 2      |
|            |                            | AC Vain Relay                 | Alstom       | A62-597                | 2      |
|            |                            | Bal Imp                       | Alstom       | A3-117                 | 2      |
|            |                            | 1 ohm Resistor                | GRS          | A3-207 (01246-1)       | 2      |
|            |                            | 2.5 ohm Resistor              |              | 56105-11               | 2      |
|            |                            | XFMR                          | Alstom       | 31094-000 (A95 50)     | 1      |
|            |                            | 700 Amplifier Module          |              | 150-094017-022 Rev.    | D 1    |
|            |                            | 700 Amplifier Module          |              | 150-094017-022 Rev. F/ | 40 2   |
|            |                            | 701-2 CAB Coupler (2340 Feq.) |              | 150-097031-010 Rev.    | D 3    |
|            |                            | Chassis AF Track XMT TTT-2    | Getsgs       | 812-097031-001         | 1      |
|            |                            |                               |              |                        |        |

| Tucker Sig | gnal House Asset Inventory |  |  |   |  |
|------------|----------------------------|--|--|---|--|
| ltem       | Image                      | Inventory  |  |   |  |
| Rack 5     | A DECEMBER OF              |  | Rack 5   |   |  |
| Hack 5     | NO. OF STREET, SALES       | COMPONENT  | MANUFACTURER   | PART NUMBER   | COUNT  |
|            |                            | XFMR Loop Matching   | EPC  | 800-088019-200  | 1  |
|            |                            | RAIL MATCHING COUPLER BRC-1  |  | 800-088-019-300   | 2  |
|            |                            | AC Vain Relay  | Alstom   | A62-597   | 2  |
|            |                            | Bal Imp  | Alstom   | A3-117  | 2  |
|            |                            | 1 ohm Resistor   | GRS  | A3-207 (01246-1)  | 2  |
|            |                            | 2.5 ohm Resistor   |  | 56105-11  | 2  |
|            |                            | XFMR   | Alstom   | 31094-000 (A95 50)  | 1  |
|            |                            | 700 Amplifier Module   | HARMON   | 150-094017-022 Rev. D   | 2  |
|            |                            | 700 Amplifier Module   | HARMON   | 150-094017-022 Rev. FAO   | 1  |
|            |                            | 701-2 CAB Coupler (2340 Feq.)  | HARMON   | 150-097031-010 Rev. O   | 3  |
|            | Lange                      | Chassis AF Track XMT TTT-2   | Getsgs   | 812-097031-001  | 1  |
|            |                            |  |  |   |  |
| Rack 6     |                            |  | Rack 6   |   |  |
| Rack 6     |                            | COMPONENT  | Rack 6   | PART NUMBER   |  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D  | COUNT<br>5   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER<br>HARMON<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C   | <b>COUNT</b><br>5<br>1   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-094017-022 Rev. EAO  | COUNT<br>5<br>1<br>0 1   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)   | Rack 6<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-094017-022 Rev. EAO<br>150-097031-010 Rev. O   | COUNT<br>5<br>1<br>0 1<br>4  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)  | Rack 6<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER<br>150-094017-022 Rev. D<br>150-094017-022 Rev. C<br>150-094017-022 Rev. EAO<br>150-097031-010 Rev. O<br>150-095025-034 Rev. CAO  | COUNT<br>5<br>1<br>0<br>1<br>4<br>0<br>2   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)   | Rack 6<br>MANUFACTURER<br>HARMON<br>HARMON<br>HARMON<br>HARMON<br>HARMON<br>HARMON   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. B   | COUNT<br>5<br>1<br>0<br>1<br>4<br>0<br>2<br>1  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)  | Rack 6MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMON   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. B       150-095025-047 Rev. FAO   | COUNT<br>5<br>1<br>0 1<br>4<br>0 2<br>1<br>1<br>0 2  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)   | Rack 6MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMON   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. B       150-095025-047 Rev. FAO       150-095025-047 Rev. D   | COUNT<br>5<br>1<br>0 1<br>4<br>0 2<br>1<br>0 2<br>1<br>0 2<br>1  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)   | Rack 6MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMON   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. D       150-095025-047 Rev. E   | COUNT<br>5<br>1<br>0 1<br>4<br>0 2<br>1<br>0 2<br>1<br>0 2<br>1<br>1<br>1  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3870 Feq.)   | Rack 6MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMON                               | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. D       150-095025-047 Rev. E   | COUNT<br>5<br>1<br>0<br>1<br>4<br>0<br>2<br>1<br>0<br>2<br>1<br>1<br>1<br>1<br>1   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (3870 Feq.)   | Rack 6MANUFACTURERHARMON             | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAC       150-095025-034 Rev. EAC       150-095025-034 Rev. CAC       150-095025-034 Rev. CAC       150-095025-034 Rev. FAC       150-095025-047 Rev. FAC       150-095025-047 Rev. E       150-095025-047 Rev. E       150-095025-047 Rev. E       150-095025-047 Rev. E   | COUNT<br>5<br>1<br>0<br>1<br>4<br>0<br>2<br>1<br>1<br>0<br>2<br>1<br>1<br>1<br>1<br>1<br>1   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module 3870 Feq.)<br>703-1 Receiver Module 3870 Feq.)   | Rack 6MANUFACTURERHARMON | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-097031-010 Rev. O       150-095025-034 Rev. CAO       150-095025-034 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. E   | COUNT<br>5<br>1<br>0<br>1<br>4<br>0<br>2<br>1<br>1<br>0<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1  |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module 3870 Feq.)<br>703-1 Receiver Module 3870 Feq.)<br>703-1 Receiver Module 3870 Feq.)<br>703-1 Receiver Module (4410 Feq.)                          | Rack 6MANUFACTURERHARMONGetsgs                   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. C       150-097031-010 Rev. O       150-095025-034 Rev. CAC       150-095025-034 Rev. CAC       150-095025-034 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. E   | COUNT<br>5<br>1<br>4<br>2<br>1<br>2<br>1<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>2<br>2   |
| Rack 6     |                            | COMPONENT<br>700 Amplifier Module<br>700 Amplifier Module<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (3510 Feq.)<br>702-1 Track Coupler (4410 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3510 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (3870 Feq.)<br>703-1 Receiver Module (3410 Feq.)<br>Chassis AF Track XMT TTT-2<br>AF Track Receiver Chassis | Rack 6MANUFACTURERHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONHARMONGetsgsGetsgsGetsgs   | PART NUMBER       150-094017-022 Rev. D       150-094017-022 Rev. C       150-094017-022 Rev. C       150-094017-022 Rev. EAO       150-095025-034 Rev. EAO       150-095025-034 Rev. CAO       150-095025-034 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. FAO       150-095025-047 Rev. E       812-097031-001       812-097031-034 | COUNT<br>5<br>1<br>0 1<br>4<br>0 2<br>1<br>1<br>0 2<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>2<br>1<br>1<br>2<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |

| Tucker Sig | gnal House Asset Inventory           |                                   |              |                         |        |
|------------|--------------------------------------|-----------------------------------|--------------|-------------------------|--------|
| ltem       | Image                                | Inventory                         |              |                         |        |
| Rack 7     | The second state of the second state |                                   | Rack 7       |                         |        |
|            | CHESKE AND                           | COMPONENT                         | MANUFACTUR   | ER PART NUMBER          | COUN   |
|            |                                      | 700 Amplifier Module              | HARMON       | 150-094017-022 Rev.     | D 1    |
|            |                                      | 700 Amplifier Module              | HARMON       | 150-094017-022 Rev. E   | AO 1   |
|            |                                      | 510 Amplifier Module              | HARMON       | 150-088019-050 REV.     | B 2    |
|            |                                      | 530 CAB Coupler (2340 Feq.)       | HARMON       | 150-088019-051 REV.     | B 1    |
|            | - I                                  | 701-2 CAB Coupler (2340 Feq.)     | HARMON       | 150-097031-010 Rev.     | 0 1    |
|            | A COLUMN A                           | 540 TRACK DETECTION COUPLER (387  | 70) HARMON   | 150-088019-060 REV.     | B 1    |
|            |                                      | 702-1 Track Coupler (3870 Feq.)   | HARMON       | 150-095025-034 Rev.     | B 1    |
|            |                                      | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2      |
| Do als 9   |                                      |                                   | Dack 9       |                         |        |
| RACKO      | D. I. I. Commence                    | COMPONENT                         | MANUEACTURER | PART NUMBER             | COLINT |
|            | and the second second                | 700 Amplifier Module              | HARMON       | 150-094017-022 Rev. D   | 7      |
|            |                                      | 701-2 CAB Coupler (2340 Feg.)     | HARMON       | 150-097031-010 Rev. O   | 4      |
|            |                                      | 702-1 Track Coupler (4950 Feg.)   | HARMON       | 150-095025-034 Rev. CAO | 1      |
|            |                                      | 702-1 Track Coupler (3690 Feg.)   | HARMON       | 150-095025-034 Rev. CAO | 1      |
|            | THE OWNER WHEN THE A                 | 702-1 Track Coupler (4950 Feg.)   | HARMON       | 150-095025-034 Rev. B   | 1      |
|            |                                      | 703-1 Receiver Module (2950 Feg.) | HARMON       | 150-095025-047 Rev. FAO | 2      |
|            |                                      | 703-1 Receiver Module (3690 Feg.) | HARMON       | 150-095025-047 Rev. FAO | 1      |
|            |                                      | 703-1 Receiver Module (3330 Feq.) | HARMON       | 150-095025-047 Rev. E   | 1      |
|            | A CONTRACTOR                         | Chassis AF Track XMT TTT-2        | Getsgs       | 812-097031-001          | 2      |
|            |                                      | AF Track Receiver Chassis         | Getsgs       | 812-097031-034          | 1      |

STATISTICS.

| Tucker Signal House Asset Inventory |   |                               |              |             |              |       |
|-------------------------------------|---|-------------------------------|--------------|-------------|--------------|-------|
| ltem                                | Image   | Inventory                     |              |             |              |       |
| Rack 9                              |   |                               | Rack 9       |             |              |       |
|                                     | R. Duilling and second  | COMPONENT                     | MANUFACTU    | RER PART N  | UMBER        | COUNT |
|                                     |   | 700 Amplifier Module          | HARMON       | 150-09401   | 7-022 Rev. D | 2     |
|                                     |   | 510 Amplifier Module          | HARMON       | 150-08801   | 9-050 REV.B  | 1     |
|                                     |   | 530 CAB Coupler (2340 Feq.)   | HARMON       | 150-08801   | 9-051 REV.B  | 1     |
|                                     | I B B Barry C   | 701-2 CAB Coupler (2340 Feq   | .) HARMON    | 150-09703   | 1-010 Rev. O | 1     |
|                                     | and the second design   | 702-1 Track Coupler (3330 Fee | ι.) HARMON   | 150-09502   | 5-034 Rev. B | 1     |
|                                     | A DESCRIPTION OF TAXABLE PARTY OF TAXABLE PARTY.  | 520 RECEIVER MODULE (4230 F   | EQ) HARMON   | 150-08801   | 9-080 REV.B  | 1     |
|                                     |   | Chassis AF Track XMT TTT-2    | Getsgs       | 812-097     | 7031-001     | 2     |
| 1                                   |   | 500RECEIVER CHASSIS           | EPC          | 800-088     | 3019-030     | 1     |
| Back 10                             |   |                               | Rack 10      |             | ]            |       |
| Hack 10                             | S. MILLING  | COMPONENT                     | MANUFACTURER | PART NUMBER | COUNT        |       |
|                                     |   | HLC Cabinet with Lexan Cover  | Getsgs       | 226802-001  | 2            |       |
|                                     | The second se | VLP                           | -            |             | 2            |       |
|                                     |   | ACP-2                         |              |             | 2            |       |
|                                     |   | SSM                           |              |             | 2            |       |
|                                     | le 1  | CCI                           |              |             | 2            |       |
|                                     |   | VSD                           |              |             | 1            |       |
|                                     |   | VGP I/O-12V                   |              |             | 4            |       |
|                                     |   | NV I/O                        |              |             | 3            |       |
|                                     |   | 32 NVI                        |              |             | 4            |       |
|                                     |   | VGPI 16                       |              |             | 2            |       |
|                                     |   | CLA BOARD                     |              |             | 1            |       |
|                                     |   | K3-232<br>Modem               |              |             | 4            |       |
|                                     | No. 1966  | 12V Power Supply              |              |             | 2            |       |
|                                     |   |                               |              | 1           |              |       |

| Tucker Signal House Asset Inventory |                      |                            |           |                 |              |       |
|-------------------------------------|----------------------|----------------------------|-----------|-----------------|--------------|-------|
| ltem                                | Image                | Inventory                  |           |                 |              |       |
| Rack 11                             |                      |                            |           | Rack 11         |              |       |
| HUCK II                             | BIOCOCCUPACION INC.  | COMPONENT                  |           | MANUFACTURER    |              |       |
|                                     |                      | Rotary Dials (Full Hemisph | ere-NEW)  |                 |              | 18    |
|                                     |                      | Non-Vital Relays           | ;         |                 |              | 72    |
|                                     |                      |                            |           |                 |              |       |
| SCADA                               |                      | SCADA                      |           |                 |              |       |
|                                     |                      | COMPONENT                  | MAN       | JFACTURER       | PART NUMBER  | COUNT |
|                                     | 1 In second and I in | Power Supply               | Schne     | ider Electric   | TSXPSY1610   | 1     |
|                                     |                      | CPU                        | Schne     | ider Electric   | TSXP572623   | 1     |
|                                     |                      | Memory Card                | Schneider | Automation S.A. | TSXMRP064P   | 1     |
|                                     |                      | RS-232                     |           |                 |              | 1     |
|                                     |                      | Input Card                 | Schne     | ider Electric   | TSX DEY16A2  | 6     |
|                                     |                      | INPUT TERMINAL BLOCK       | Schneider | Automation S.A. | TSX BLY01    | 6     |
|                                     |                      | Output Card                | Schne     | ider Electric   | TSX DSY64T2K | 1     |
|                                     |                      | Output Cord                | Phoe      | nix Contact     | 22 98 438    | 3     |
|                                     |                      | Relays                     | Phoe      | nix Contact     | ABE7*        | 3     |
|                                     |                      | Power Supply               | CONN      | ECT POWER       | 992534 0024  | 1     |
|                                     |                      | Battery Charger            | CONN      | ECT POWER       | 991628 0024  | 1     |
|                                     |                      | Batteries                  | CD Te     | echnologies     | UPS12-150MR  | 2     |
|                                     |                      | Backplane                  |           | -               |              | 1     |
|                                     |                      | Phone Line Extender        |           | Tcom            |              | 1     |
|                                     | EL .                 |                            |           |                 |              |       |

| Tucker S | ignal House Asset Inventory   |  |                 |                          |       |
|----------|---|--|-----------------|--------------------------|-------|
| ltem     | Image   | Inventory  |                 |                          |       |
| Sides    |   | Hous   | e Side-A        |                          |       |
|          |   | COMPONENT  | MANUFACTURER    | PART NUMBER              | COUNT |
|          | ap 10 million and a second  | Switch Heater Push Button Box                      |                 |                          | 1     |
|          |   |  |                 |                          |       |
|          |   | Hous   | e Side-B        |                          |       |
|          | R .   | FIA-Keypad Controller                              | NAPCO           | RPC3000LCDe              | 1     |
|          |   | Fire Intrusion Alarm                               | NAPCO           |                          | 1     |
|          | forth and a second s | Battery  | Genesis         | NP7-1212V,7.0Ah          | 2     |
|          |   | Main Board   |                 |                          | 1     |
|          | and a second  | Relay Boards                                       |                 |                          | 1     |
|          |   | Hous   | e Side-C        |                          |       |
|          |   |  |                 |                          |       |
|          | ===   |  |                 |                          |       |
|          |   | Hous   | e Side-D        |                          |       |
|          |   | CLCP 256 IO LED Driver Module                      | Getsgs          | Assy 227027-001 Rev. 806 | 1     |
|          |   | Power Supply CLCP 12VDC 20W                        | Getsgs          | 226609-200               | 1     |
|          |   | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D        | 40275-953-02             | 1     |
|          |   | Heavy Duty Safety Switch 100A 240V AC/ 250V DC     | Square D        | 40276-001-02             | 1     |
|          |   | Hawk Event Recorder                                | Getsgs          | 251210-00001             | 1     |
|          |   | Current Monitor                                    | NRS             | 16775-00                 | 2     |
|          |   | BATTERY SURGE ARRESTOR                             | HARMON          | 250597-000               | 1     |
|          |   | 12V Power Supply                                   | NRS             | ERB-C 12/40              | 2     |
|          |   | 12V BATTERY  | CD TECHNOLOGIES | TEL 12-90                | 1     |

# **UMSL South Signal House**



| UMSL Sou | th Signal House Asset Inventory   |   |                     |                        |       |
|----------|---|---|---------------------|------------------------|-------|
| ltem     | Image   | Inventory                                       |                     |                        |       |
| Rack 1   |   | Rack 1   COMPONENT MANUFACTURER PAR   BPL-1 EPC | T NUMBER COUNT<br>2 |                        |       |
| Rack 2   |   |   | Rack 2              |                        |       |
|          |   | COMPONENT                                       | MANUFACTURER        | PART NUMBER            | COUNT |
|          | - 155 M   | Vital Relay                                     | GRS                 | A62-122 (56001-921-07) | 2     |
|          |   | 520 Receiver Module (3870 Feq.)                 | EPC                 | 150-088019-080 Rev. B  | 1     |
|          |   | 520 Receiver Module (2970 Feq.)                 | EPC                 | 150-088019-080 Rev. B  | 2     |
|          | TALLAR AND THE OWNER AND THE OWNER  | 520 Receiver Module (3510 Feq.)                 | EPC                 | 150-088019-080 Rev. B  | 2     |
|          |   | 520 Receiver Module (4410 Feq.)                 | EPC                 | 150-088019-080 Rev. B  | 1     |
|          | None of the second s | 520 Receiver Module (3870 Feq.)                 | EPC                 | 150-088019-080 Rev. F  | 1     |
|          |   | 510 Amplifier Module                            | EPC                 | 150-088019-050 Rev. B  | 8     |
|          |   | 530 CAB Coupler                                 | EPC                 | 150-088019-051 Rev. B  | 4     |
|          |   | 540 Train Detection Coupler (2970 Feq.)         | EPC                 | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (3310 Feq.)         | EPC                 | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (4410 Feq.)         | EPC                 | 150-088019-000 Rev. B  | 1     |
|          |   |   |                     | 155 000015 000 Nev. B  | -     |

| UMSL Sou | th Signal House Asset Inventory   |   |              |                        |       |
|----------|---|---|--------------|------------------------|-------|
| ltem     | Image   | Inventory                               |              |                        |       |
| Rack 3   |   |   | Rack 3       |                        |       |
| hadre 5  | and a state of the state of the   | COMPONENT                               | MANUFACTURER | PART NUMBER            | COUNT |
|          |   | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 8     |
|          |   | 530 CAB Coupler                         | EPC          | 150-088019-051 Rev. B  | 4     |
|          |   | 540 Train Detection Coupler (2970 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          | ACCORDENCES IN COMPANY AND ADDRESS OF THE OWNER OWNER OF THE OWNER   | 540 Train Detection Coupler (3510 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
| Rack 4   |   | COMPONENT                               | Rack 4       |                        | COUNT |
|          |   | Vital Bolay                             |              | AC2 122 (EC001 021 07) |       |
|          |   | 520 Receiver Module (3690 Feg.)         | EPC          | 150-088019-080 Rev B   | 2     |
|          |   | 520 Receiver Module (3050 Feq.)         | FPC          | 150-088019-080 Rev. B  | 2     |
|          | STATE   | 520 Receiver Module (3330 Feg.)         | EPC          | 150-088019-080 Rev. B  | 1     |
|          |   | 520 Receiver Module (4230 Feg.)         | EPC          | 150-088019-080 Rev. B  | 1     |
|          |   | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B  | 8     |
|          |   | 530 CAB Coupler                         | EPC          | 150-088019-051 Rev. B  | 4     |
|          |   | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          | THE REPORT OF THE PARTY OF THE | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (4950 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          |   | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B  | 1     |
|          |   |   |              |                        |       |

| UMSL Sou | th Signal House Asset Inventory  |                           |           |               |             |       |
|----------|--|---------------------------|-----------|---------------|-------------|-------|
| ltem     | Image  | Inventory                 |           |               |             |       |
| Rack 5   |  |                           |           | Rack 5        |             |       |
| Hack 5   |  | COMPONENT                 |           | MANUFACTURER  | PART NUMBER | COUNT |
|          | in the second se | Rotary Dials (Full Hemisp | here-OLD) |               |             | 12    |
|          |  | Non-Vital Relay           | /S        |               |             | 9     |
|          |  |                           |           |               |             |       |
| Rack 6   | The second secon |                           | Rack      | 6             |             |       |
|          | The second second second   | COMPONENT                 | MANUFACTU | JRER PART NUM | BER COUNT   |       |
|          |  | Vital Relay               | SafeTrar  | n 400900      | 2           |       |
|          | Doubler line Doubler   | VLP                       |           |               | 1           |       |
|          | A STATES STATES IN THE STATES  | ACP-2                     |           |               | 1           |       |
|          | The state of the s | SSM                       |           |               | 1           |       |
|          |  | CCI                       |           |               | 1           |       |
|          |  | VGP I/O                   |           |               | 1           |       |
|          |  | NV I/O                    |           |               | 1           |       |
|          |  | NVI 32                    |           |               | 2           |       |
|          | Mr. Martin Contraction of the Martin   | VGPI 16                   |           |               | 1           |       |
|          | HARVON LOOC CONTROLLER   | Surge Protector BSA-4     | Harmon    | 250597        | 1           |       |
|          |  | Modem                     |           |               | 2           |       |
|          |  | 12V Power Supply          |           |               | 1           |       |
|          |  |                           |           |               |             |       |

| Item     Image     Inventory       Sides     Image     House Side-A     COMPONENT     MANUFACTURER     PART NUMBER     COUNT       Sides     Image     House Side-A     COMPONENT     MANUFACTURER     PART NUMBER     COUNT       Sides     Image     House Side-B     20V Power Supply     NRS     ERV-C 24/30     1       Current Monitor     NRS     16775-00     1     1     1     20V Power Supply     Lamarche     A29B-20-12V-A1     1     2.25V Battery     Power Supply     Lamarche     A29B-20-12V-A1     1     2.25V Battery     Power Supply     Lamarche     A29B-20-12V-A1     1     1     2.25V Battery     Power Supply     Lamarche     A29B-20-12V-A1     1 <td< th=""><th>ItemImageInventorySidesImageHouse Side-ACOMPONENTMANUFACTURERPART NUMBERCOMPONENTMANUFACTURERPART NUMBERHouse Side-BCOUNTCOV Power SupplyNRSERV-C 24/30Current MonitorNRS16775-00House Side-C12V Power SupplyLamarche12V Power SupplyLamarcheA29B-20-12V-A112V Power SupplyLamarcheA29B-20-12V-A11001010110Modem08129111BatteryNP7-1212V,7.0Ah111DI1112DI1113DI1114DI1115DI11161117DI1118DI1119111101111101111101111101111101111101111101111101111101</th></td<> <th>UMSL Sou</th> <th>th Signal House Asset Inventory</th> <th></th> <th></th> <th></th> <th></th> | ItemImageInventorySidesImageHouse Side-ACOMPONENTMANUFACTURERPART NUMBERCOMPONENTMANUFACTURERPART NUMBERHouse Side-BCOUNTCOV Power SupplyNRSERV-C 24/30Current MonitorNRS16775-00House Side-C12V Power SupplyLamarche12V Power SupplyLamarcheA29B-20-12V-A112V Power SupplyLamarcheA29B-20-12V-A11001010110Modem08129111BatteryNP7-1212V,7.0Ah111DI1112DI1113DI1114DI1115DI11161117DI1118DI1119111101111101111101111101111101111101111101111101111101   | UMSL Sou   | th Signal House Asset Inventory |                  |                                   |                 |             |   |  |
|--|---|--|---------------------------------|------------------|-----------------------------------|-----------------|-------------|---|--|
| Sides   House Side-A     COMPONENT   MANUFACTURER   PART NUMBER   COUNT     House Side-B   20V Power Supply   NRS   ERV-C 24/30   1     Current Monitor   NRS   16775-00   1     House Side-C   12V Power Supply   Lamarche   A298-20-12V-A1   1     12V Battery   PowerSafe   DDr 50-17   14     12V Battery   NP7-1212V,7.0Ah   1   1     Modem   D8129   1     Battery   NP7-1212V,7.0Ah   1     DI   1   1   1     DV   1   1   1     Ba  | Sides       Bides     House Side-A       COMPONENT     MANUFACTURER     PART NUMBER     COUNT       House Side-B     20V Power Supply     NRS     ERV-C 24/30     1       Current Monitor     NRS     16775-00     1       House Side-C     12V Power Supply     NRS     16775-00     1       12V Power Supply     Lamarche     A29B-20-12V-A1     1       2.25V Battery     PowerSafe     DDr 50-17     14       12V Power Supply     Lamarche     A29B-20-12V-A1     1       12V Battery     Odyssey     PC2150     1       House Side-D     Dimega Alarm     Radionics     D8112     1       Modem     D8129     1     1     Baseboard     1     1       Di     Di     Di     1< | ltem   | Image                           | Inventory        |                                   |                 |             |   |  |
| ONOSCOMPONENTMANUFACTURERPART NUMBERCOUNTHouse Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A11LamarcheA29B-20-12V-A11Lawse Side-C12V Power SupplyLamarcheA29B-20-12V-A11Lawse Side-D (Fire Control Panel)KeypadRely and RadionicsD360TD1Omega AlarmRadionicsD360TD1ModemD1Modem1SCADA Control BoxModem1BatteryNP7-1212V,7.0Ah1BatteryNP7-1212V,7.0Ah1BatteryNP7-1212V,7.0Ah1BatteryNP7-1212V,7.0Ah1Battery1Non-Vital1POWERS Side-D11212V,7.0Ah1122V,7.0Ah  | COMPONENTMANUFACTURERPART NUMBERCOUNTHouse Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD81291BatteryNP7-1212V,7.0Ah1Baseboard1DI1DI1Basteboard1Baseboard1BasteryGenesisNP7-1212V,7.0Ah1BatteryGenesisNP7-1212V,7.0Ah2  | Sides  |                                 |                  | House Side-                       | A               |             |   |  |
| House Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V Power SupplyLamarcheA29B-20-12V-A1112V Power SupplyDurctorl Panel)KeypadRadionicsD360TD1ModemD81221BatteryNP7-1212V,7.0Ah1Baseboard1110101010101010101  | House Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A1112V Power SupplyLamarcheA29B-20-12V-A1112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD812911SCADA Control BoxModem11Di11Di11Di11Baseboard11Di11BatteryGenesisNP7-1212V,7.0Ah2   | 01460  |                                 | COMPONENT        | MANUFACTURER                      | PART NUMBER     | COUNT       |   |  |
| House Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11Di11Power SupplyPower-1HC15-3-A2Non-Vital11BatteryGenesisNP7-1212V,7.0Ah2   | House Side-B20V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheA298-20-12V-A1112V Power SupplyLamarcheBatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1ModemD8129111ModemD8129111SBX1111BatteryNP7-1212V,7.0Ah11DI1111BatteryGenesisNP7-1212V,7.0Ah2   |  |                                 |                  |                                   |                 |             |   |  |
| 20V Power Supply     NRS     ERV-C 24/30     1       Current Monitor     NRS     16775-00     1       House Side-C     1     1     2.25V Battery     PowerSafe     DDr 50-17     14       12V Power Supply     Lamarche     A29B-20-12V-A1     1     2.25V Battery     PowerSafe     DDr 50-17     14       12V Battery     Odyssey     PC2150     1       House Side-D (Fire Control Panel)     Keypad     Radionics     D360TD     1       Omega Alarm     Radionics     D360TD     1       Omega Alarm     Radionics     D8112     1       Modem     D8129     1       Battery     NP7-1212V,7.0Ah     1       SBX     1     1       Baseboard     1     1       Di     1     1       Power Supply     Power-1     HC15-3-A     2       Non-Vital     1     1     1   | 20 V Power SupplyNRSERV-C 24/301Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA298-20-12V-A112.25V BatteryPowerSafeDD r 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control BoxModem1DI11DI11Baseboard11DI11BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111BatteryGenesisNP7-1212V,7.0AhDI111DI11DI11DI <t< td=""><td></td><th></th><td></td><td>House Side-</td><td>В</td><td></td></t<>   |  |                                 |                  | House Side-                       | В               |             |   |  |
| Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11DI11DI11Power SupplyPower-1HC15-3-A2Nor-Vital111BatteryGenesisNP7-1212V,7.0Ah2   | Current MonitorNRS16775-001House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD8112ModemDressedModemDressed <td col<="" td=""><td></td><th></th><td>20V Power Supply</td><td>NRS</td><td>ERV-C 24/30</td><td>1</td></td>  | <td></td> <th></th> <td>20V Power Supply</td> <td>NRS</td> <td>ERV-C 24/30</td> <td>1</td> |                                 |                  | 20V Power Supply                  | NRS             | ERV-C 24/30 | 1 |  |
| House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SRX11DI11Power SupplyPower-1HC15-3-ANon-Vital11BatteryGenesisNP7-1212V,7.0Ah   | House Side-C12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD31221BatteryNP7-1212V,7.0Ah1SCADA Control Box1SBX11DI11DI11Power SupplyPower-1HC15-3-A2Non-Vital1BatteryGenesisNP7-1212V,7.0Ah2NP7-1212V,7.0Ah1   |  |                                 | Current Monitor  | NRS                               | 16775-00        | 1           |   |  |
| 12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11Di11Power SupplyPower-1HC15-3-ANon-Vital11BatteryGenesisNP7-1212V,7.0Ah   | 12V Power SupplyLamarcheA29B-20-12V-A112.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11DI11Power SupplyPower-1HC15-3-ANon-Vital11BatteryGenesisNP7-1212V,7.0Ah   |  |                                 |                  | House Side-                       | С               |             |   |  |
| 2.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11DI11DI11Di11Power SupplyPower-1HC15-3-ANon-Vital11BatteryGenesisNP7-1212V,7.0Ah2   | 2.25V BatteryPowerSafeDDr 50-171412V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1Modem1SBX1Di1Di1Di1Di1Baseboard1Di1Baseboard1Baseboard1Baseboard1Di1BasterySNP7-1212V,7.0AhDi1Baseboard1Di1BasteryGenesisNOn-Vital1BatteryGenesisNP7-1212V,7.0Ah2  |  |                                 | 12V Power Supply | Lamarche                          | A29B-20-12V-A1  | 1           |   |  |
| 12V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SEADA Control Box1Modem1SBX1Baseboard1DI1Power SupplyPower-1HC15-3-ANOn-Vital1BatteryGenesisNP7-1212V,7.0AhBatteryGenesisNP7-1212V,7.0Ah   | 12V BatteryOdysseyPC21501House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control BoxModem1SBX1Baseboard1DI1DI1Power SupplyPower-1HC15-3-APower SupplyPower-1HC15-3-ABatteryGenesisNP7-1212V,7.0AhBatteryGenesisNP7-1212V,7.0Ah   |  |                                 | 2.25V Battery    | PowerSafe                         | DDr 50-17       | 14          |   |  |
| House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11Baseboard1DI1DI1Power SupplyPower-1HC15-3-ANP7-1212V,7.0Ah1BatteryGenesisNP7-1212V,7.0Ah   | House Side-D (Fire Control Panel)KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX11Baseboard1DI11Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0AhRemover SupplyPower-11Battery1Battery1Con-Vital1Battery1 <t< td=""><td></td><th></th><td>12V Battery</td><td>Odyssey</td><td>PC2150</td><td>1</td></t<>   |  |                                 | 12V Battery      | Odyssey                           | PC2150          | 1           |   |  |
| KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1Modem1SBX1Baseboard1DI1DI1Power SupplyPower-1HC15-3-A2Non-Vital1BatteryGenesisNP7-1212V,7.0Ah  | KeypadRadionicsD360TD1Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SBX1Baseboard1DI1Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0Ah   |  |                                 | н                | House Side-D (Fire Control Panel) |                 |             |   |  |
| Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1SBX1Baseboard1DI1DI1Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0AhDI1  | Omega AlarmRadionicsD81121ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1SBX11Baseboard1DI1DI1Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0AhBatteryGenesisNP7-1212V,7.0Ah  |  |                                 | Keypad           | Radionics                         | D360TD          | 1           |   |  |
| ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1SBX1Baseboard1DI1Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0Ah  | ModemD81291BatteryNP7-1212V,7.0Ah1SCADA Control Box1Modem1SBX1Baseboard1DI1DI1Power SupplyPower-1HC15-3-ANon-Vital1BatteryGenesisNP7-1212V,7.0Ah  |  |                                 | Omega Alarm      | Radionics                         | D8112           | 1           |   |  |
| Battery   NP7-1212V,7.0Ah   1     SCADA Control Box   1     Modem   1     SBX   1     Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A   2     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   2   | Battery   NP7-1212V,7.0Ah   1     SCADA Control Box   1     Modem   1     SBX   1     Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A   2     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   2  |  |                                 | Modem            |                                   | D8129           | 1           |   |  |
| SCADA Control Box     Modem   1     SBX   1     Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   | SCADA Control Box     Modem   1     SBX   1     Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A   2     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   2  |  |                                 | Battery          |                                   | NP7-1212V,7.0Ah | 1           |   |  |
| Modem1SBX1Baseboard1DI1Power SupplyPower-1HC15-3-A2Non-Vital1BatteryGenesisNP7-1212V,7.0Ah2  | Modem1SBX1Baseboard1DI1Power SupplyPower-1HC15-3-A2Non-Vital1BatteryGenesisNP7-1212V,7.0Ah2   |  |                                 |                  | SCADA Control                     | Вох             |             |   |  |
| SBX 1   Baseboard 1   DI 1   Power Supply Power-1 HC15-3-A   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah   | SBX   1     Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A   2     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   2  |  |                                 | Modem            |                                   |                 | 1           |   |  |
| Baseboard 1   DI 1   Power Supply Power-1 HC15-3-A 2   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2   | Baseboard   1     DI   1     Power Supply   Power-1   HC15-3-A   2     Non-Vital   1     Battery   Genesis   NP7-1212V,7.0Ah   2  |  |                                 | SBX              |                                   |                 | 1           |   |  |
| DI 1   Power Supply Power-1 HC15-3-A 2   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2   | DI 1   Power Supply Power-1 HC15-3-A 2   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2  |  |                                 | Baseboard        |                                   |                 | 1           |   |  |
| Power Supply Power-1 HC15-3-A 2   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2  | Power Supply Power-1 HC15-3-A 2   Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2   |  |                                 | DI               |                                   |                 | 1           |   |  |
| Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2  | Non-Vital 1   Battery Genesis NP7-1212V,7.0Ah 2   |  |                                 | Power Supply     | Power-1                           | HC15-3-A        | 2           |   |  |
| Battery Genesis NP7-1212V,7.0Ah 2  | Battery Genesis NP7-1212V,7.0Ah 2   |  |                                 | Non-Vital        |                                   |                 | 1           |   |  |
|  |   |  | Battery                         | Genesis          | NP7-1212V,7.0Ah                   | 2               |             |   |  |
|  |   |  |                                 |                  |                                   |                 |             |   |  |
|  |   |  |                                 |                  |                                   |                 |             |   |  |
|  |   |  |                                 |                  |                                   |                 |             |   |  |
|  |   |  |                                 |                  |                                   |                 |             |   |  |

# **Union Station Signal House**



Track 1 Side

Side D

Photo

| Union Station Signal House Asset Inventory |              |                 |                      |          |          |                       |       |  |  |
|--|--------------|-----------------|----------------------|----------|----------|-----------------------|-------|--|--|
| ltem                                       | Image        | Inventory       |                      |          |          |                       |       |  |  |
| Rack 1                                     |              |                 | Rack 1               |          |          |                       |       |  |  |
|  |              | COMPONENT       | MANUFACTURER         | PART NUM | ER COUN  | т                     |       |  |  |
|  |              | BPL-1           | EPC                  |          | 2        |                       |       |  |  |
| Rack 2                                     |              | Rack 2          |                      |          |          |                       |       |  |  |
|  |              | CC              | MPONENT              | MANU     | FACTURER | PART NUMBER           | COUNT |  |  |
|  |              | ١               | /ital Relay          |          | GRS      | A62-122 56001-921-07  | 1     |  |  |
|  |              | 520 Receive     | r Module (4410 Feq.  | )        | EPC      | 150-088019-080 Rev. B | 1     |  |  |
|  |              | 520 Receive     | r Module (2970 Feq.  | .)       | EPC      | 150-088019-080 Rev. B | 1     |  |  |
|  |              | 520 Receive     | r Module (3870 Feq.  | .)       | EPC      | 150-088019-080 Rev. B | 1     |  |  |
|  | Jacob Barris | 520 Receive     | r Module (2970 Feq.  | .)       | EPC      | 150-088019-080 Rev. F | 1     |  |  |
|  |              | 510 Ar          | nplifier Module      |          | EPC      | 150-088019-050 Rev. B | 4     |  |  |
|  |              | 530             | CAB Coupler          |          | EPC      | 150-088019-051 Rev. B | 2     |  |  |
|  |              | 540 Train Detec | tion Coupler (3870 F | eq.)     | EPC      | 150-088019-060 Rev. B | 1     |  |  |
|  |              | 540 Train Detec | tion Coupler (2970 F | -eq.)    | EPC      | 150-088019-060 Rev. B | 1     |  |  |
|  |              |                 |                      |          |          |                       |       |  |  |

| Union Station | Signal House Asset Inventory   |   |              |                       |       |  |  |  |  |  |
|---------------|--|---|--------------|-----------------------|-------|--|--|--|--|--|
| ltem          | Image  | Inventory                               |              |                       |       |  |  |  |  |  |
| Rack 3        |  |   | Rack 3       |                       |       |  |  |  |  |  |
|               | A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER   | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |  |  |
|               |  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 2     |  |  |  |  |  |
|               |  | 530 CAB Coupler                         | EPC          | 150-088019-051 Rev. B | 1     |  |  |  |  |  |
|               |  | 540 Train Detection Coupler (3690 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |  |  |  |
| Rack 4        |  |   | Rack 4       |                       |       |  |  |  |  |  |
|               | (Contraction)  | COMPONENT                               | MANUFACTURER | PART NUMBER           | COUNT |  |  |  |  |  |
|               | Contraction of the local division of the loc | 520 Receiver Module (4230 Feq.)         | EPC          | 150-088019-080 Rev. B | 2     |  |  |  |  |  |
|               | - West and the second  | 520 Receiver Module (3690 Feq.)         | EPC          | 150-088019-080 Rev. B | 1     |  |  |  |  |  |
|               | -  | 510 Amplifier Module                    | EPC          | 150-088019-050 Rev. B | 4     |  |  |  |  |  |
|               |  | 530 CAB Coupler                         | EPC          | 150-088019-051 Rev. B | 2     |  |  |  |  |  |
|               |  | 540 Train Detection Coupler (3330 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |  |  |  |
|               |  | 540 Train Detection Coupler (4230 Feq.) | EPC          | 150-088019-060 Rev. B | 1     |  |  |  |  |  |
|               |  |   |              |                       |       |  |  |  |  |  |

| Union Station Signal House Asset Inventory |  |                          |            |      |           |          |   |   |  |
|--|--|--------------------------|------------|------|-----------|----------|---|---|--|
| Item                                       | Image  | Inventory                |            |      |           |          |   |   |  |
| Back 5                                     |  | Rack 5                   |            |      |           |          |   |   |  |
| Nack 5                                     | 222.22   | COMPONENT                | -          |      |           | COUNT    |   |   |  |
|  |  | Rotary Dials (Full Hemis | ohere-OLD) |      |           |          | 6 | 1 |  |
|  | CLARK HERE   | Non-Vital Relay          | /S         |      |           |          | 5 |   |  |
| Back 6                                     |  |                          |            |      |           |          |   |   |  |
| Rack 6                                     |  | Rack 6                   |            |      |           |          |   |   |  |
|  |  | COMPONENT                | MANUFACT   | URER | PART NUME | ER COUNT |   |   |  |
|  |  | Vital Relay              | SafeTra    | in   | 400900    | 2        |   |   |  |
|  |  | VLP                      |            |      |           | 1        |   |   |  |
|  |  | ACP-2                    |            |      |           | 1        |   |   |  |
|  | THE REAL PROPERTY AND ADDRESS OF   | SSM                      |            |      |           | 1        |   |   |  |
|  | A REAL PROPERTY OF THE REAL PR | CCI                      |            |      |           | 1        |   |   |  |
|  |  | VGP I/O                  |            |      |           | 1        |   |   |  |
|  | A STATUS LOOK CONTROLLOR   | NV I/O                   |            |      |           | 2        |   |   |  |
|  |  | 32 NVI                   |            |      |           | 1        |   |   |  |
|  |  | VGPI 16                  |            |      | 250507    | 1        |   |   |  |
|  |  | Surge Protector BSA-4    | Harmo      | n    | 250597    | 1        |   |   |  |
|  | THE REAL STATE   | ULA<br>Modem             |            |      |           |          |   |   |  |
|  |  | 12V Power Supply         |            |      |           | 1        |   |   |  |
|  |  |                          |            |      |           |          |   |   |  |

| Union Station Signal House Asset Inventory |       |                  |               |                        |       |  |  |  |
|--|-------|------------------|---------------|------------------------|-------|--|--|--|
| ltem                                       | Image | Inventory        | Inventory     |                        |       |  |  |  |
| SCADA                                      |       |                  | SCA           | DA                     |       |  |  |  |
|  |       | COMPONENT        | MANUFACTURER  | PART NUMBER            | COUNT |  |  |  |
|  |       | Modem            |               | V3225                  | 1     |  |  |  |
|  |       | SPX              |               |                        | 1     |  |  |  |
|  |       | C186             |               |                        | 1     |  |  |  |
|  |       | DI               |               |                        | 2     |  |  |  |
|  |       | Power Supply     |               |                        | 2     |  |  |  |
|  |       | Non Vital Relays |               |                        | 1     |  |  |  |
|  |       | Batteries        | Genesis       | NP7-12 12V, 7.0 Ah     | 2     |  |  |  |
|  |       | SCADA Case       | Eurobec Metal | N.Cat.N: 9500 DA722436 | 1     |  |  |  |
|  |       |                  |               |                        |       |  |  |  |

| Union Station Signal House Asset Inventory |                    |                               |                       |                          |       |  |  |  |  |
|--|--------------------|-------------------------------|-----------------------|--------------------------|-------|--|--|--|--|
| Item                                       | Image              | Inventory                     |                       |                          |       |  |  |  |  |
| Sides                                      |                    | House Side-A                  |                       |                          |       |  |  |  |  |
|  |                    | COMPONENT                     | MANUFACTURER          | PART NUMBER              | COUNT |  |  |  |  |
|  | B                  |                               | House Side-B          |                          |       |  |  |  |  |
|  | D <sup>R</sup> O B | CLCP 256 IO LED Driver Module | Getsgs                | Assy 227027-001 Rev. 806 | 1     |  |  |  |  |
| 1  |                    | Power Supply CLCP 12VDC 20W   | Getsgs                | 226609-200               | 1     |  |  |  |  |
|  |                    | 28V Power Supply              | NRS                   | ERV-C 24/30              | 1     |  |  |  |  |
|  |                    | Current Monitor               | NRS                   |                          | 1     |  |  |  |  |
|  |                    | House Side-C                  |                       |                          |       |  |  |  |  |
|  |                    | 12V Power Supply              | Lamarche              | A29-20-12V-A1            | 1     |  |  |  |  |
|  |                    | Battery                       | PowerSafe             | DDr 50-17                | 14    |  |  |  |  |
|  |                    | 12V Battery                   | PowerSafe             | 12V 155FS                | 1     |  |  |  |  |
|  |                    | Hou                           | se Side-D (Fire Contr | rol Panel)               |       |  |  |  |  |
|  | D III              | Keypad                        | Raydioncs             | D360TD                   | 1     |  |  |  |  |
|  |                    | Omega Alarm                   | Raydioncs             | D8112                    | 1     |  |  |  |  |
|  | Marcha M           | Modem                         |                       | D8129                    | 1     |  |  |  |  |
|  |                    | Battery                       |                       | NP7-1212V,7.0Ah          | 1     |  |  |  |  |
|  |                    |                               |                       |                          |       |  |  |  |  |

# Waterman Signal House



Photo, Photo 2

| Waterman Signal House Asset Inventory |       |  |  |  |  |  |  |
|---------------------------------------|-------|--|--|--|--|--|--|
| ltem                                  | Image | Inventory  |  |  |  |  |  |
| Rack 1                                |       |  | Rack 1   |  |  |  |  |
|                                       |       | COMPONENT N  | IANUFACTURER   | PART NUMBER  | COUNT  |  |  |
|                                       |       | BPL-3  | HARMON 15  | 50-097031-013 Rev. O   | 1  |  |  |
|                                       |       |  |  |  |  |  |  |
|                                       |       |  |  |  |  |  |  |
| Rack 2                                |       |  | Raci   | k 2  |  |  |  |
| Rack 2                                |       |  | Raci<br>MANUFACTURER   | k 2<br>PART NUMBER   |  |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay   | Raci<br>MANUFACTURER<br>Alstom   | k 2<br>PART NUMBER<br>A62-407 (56001-745-0   | <b>COL</b><br>(2) 1  |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay<br>Vital Relay  | Raci<br>MANUFACTURER<br>Alstom<br>Alstom                                       | k 2<br>PART NUMBER<br>A62-407 (56001-745-0<br>A62-122 (56001-921-0   | <b>COL</b><br>(2) 1<br>(7) 2   |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR  | Raci<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom                             | k 2<br>PART NUMBER<br>A62-407 (56001-745-0<br>A62-122 (56001-921-0<br>31094-000-01 Rev. F  | COL       02)     1       07)     2       =     1                            |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply                                  | Raci<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom<br>Kepco                    | k 2<br>PART NUMBER<br>A62-407 (56001-745-0<br>A62-122 (56001-921-0<br>31094-000-01 Rev. F<br>PRR 28-38M24787                               | COL<br>)2) 1<br>)7) 2<br>= 1<br>2  |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply<br>28V Power Supply              | Racl<br>MANUFACTURER<br>Alstom<br>Alstom<br>Kepco<br>Kepco                     | k 2<br>PART NUMBER<br>A62-407 (56001-745-0<br>A62-122 (56001-921-0<br>31094-000-01 Rev. F<br>PRR 28-38M24787<br>PRM 28-17-24810            | COL       02)     1       07)     2       =     1       2     2      2     2 |  |  |
| Rack 2                                |       | COMPONENT<br>Vital Relay<br>Vital Relay<br>XFMR<br>28V Power Supply<br>28V Power Supply<br>Rectifier | Raci<br>MANUFACTURER<br>Alstom<br>Alstom<br>Alstom<br>Kepco<br>Kepco<br>Alstom | k 2<br>PART NUMBER<br>A62-407 (56001-745-0<br>A62-122 (56001-921-0<br>31094-000-01 Rev. F<br>PRR 28-38M24787<br>PRM 28-17-24810<br>A53-541 | COL<br>22) 1<br>27) 2<br>= 1<br>22<br>22<br>1                                |  |  |

| Waterman | Signal House Asset Inventory  |                                 |              |                        |       |
|----------|---|---------------------------------|--------------|------------------------|-------|
| ltem     | Image   | Inventory                       |              |                        |       |
| Rack 3   |   |                                 | Rack 3       |                        |       |
|          |   | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUNT |
|          |   | Switch Rectifier 120AC/120DC    |              | 250756-000             | 1     |
|          |   | Vital Relay                     | Alstom       | A62-429 (56001-926-01) | 4     |
|          |   | Vital Relay                     | Alstom       | A62-432 (56001-785-01) | 2     |
|          |   | Vital Relay                     | Alstom       | A62-122 (56001-921-07) | 1     |
|          | The second se | Vital Relay                     | Alstom       | A62-247                | 4     |
| Rack 4   |   |                                 | Rack 4       |                        |       |
| Nuck 4   | AU  | COMPONENT                       | MANUFACTURER | PART NUMBER            | COUNT |
|          |   | XFMR Loop Matching              | EPC          | 800-088019-200         | 1     |
|          |   | AC Vain Relay                   | Alstom       | A62-486                | 1     |
|          |   | Bal Imp                         | Alstom       | A3-117                 | 1     |
|          |   | 3 ohm Resistor ADJ              | GRS          | A3-207 (01246-1)       | 1     |
|          |   | 25 ohm Resistor ADJ             |              | 56105-11               | 1     |
|          |   | XFMR                            | Alstom       | 31094-000 (A95 50)     | 1     |
|          |   | 700 Amplifier Module            |              | 150-094017-022 Rev. D  | 4     |
|          |   | 701-2 CAB Coupler (2340 Feq.)   |              | 150-097031-010 Rev. O  | 2     |
|          |   | 702-1 Track Coupler (2970 Feq.) |              | 150-095025-034 Rev. B  | 1     |
|          |   | 702-1 Track Coupler (3870 Feq.) |              | 150-095025-034 Rev. B  | 1     |
|          |   | Chassis AF Track XMT TTT-2      | Getsgs       | 812097031-001          | 1     |
|          |   |                                 |              |                        |       |

| Waterman | Signal House Asset Inventory   |  |                        |  |   |  |  |  |  |
|----------|--|--|------------------------|--|---|--|--|--|--|
| ltem     | Image  | Inventory  |                        |  |   |  |  |  |  |
| Rack 5   | Contraction of the local division of the loc |  | Rack 5                 |  |   |  |  |  |  |
|          | A CONTRACTOR AND   | COMPONENT  | MANUFACTURER           | PART NUMBER  | COUNT   |  |  |  |  |
|          | 1  | 700 Amplifier Module   |                        | 150-094017-022 Rev. D  | 9   |  |  |  |  |
|          | THE A MEN  | 701-2 CAB Coupler (2340 Feq.)  |                        | 150-097031-010 Rev. O  | 6   |  |  |  |  |
|          |  | 702-1 Track Coupler (4410 Feq.)  |                        | 150-095025-034 Rev. B  | 1   |  |  |  |  |
|          |  | 702-1 Track Coupler (3510 Feq.)  |                        | 150-095025-034 Rev. B  | 1   |  |  |  |  |
|          | The second se  | 702-1 Track Coupler (3330 Feq.)  |                        | 150-095025-034 Rev. B  | 1   |  |  |  |  |
|          | Hard Hard Hard Hard  | 703-1 Receiver Module (3870 Feq.)  |                        | 150-095025-047 Rev. E  | 1   |  |  |  |  |
|          |  | 703-1 Receiver Module (4410 Feq.)  |                        | 150-095025-047 Rev. E  | 1   |  |  |  |  |
|          |  | 703-1 Receiver Module (3510 Feq.)  |                        | 150-095025-047 Rev. E  | 1   |  |  |  |  |
|          |  | Chassis AF Track XMT TTT-2   | Getsgs                 | 812-097031-001   | 3   |  |  |  |  |
|          |  | AF Track Receiver Chassis  | Getsgs                 | 812-097031-034   | 1   |  |  |  |  |
|          |  |  |                        |  |   |  |  |  |  |
| Rack 6   |  |  | Rack 6                 |  | ]   |  |  |  |  |
| Rack 6   |  | COMPONENT  | Rack 6<br>MANUFACTURER | PART NUMBER  | COUNT   |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module  | Rack 6<br>MANUFACTURER | <b>PART NUMBER</b><br>150-094017-022 Rev. D  | COUNT<br>11   |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)   | Rack 6<br>MANUFACTURER | <b>PART NUMBER</b><br>150-094017-022 Rev. D<br>150-097031-010 Rev. O   | <b>COUNT</b><br>11<br>7   |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B   | COUNT<br>11<br>7<br>1   |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B  | COUNT<br>11<br>7<br>1<br>1<br>1   |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B   | COUNT<br>11<br>7<br>1<br>1<br>1<br>1  |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)<br>702-1 Track Coupler (3330 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B  | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>1                                    |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (4950 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>703-1 Receiver Module (3330 Feq.)  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B  | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>1<br>2                               |  |  |  |  |
| Rack 6   |  | COMPONENT       700 Amplifier Module       701-2 CAB Coupler (2340 Feq.)       702-1 Track Coupler (4230 Feq.)       702-1 Track Coupler (3690 Feq.)       702-1 Track Coupler (3950 Feq.)       702-1 Track Coupler (3330 Feq.)       703-1 Receiver Module (3330 Feq.)       703-1 Receiver Module (4230 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. E<br>150-095025-047 Rev. E   | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2                          |  |  |  |  |
| Rack 6   |  | COMPONENT       700 Amplifier Module       701-2 CAB Coupler (2340 Feq.)       702-1 Track Coupler (4230 Feq.)       702-1 Track Coupler (3690 Feq.)       702-1 Track Coupler (3330 Feq.)       703-1 Receiver Module (3330 Feq.)       703-1 Receiver Module (3690 Feq.)       703-1 Receiver Module (3690 Feq.)   | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. E<br>150-095025-047 Rev. E   | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>1                     |  |  |  |  |
| Rack 6   |  | COMPONENT       700 Amplifier Module       701-2 CAB Coupler (2340 Feq.)       702-1 Track Coupler (4230 Feq.)       702-1 Track Coupler (3690 Feq.)       702-1 Track Coupler (3330 Feq.)       702-1 Track Coupler (3330 Feq.)       703-1 Receiver Module (3330 Feq.)       703-1 Receiver Module (3690 Feq.)       703-1 Receiver Module (3690 Feq.)       703-1 Receiver Module (3690 Feq.)       703-1 Receiver Module (4950 Feq.) | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E   | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>1<br>1<br>1      |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (3690 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>Chassis AF Track XMT TTT-2  | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E                          | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>1<br>1<br>3           |  |  |  |  |
| Rack 6   |  | COMPONENT<br>700 Amplifier Module<br>701-2 CAB Coupler (2340 Feq.)<br>702-1 Track Coupler (4230 Feq.)<br>702-1 Track Coupler (3690 Feq.)<br>702-1 Track Coupler (3330 Feq.)<br>703-1 Receiver Module (3330 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4230 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>703-1 Receiver Module (4950 Feq.)<br>Chassis AF Track XMT TTT-2<br>AF Track Receiver Chassis          | Rack 6<br>MANUFACTURER | PART NUMBER<br>150-094017-022 Rev. D<br>150-097031-010 Rev. O<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-034 Rev. B<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E<br>150-095025-047 Rev. E | COUNT<br>11<br>7<br>1<br>1<br>1<br>1<br>1<br>2<br>2<br>2<br>1<br>1<br>3<br>3<br>1 |  |  |  |  |

| Waterman | Signal House Asset Inventory   |                                 |              |               |          |  |  |
|----------|--|---------------------------------|--------------|---------------|----------|--|--|
| ltem     | Image  | Inventory                       |              |               |          |  |  |
| Rack 7   |  | Rack 7                          |              |               |          |  |  |
|          | a lattice and  | COMPONENT                       | MANUFACTURER | PART NUMBER   | COUNT    |  |  |
|          |  | HLC Cabinet with Lexan Cover    | Getsgs       | 226802-001    | 2        |  |  |
|          | A A A A A A A A A A A A A A A A A A A  | VLP                             | 0            |               | 2        |  |  |
|          | Totalinge provents and   | ACP-2                           |              |               | 1        |  |  |
|          | ACTIVATION IN T  | ACP-3                           |              |               | 1        |  |  |
|          |  | SSM                             |              |               | 2        |  |  |
|          |  | CCI                             |              |               | 2        |  |  |
|          |  | VSD                             |              |               | 1        |  |  |
|          | A THE A DESCRIPTION OF A DESCRIPTION OF  | VGP I/O-12V                     |              |               | 2        |  |  |
|          | The second se  | NV I/O                          |              |               | 3        |  |  |
|          |  | 32 NVI                          |              |               | 3        |  |  |
|          |  | VGPI 16                         |              |               | 2        |  |  |
|          | Depression 2   | CLA Board                       |              |               | 1        |  |  |
|          |  | RS-232                          |              |               | 4        |  |  |
|          |  | Modem                           |              |               | 2        |  |  |
|          |  | 12V Power Supply                |              |               | 2        |  |  |
| Back 8   |  |                                 | Rack 8       |               |          |  |  |
| Nuck O   | A CONTRACTOR OF A CONTRACTOR O | COMPONENT                       | MANUFACTI    | JRER PART NUM | IBER COU |  |  |
|          | · · · · · · · · · · · · · · · · · · ·  | Rotary Dials (Full Hemisphere-N | EW)          |               | 15       |  |  |
|          |  | Non-Vital Relays                |              |               | 57       |  |  |
|          |  |                                 |              |               |          |  |  |

| Waterman | Waterman Signal House Asset Inventory |                       |                           |                  |       |  |  |  |  |
|----------|---------------------------------------|-----------------------|---------------------------|------------------|-------|--|--|--|--|
| Item     | Image Inventory                       |                       |                           |                  |       |  |  |  |  |
| SCADA    |                                       |                       | SCADA                     |                  |       |  |  |  |  |
|          |                                       | COMPONENT             | MANUFACTURER              | PART NUMBER      | COUNT |  |  |  |  |
|          |                                       | Power Supply          | Schneider Electric        | TSXPSY1610       | 1     |  |  |  |  |
|          |                                       | CPU                   | Schneider Electric        | TSP57203         | 1     |  |  |  |  |
|          | Harris I.                             | Memory Card           | Schneider Automation S.A. | TSXMRP064P       | 1     |  |  |  |  |
|          | The second second second              | Input Card            | Schneider Electric        | TSXDEY32D2K      | 3     |  |  |  |  |
|          |                                       | Input Cord            | Schneider Electric        | TSXCDP203        | 6     |  |  |  |  |
|          |                                       | Output Card           | Schneider Electric        | TSXDSY32T2K      | 1     |  |  |  |  |
|          |                                       | Output Cord           | Phoenix Contact           | 22 98 438        | 2     |  |  |  |  |
|          |                                       | Input Card ABE7       | Schneider Electric        | ABE7H16C11       | 6     |  |  |  |  |
|          |                                       | Relays                | Phoenix Contact           | PLC-V8/FLK14/OUT | 4     |  |  |  |  |
|          |                                       | Power Supply          | Connect Power             | 992534 0024      | 1     |  |  |  |  |
|          |                                       | Battery Charger       | Connect Power             | 991628 0024      | 1     |  |  |  |  |
|          |                                       | Batteries             | CD Technologies           | UPS12-150MR      | 2     |  |  |  |  |
|          |                                       | Fiber Media Converter | GarrettCom Inc.           | CS14P-SST-48VDC  | 1     |  |  |  |  |
|          |                                       | Phone Line Extender   | Tcom                      |                  | 1     |  |  |  |  |
|          | E C                                   | Backplane             | Schneider Electric        | 21041811988      | 1     |  |  |  |  |

| Waterma | Waterman Signal House Asset Inventory  |  |                     |                          |       |  |  |  |  |  |  |  |
|---------|--|--|---------------------|--------------------------|-------|--|--|--|--|--|--|--|
| ltem    | Image  | Inventory  |                     |                          |       |  |  |  |  |  |  |  |
| Sides   | 100  | Но   | use Side-A          |                          |       |  |  |  |  |  |  |  |
| Ciaco   | and the second se  | COMPONENT  | MANUFACTURER        | PART NUMBER              | COUNT |  |  |  |  |  |  |  |
|         |  | FIA-Keypad Controller                              | NAPCO               | RPC3000LCDe              | 1     |  |  |  |  |  |  |  |
|         |  | Switch Heater Push Button Box                      |                     |                          | 1     |  |  |  |  |  |  |  |
|         |  | Но   | use Side-B          |                          | L     |  |  |  |  |  |  |  |
|         |  | CLCP 256 IO LED Driver Module                      | Getsgs              | Assy 227027-001 Rev. 806 | 1     |  |  |  |  |  |  |  |
|         |  | Power Supply CLCP 12VDC 20W                        | Getsgs              | 226609-200               | 1     |  |  |  |  |  |  |  |
|         | Tests Prove Lines  | House Side-C                                       |                     |                          |       |  |  |  |  |  |  |  |
|         |  | Но   | use Side-D          |                          |       |  |  |  |  |  |  |  |
|         | And a second sec | Fire Intrusion Alarm                               | NAPCO               |                          | 1     |  |  |  |  |  |  |  |
|         |  | Battery  | Genesis             | NP7-1212V,7.0Ah          | 2     |  |  |  |  |  |  |  |
|         | the second s   | Main Board   |                     |                          | 1     |  |  |  |  |  |  |  |
|         |  | Relay Boards                                       |                     |                          | 1     |  |  |  |  |  |  |  |
|         |  | Expansion Modules                                  |                     |                          |       |  |  |  |  |  |  |  |
|         | and the second se  | Double Throw Enclosed Switch 100A 240V AC/ 250V DC | Square D            | 40275-953-01             | 1     |  |  |  |  |  |  |  |
|         |  | Heavy Duty Safety Switch 100A 240V AC/ 250V DC     | Square D            | 40276-003-01             | 1     |  |  |  |  |  |  |  |
|         |  | Automatic Transfer Switch                          | Thompson Technology | TS 842MS3-100B-240-SE    | 1     |  |  |  |  |  |  |  |
|         |  | Hawk Event Recorder                                | Getsgs              | 251210-00001             | 1     |  |  |  |  |  |  |  |
|         |  | Surge Protector 18V AC 15A USSP                    | US&S                | N451552-0507             | 2     |  |  |  |  |  |  |  |
|         |  | Current Monitor                                    | NRS                 | 16775-00                 | 1     |  |  |  |  |  |  |  |
|         |  | 12V Power Supply                                   | NRS                 | ERB-C 12/501C            | 1     |  |  |  |  |  |  |  |
|         |  | Battery  | GNB                 | 50A15                    | 6     |  |  |  |  |  |  |  |



Federal Transit Administration

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