APPENDIX E – DECISIONS NEEDED SUMMARY

Appendix E is a webhosted tool designed to help with year-round mission support planning, feeding contractor’s requirements into the annual budget and funding decisions.

Appendix E includes proposals that have been screened and discussed by DOE RL, but are not fully validated and/or not completely vetted for mission support alignment by all SMEs.

Using Appendix E along with Appendix A, B, C, & D

In each annual planning calendar, a reported mission support need in Appendix C Contractor Requirements to J-3 defines a reliability project listed in Appendix B RPIP. These reliability projects meet needs and scheduled target dates from source documents in Appendix A Planning Document Reference List. Any requested need that cannot be met within the timeframe is reported in Appendix D System Gap Summary or in Appendix E, as appropriate.

Background & Purpose

ISAP “Appendix E – Decisions Needed Summary” was a section created by the ISAP Program staff in order to capture those mission needs that could not be identified as projects or gaps.

The table on the following pages resulted from ISAP Program staff taking a graded step approach to process quality improvements from FY2010 through FY2015. The purpose is to show how programmatic planning is implemented at the Hanford Site. A secondary purpose of the tracking is to enable RL staff to preview major efforts ahead requiring RL staff engagement and document reviews of master plans, reports and studies as well as time required ahead for various mission support actions and decisions.

Authority

The authority to develop the decisions needed list is the Mission Support Contract J-3 requirements for ISAP annual updates of HNF-44238 submitted to DOE-RL as CD0003 contract deliverable according to the mission support planning guidance established in MSC-GD-MS-54665, Planning Process Description Revision 2, 2016.

Table Organization

The table is organized from left to right, starting with the decision needed, the current status, timeframe for the decision, and any comments or benefit statement of a decision outcome.

For a cross reference key word search based on terms in the Infrastructure Stewardship Plan, RPP-RPT-55977 see Page 9 in this document.
<table>
<thead>
<tr>
<th>Decision Needed</th>
<th>Current Status</th>
<th>Timeframe for Decision</th>
<th>Comments/Benefit of Decision Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of the recommendation from the Emergency Services Strategic Plan (ESSP).</td>
<td>3 barricades control site access.</td>
<td>Ongoing activity in FY2016 and beyond.</td>
<td>Site Access Optimization Study report was prepared as part of the overall controlled site area footprint reduction strategy. Reduced hours at Rattlesnake Barricade was the only implemented outcome. Eight major initiatives are included in ESSP report.</td>
</tr>
<tr>
<td>Develop approach for broad public access to the Manhattan Project National Historical Park (MAPR), including vehicle access to some facilities as appropriate.</td>
<td>Ongoing actions for DOE RL and NPS. The Foundation Document was written in FY2016, and now issued in February, 2017.</td>
<td>Ongoing activity in FY2017 and beyond.</td>
<td>Responds to NDAA 2015 creating MAPR designation in December, 2014 as well as the signed agreement dated November, 2015 between the Department of Energy and the Department of Interior, National Parks Service (NPS).</td>
</tr>
<tr>
<td><strong>Fire</strong></td>
<td></td>
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</tr>
<tr>
<td>Close 300 Area Station 93 – Building 3709A.</td>
<td>Station 93 is currently in use.</td>
<td>Deferred to TBD after FY2020.</td>
<td>PNNL operations in the 300 Area require RadCon and chemical responses from Station 93. RL and MSA options include continuing to operate Station 93 or a new station to serve the southeast area of the site.</td>
</tr>
<tr>
<td>Close 100 Area Station 91 – Building 609.</td>
<td>Station 91 is currently in use.</td>
<td>4th Qtr. FY2018</td>
<td>Part of the Fire Station Consolidation Plan under review and discussion since FY2014.</td>
</tr>
<tr>
<td><strong>Emergency Management</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Assumption made that Energy Northwest will maintain sirens for Columbia Generating Station (CGS) through FY2020.</td>
<td>Currently in use.</td>
<td>FY2017 through FY2020.</td>
<td>ENW will continue to operate sirens until FY2020.</td>
</tr>
<tr>
<td>Determine changes needed to support implementation of broad public access as part of MAPR.</td>
<td>Ongoing actions for DOE RL and NPS. The Foundation Document was written in FY2016, and now issued in February, 2017.</td>
<td>Ongoing activity in FY2017 and beyond.</td>
<td>Responds to NDAA 2015 creating MAPR designation in December, 2014 as well as the signed agreement dated November, 2015 between the Department of Energy and the Department of Interior, National Parks Service (NPS). Legacy Management (LM) will manage MAPR within DOE going forward.</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>300 Area Road Condition Assessment &amp; Maintenance Transition.</td>
<td>Evaluation was completed in FY2016.</td>
<td>Transition from MSA is expected in FY2017 or beyond for road maintenance.</td>
<td>Pavement condition assessment is one factor for the planned next transition from MSA to others. RL owned buildings located in 300 Area will continue to be used by PNSO and staffed by PNNL until FY2054 under the RL/PNSO Operational Agreement signed in December, 2015. CHPRC expects 300 Area Roads And Grounds will be supported by MSC for 300-296 Remediation and 324 Demolition. However, a contract gap exists between MSC J-3 scope and CHPRC contract scope. As a next step, MSA expects to seek formal guidance from RL next to resolve the contract gap created by RCCC scope award to CHPRC. Also, HNF-58234, Revision 2 clarifies limits of responsibility (signatures by 4 site contractors are pending as June 19, 2017).</td>
</tr>
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<tr>
<td>Restricted route status candidates – site wide.</td>
<td>The candidate list for restricted status is in the FY2016 Roads Master Plan.</td>
<td>Annual reviews will implement restricted route status.</td>
<td>MSA recommended designating 8 miles in 11 route segments in 600 Area and 200 Areas for Restricted Status in FY2016, plus an additional 4 miles in FY2017. The restricted roads line item is tracked in the ISAP Appendix I - Footprint Reduction Plan.</td>
</tr>
</tbody>
</table>

**Electrical**

<table>
<thead>
<tr>
<th>Electrical Master Plan update.</th>
<th>Every 2 years, currently in process in FY2017.</th>
<th>1st/2nd/3rd Qtr. Every 2 years.</th>
<th>The update cycle is every two years with the next update is set for FY2019.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Area, remove substation A9 from service.</td>
<td>Currently in use.</td>
<td>4th Qtr. FY2018.</td>
<td>Removal of A9 Substation will provide footprint reduction. The A9 line item is tracked in the Footprint Reduction Plan.</td>
</tr>
<tr>
<td>400 Area, substation 451B disposition.</td>
<td>Currently in use.</td>
<td>Study was completed during FY2017.</td>
<td>Removal of 451B Substation will provide footprint reduction. Pre-project condition assessment of relays and switch gear, load consolidation opportunities and scoping is active during FY2017 by MSA EU staff performing the formal study project to Reconfigure, Renovate or Replace the 451B Substation. The 451B line item</td>
</tr>
</tbody>
</table>
### Water

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water System Master Plan update.</td>
<td>Completed in FY2016.</td>
<td>Every 2 years.</td>
<td>The contract required update cycle is every two years; next in FY2018, FY2020, etc.</td>
</tr>
</tbody>
</table>

### Sanitary Sewer

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitary Sewer System Master Plan update.</td>
<td>Completed in FY2016.</td>
<td>Every 2 years.</td>
<td>The contract required update cycle is every two years; next in FY2018, FY2020, etc.</td>
</tr>
</tbody>
</table>

### Information Technology

<table>
<thead>
<tr>
<th>Description</th>
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</thead>
</table>

### Natural Gas Pipeline

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Route alignment and selection of a preferred alternative route for 32 mile transmission line to 200 East Area from Pasco.</td>
<td>NEPA review is on hold, proposal is inactive for DOE owned land. No EIS report was issued.</td>
<td>No new date to reconsider the proposal.</td>
<td>The pipeline proposal has two major components. The Franklin County route segment was evaluated during FY2015 and FY2016 to possibly continue under a phased NEPA review approach for non-DOE owned lands to serve other regional needs. The conclusion reached was not enough private customer demand for the Franklin County segment to move forward separately.</td>
</tr>
</tbody>
</table>

### Land Management/Aggregates

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate NEPA Review for Evaporative Transpiration Barrier, a proposal by RL staff for a better estimate of cover material quantities in future years.</td>
<td>Discussed periodically within RL. Currently inactive.</td>
<td>No date shown.</td>
<td>NEPA review may be required for various mission support activities if the proposal makes major changes to CLUP or other NEPA action covering work in the clean-up mission. Also, a separate related proposal to generate aggregate material from building demolition will require siting a crushing / pulverizing plant, if this proposal moves forward.</td>
</tr>
</tbody>
</table>

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<tr>
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<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support development of the MAPR at Hanford.</td>
<td>New major action defined in FY2015 may require siting one or more proposed new facilities.</td>
<td>TBD.</td>
<td>Responds to NDAA 2015 for MAPR.</td>
</tr>
</tbody>
</table>

### Long Term Stewardship

<table>
<thead>
<tr>
<th>Description</th>
<th>Status</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area/Program</td>
<td>Quarter/Year</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Transition 300 Area</td>
<td>3rd Quarter FY2017</td>
<td>Part of LTS program activity. See LTS Program Plan.</td>
<td></td>
</tr>
<tr>
<td>5-Year CERCLA Review</td>
<td>2nd Quarter FY2017</td>
<td>Part of LTS program activity. See LTS Program Plan.</td>
<td></td>
</tr>
<tr>
<td>10-Year Inspection of SSE reactors.</td>
<td>3rd Quarter FY2025</td>
<td>Part of LTS program activity. See LTS Program Plan and website for next periodic inspection. DOE RL approval was provided for SSE inspections every 10 years, as a cost avoidance proposal.</td>
<td></td>
</tr>
<tr>
<td>Transition 100K Reactor Area</td>
<td>4th Quarter FY2021</td>
<td>Part of LTS program activity. See LTS Program Plan.</td>
<td></td>
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</tbody>
</table>

### Facilities

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>200E Area Office Facility(s) Planning Support*</td>
<td>In progress. Need</td>
<td>FY2018.</td>
<td>WRPS is working on using several alternative sites to meet the overall space need. The site locations are within 20E Area, North Richland, or other site areas. The projected total facility need for office space is in the range of 600-1,100 staff in 200E. To date, approximately 67 FTE new hires were added in FY2014 and FY2015 another 516 FTE new hires were added during FY2016, with required relocation of some workforce within 200E Area to North Richland. Five new leases in North Richland have been committed in FY2015 and FY2016.</td>
</tr>
<tr>
<td></td>
<td>ahead of WTP startup to support Tank Farms and DFLAW programs.</td>
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</table>

| Evaluate whether any additional facilities are required and where such facilities might be located to support MAPR. | No new facilities are identified in FY2016 (as of July 6, 2016). A visitor center has been mentioned at public meetings. Ongoing actions for DOE RL and NPS. The Foundation Document | TBD. | Responds to NDAA 2015 creating MAPR designation in December, 2014 as well as the signed agreement dated November, 2015 between the Department of Energy and the Department of Interior, National Parks Service (NPS). The River Corridor Integrated Land Planning Document shows “Gateway to the Hanford Reach visitor facilities” at the southeast corner of the existing intersection of Route 10 and SR-240. |
written in FY2016, and now issued in February, 2017.

| **HAMMER** | Support WTP startup training. | FY2017 & FY2018. | HAMMER support needs for the WTP startup is coordinated by One System Technical Group currently. A large number of training sessions and participation occurred in late FY2014, due to additional staff added in FY2014. Annual progress meets the changing staff profile.

| Continued utilization of HAMMER by the National training Center (NTC) to develop national training programs. | Ongoing consideration. | NTC status will help HAMMER with revenue diversification strategy, along with serving all of DOE for training.

| **Sitewide Services** | EJTA & Electronic Medical Records Replacement. | HPMC is discussing a proposal with RL and OCH interface contacts during FY2015. | Referred to Interface contacts in all affected organizations. | EJTA is a vital program to all site contractors, currently in dire need of a solution to mitigate the potential risk it poses to Hanford Contractors and stakeholders. EJTA must be in compliance with the new Hanford Site EJTA Procedure DOE-0394 Rev. 0 and 10 CFR 851 Worker Safety and Health. DOE-RL was provided with a viable system solution by HPMC that will replace both the outdated EJTA and the current Electronic Medical Records system that has been problematic. The cost to replace these systems is approximately $1 million as a long term solution for the Hanford Site program. When asked (March 2015), WRPS, CHPRC, WCH, and MSA all concur with the need for DOE attention to EJTA. WTP utilizes its own EJTA system and occupational medical provider.

| Fleet replacements to meet Executive Order mandates for GHG and carbon reduction requiring alternate fuel | FY2016 Fleet Services Master Plan was prepared. | Ongoing consideration for vehicle replacements at the rate 20 to 150 vehicles a year. | The current alternate fuel vehicle (AFV) ratio is 46% for overall fleet (3,197 vehicles and non-licensed equipment items including 3 buses). The AFV rate is dependent on and also limited by... |
vehicles (AFV), as well as Washington state and GSA fuel platform and emissions requirements.

market availability for heavy and specialized vehicles, plus GSA lease program available vehicles. U.S., Canada and Mexico new federal fleet carbon emission reductions was announced in June, 2016. Also, Washington State announced carbon emission regulation changes in 2016 not yet fully implemented in FY2017.

| Crane & Rigging, PSRP, RSS, Dosimetry User Based Services (UBS) equipment replacements. | The 4 major service areas in left hand column have identified needs shown on the ‘Services’ page in FY16 ISAP annual report. | Annual reviews of funded equipment replacements are needed, as needs to replace emerge, based on usage. | Equipment requires periodic replacement to support UBS activities. A list of candidate equipment is identified although the timing of each actual replacement can be within a given fiscal year with very short or no advance notice, when UBS equipment actually fails and needs immediate replacement by RL. |

* Anticipated facility will be needed and implemented sooner than shown.

Revised: June 21, 2017
Key Words

100 Area Station 91 – Building 609
100K Reactor Area Transition
1st Street Upgrade LAW to IDF Road to Dispose of Canisters
200E Area Office Facility(s)
219-S Facility Upgrade
219-S IQRPE assessment
219-S IQRPE Plan
222-S Building Fire Alarm System
222-S Gas Chromatography (GC)/Mass Spectrometry (MS)
222-S HVAC Upgrade
222-S Room Renovation - 1J
222-S Room Renovation - 4C
222-S Room Renovations - 4N
222-S Thermal Desorption Units (TDUs)
241-A and 241-AX TMACS Interface Equipment Permanent Power Supply
241-AN and 241-AP Replace Switchgear
241-AN Water Source
241-AN, 241-AP, 241-AW, and 241-SY Motor Control Center Electrical Modifications
241-AN/241-AP/241-AW/241-SY Replace MCC-1
241-AP and 241-AW Redesign and Fabricate New Slurry Distributors
241 - AP Service Water Flow Meter and Install Throttling Valve

241 - AW-106 Transfer Pump

241 - AY and 241 - AZ Farm Programmable Logic Controller Migration

241 - AY-101 and the 241 - AZ Valve Pit Install a direct transfer line between the two

241 - AZ Farm Power Upgrades

241 - AZ-102 Transfer Pump Power and Control Stand and Transfer Pump

241 - SY Farm Exhauster Refurbishment and Installation

241 - SY Farm outside paved road

241 - T Farm Interim Surface Barrier Repair/Replacement

241 - UX-302 - A Intrusion Mitigation

242 - A Change/Staging Structure

242 - A DSA Safety System Upgrades

242 - A Fire Alarm System

242 - A Monitor Control System (MCS) Hardware Upgrades

242 - A Motor Control Center (MCC) Upgrades/Replacement

242 - A Process Condensate Sampling Station

242 - A Reboiler Replacement Design and Procure Spare

242 - S C-100 Tank Emptying

2704HV East Parking Lot and Akron Connecting Road Upgrades

2704-HV Replace Building Fire Alarm System

272-WA Electrical Upgrades (incl. Parking Lot Light Pole)
272-WA Replace Building Fire Alarm System

300 Area Road Condition Assessment & Maintenance Transition.

300 Area Station 93 – Building 3709A

300 Area, 100-N Transition

32 mile transmission line to 200 East Area from Pasco

400 Area, substation 451B

702-AZ Ventilation System Software Update

Alternative Fuel vehicles

AP Farm Pit Upgrades – Water Scope

Carbon reduction

CERCLA

Cold Vapor Atomic Absorption Spectrometer

Columbia Generating Station

Consolidated Annulus Emergency Pumping

Consolidated Supernatant Emergency Pumping

Continued Electromagnetic Acoustic Transducer Development

Continued Phased Array Development

Critical Transfer System Components

Detail Design for Archive Storage Facility

DST In-Pit Heating

Electrical Master Plan

Electronic Medical Records Replacement
Emergency Services Strategic Plan (ESSP)
Employee Job Task Analysis (EJTA)
Enterprise Resources Planning
ETF (Replace 3X Basin Covers)
ETF Brine Loadout Station
ETF Chemical System Piping/Tank Replacement
ETF Chiller Replacement
ETF Peroxide Decomposer Vessel Repair/Replacement
ETF RO and ETF Evaporator Valve Redesign
ETF Verification Tank Coating Replacement
Facility Master Plan
Fire water upgrade along Buffalo Ave.
Flash Thermography Evaluation for Remote Inspection
General Purpose Facilities
General-Service Wireless Transfer Leak Detectors
Ground Stabilization and Void Assessment of SST Farms
HAMMER
Implementation Plan for DNFSB Recommendation 2012-2 Tank Farm Flammable Gas Safety Significant, Part 2
Inductively Coupled Plasma/Mass Spectrometer
ISS reactors
Laboratory Information Management System (LIMS) Upgrade
Manhattan Project National Historical Park
National Training Center (NTC)
NEPA Review for Evaporative Transpiration Barrier
Pit Jumper Replacements
Reconfigure 241-AP-02A Pit – Post 241-AY-102 Retrieval
Replace Access Control/Entry System (ACES) System
Restricted Roads route
Sample Receipt/Standards Laboratory Replacement
Sampling Equipment (Generator, Water Truck, X-Ray Machine, etc.)
Sanitary Sewer System Master Plan
Secondary Transformers
Spare Hose-In-Hose Transfer Line and Fittings (2-Inch and 4-Inch)
Strategy to Qualify Transfer Line Pressure Rating
Tank Farm Automation Upgrades
Tank Farm DST Feed Delivery Upgrades
TMACS Upgrade to ABB and Integration to TFMCS
Total Organic Carbon/Total Inorganic Carbon
Transfer Pumps
Upgrade TMACs Communication System for SSTs
User Based Services
Water System Master Plan
West Area Paint Shop
WTP