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March 29, 2016

Mr. James Carroll  
Administrator, Land Restoration Program  
Maryland Department of the Environment  
1800 Washington Boulevard, Suite 645  
Baltimore, MD 21230-1719

Subject: Q1 2016 Storm Drain Rehabilitation Schedule, Dundalk Marine Terminal  
Baltimore, Maryland

Dear Mr. Carroll:

Honeywell International Inc. (Honeywell) and the Maryland Port Administration (MPA) are submitting the enclosed updated "Storm Drain Rehabilitation Schedule (SDRS), Dundalk Marine Terminal, Baltimore, Maryland." This update is submitted pursuant to Section III.A of the April 5, 2006, Consent Decree, entered into by the Maryland Department of the Environment (MDE), MPA, and Honeywell.

The attached schedule reflects the status of the remedy implementation and long-term monitoring pursuant to MDE's letter dated July 30, 2012, and replaces the quarterly CMIPP update. This quarter, efforts have focused on completing the replacement of a portion of the 13.5th Street trunk line and on cleaning and inspecting the 12th Street trunk line that is part of the 2016 storm drain rehabilitation schedule.

If you have any questions or require additional information, please contact me at 973-455-4131.

Very truly yours,

**HONEYWELL INTERNATIONAL INC.**



Christopher M. French  
Project Coordinator

Attachment (2 copies)

cc: Mr. Mark Kreadle/MPA  
Mr. Robert Munroe/MPA  
Mr. Michael Daneker/Arnold & Porter

First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
<b>13th Street Storm Drain (Vault Completed 2008; Pipe Lining Completed 2009; Inlet/Manhole Lining Completed 2014)</b>			
<b>2008–2009 Storm Drain Rehabilitation Program (Vault)</b>			
Rehabilitation of storm drain: construction of tidal exclusion vault, installation of CIPP	Initial conditions assessment and design	150—200	Completed construction of tidal exclusion vault, lining of 1,200 LF of pipe in Q4 2009
<b>2011–2012 Storm Drain Rehabilitation Program (Storm Drain, Manholes/Inlets)</b>			
Rehabilitation of storm drain: lining of inlets/manhole with HDPE	Additional conditions assessment and design	150—200	Completed lining of 5 manholes and 9 inlets in 2011
<b>2013 Storm Drain Rehabilitation Program (Inlets)</b>			
Rehabilitation of storm drain: lining of inlets with HDPE	Additional conditions assessment and design	150—200	Completed lining of 5 inlets in 2014
<b>Construction Completion Report</b>			
Submit draft report to MDE	Completion of draft report	M	Complete: Submitted to MDE on June 13, 2013
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Submit final report to MDE	Receipt and Response to MDE comments	10–20	Not a critical path task
Prepare addendum to construction completion report	Completion of construction	20—30	Complete during Q2 2016
Submit draft addendum to MDE	Completion of addendum	M	Milestone Task
MDE review and comment period	Submittal of draft	TBD	Not a critical path task
Submit final report to MDE	Receipt and response to MDE comments	10—20	Not a critical path task

## First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
<b><i>13.5th Street Storm Drain (Vault Completed 2010; Initial Pipe Replacement Completed 2011; Additional Pipe Replacement and Inlet Lining Completed 2016)</i></b>			
<b><i>2010 Storm Drain Rehabilitation Program (Pipe Replacement, Rehabilitate Inlets)</i></b>			
Rehabilitation of storm drain: construction of tidal exclusion vault, pipe replacement and sealing of inlets/manhole	Initial conditions assessment and design	150—200	Completed construction of tidal exclusion vault, sealing of 3 inlets and 1 manhole, and replacement of 325 LF of pipe in Q4 2011
<b><i>2015 Storm Drain Rehabilitation Program (Pipe Replacement and Inlets)</i></b>			
Rehabilitation of storm drain: pipe replacement and lining of inlets/manhole with HDPE	Additional conditions assessment and design	150—200	Completed lining of 4 inlets, 1 manhole and replacement of 290 LF of pipe in Q1 2016
<b><i>Construction Completion Report</i></b>			
Submit draft report to MDE	Completion of draft report	M	Completed: Submitted to MDE on February 11, 2014
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Submit final report to MDE	Response to MDE comments	10—20	Not a critical path task
Prepare addendum to construction completion report	Completion of construction	20—30	Complete during Q2 2016
Submit draft addendum to MDE	Completion of addendum	M	Milestone task
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Submit final report to MDE	Response to MDE comments	10—20	Not a critical path task

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**First Quarter 2016 Storm Drain Rehabilitation Schedule**


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<b>Task</b>	<b>When Task Starts/Predecessor</b>	<b>Duration* (Calendar Days)</b>	<b>Status/Comments/Assumptions</b>
<b><i>12th Street Storm Drain (Start Date: January 2015, Planning Estimate End Date: December 2016)</i></b>			
<b><i>2015 Storm Drain Rehabilitation Program (Laterals and Inlets)</i></b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Clean inlets, vaults, manholes and drain lines	Mobilization	30–60	Completed Q1/Q2 2015
QA/QC inspection of drain	Ongoing during cleaning	30–60	Completed Q1/Q2 2015
Evaluate inspection documentation	Completion of inspection	10–15	Completed Q2 2015
Prepare design and specification documents	Completion of inspection report	15–30	Completed Q2 2015
<i>Implement Storm Drain Rehabilitation Program</i>			
Prepare SOW and bid documents	Completion of design	5–10	Completed Q2 2015
Procurement	Completion of SOW and bid documents	30–45	Completed Q2 2015
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, Completed Q3 2015
Rehabilitate inlets, manholes and drain lines	Procurement	100–150	Completed lining of inlets during Q4 2015. <i>The upper sections of the 12th Street storm drain were not accessible for relining due to tenant operations. This relining work will be performed in Q2 2016.</i>
QA/QC inspection of drain repairs	Ongoing during construction	10–15	Inspections to be performed during and after completion of rehabilitation activities
Notification to MDE of completion of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, following completion of rehabilitation

### First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
<b>2016 Storm Drain Rehabilitation Program (Trunk Line)</b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Clean manholes and trunk drain lines	Mobilization	30–60	Work delayed due to MPA request. Started cleaning Q1 2016 and will finish early Q2 2016
QA/QC inspection of drain	Ongoing during cleaning	30–60	Line cleaning to be completed early Q2 2016
Evaluate inspection documentation	Completion of inspection	10–15	Inspection to be completed in Q2 2016 after line cleaning
Prepare design and specification documents	Completion of inspection report	15–30	Work anticipated to be completed in Q2 2016
<i>Implement Storm Drain Rehabilitation Program (Trunk Line)</i>			
Prepare SOW and bid documents	Completion of design	5–10	Work anticipated to be completed in Q2 2016
Procurement	Completion of SOW and bid documents	30–45	Work anticipated to be completed in Q2 2016
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, provide MDE with updated schedule
Rehabilitate trunk line manholes and drain lines	Procurement	150–200	Work anticipated to be performed Q2/Q3 2016
QA/QC inspection of drain repairs	Ongoing during construction	10–15	Inspections to be performed during and after completion of rehabilitation activities
Notification to MDE of completion of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, following completion of rehabilitation
<i>Prepare Construction Completion Report</i>			
Prepare draft report	Completion of construction and performance monitoring	60–90	Prepared following completion of rehabilitation and performance monitoring
Submit draft report to MDE	Completion of draft report	M	Milestone task, anticipated Q2 2017
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Address MDE comments	Receipt of MDE comments	30–45	Not a critical path task
Submit final report to MDE	Response to MDE comments	10–20	Not a critical path task

## First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
<b>12.5th Street Storm Drain (Start Date: March 2015, Completed: October 2015)</b>			
<b>2015 Storm Drain Rehabilitation Program</b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Clean inlets, vaults, manholes and drain lines	Mobilization	30–60	Completed Q2 2015
QA/QC inspection of drain	Ongoing during cleaning	30–60	Completed Q2 2015
Evaluate inspection documentation	Completion of inspection	10–15	Completed Q2 2015
Prepare design and specification documents	Completion of evaluation	15–30	Completed Q2 2015
<i>Implement Storm Drain Rehabilitation Program</i>			
Prepare SOW and bid documents	Completion of design	5–10	Completed Q2 2015
Procurement	Completion of SOW and Bid Documents	30–45	Completed Q2 2015
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Completed Q2 2015
Rehabilitate vaults, inlets, manholes and drain lines	Procurement	200–300	Point repair completed Q2 2015 Lining of drain lines completed Q4 2015
QA/QC Inspection of drain repairs	Ongoing during construction	10–15	Inspections completed following rehabilitation activities
Notification to MDE of completion of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, following completion of rehabilitation
<i>Prepare Construction Completion Report</i>			
Prepare draft report	Completion of final QA/QC inspection	60–90	Not a critical path task; Q2 2016
Submit draft report to MDE	Completion of draft report	M	Milestone task; Q3 2016
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Address MDE comments	Receipt of MDE comments	30–45	Not a critical path task
Submit final report to MDE	Response to MDE comments	10–20	Not a critical path task

## First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
<b>14th Street Storm Drain (Start Date: August 2013, Planning Estimate End Date: November 2017)</b>			
<b>2014 Storm Drain Rehabilitation Program (Laterals, Inlets and Manholes)</b>			
Rehabilitate/replace inlets and manholes, and drain lines	MDE notification	200–300	Completed lining of 10 inlets and 4 manholes; 675 LF of drain lines lined with CIPP UV; 1 inlet replaced in Q4 2014. Completed 3 remaining manholes during Q4 2015.
<b>2017 Storm Drain Rehabilitation Program (Trunk Line—Planning Estimate Start Date: Q4 2016; Planning Estimate End Date: Q4 2017)</b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Condition assessment of trunk line	Conditions assessment	60–90	Complete in Q4 2016
Clean trunk line	Mobilization	30–60	Complete in Q1 2017
QA/QC Inspection of drain	Ongoing during cleaning	30–60	Complete in Q1 2017
Evaluate inspection documentation	Completion of inspection	10–15	Complete in Q1 2017
Prepare design and specification documents	Completion of inspection report	15–30	Complete in Q1/Q2 2017
<i>Implement 14th Street Trunk Line Rehabilitation Program (2017)</i>			
Prepare SOW and bid documents	Completion of design	20–30	Work to start following completion of design; work anticipated to be performed Q2 2017
Procurement	Completion of SOW and bid documents	30–45	Complete in Q2 2017
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, anticipated to be performed in Q2 2017
Rehabilitate trunk line	Procurement	100–200	Work anticipated to be performed Q2–Q4 2017
QA/QC Inspection of drain repairs	Ongoing during construction	10–15	Inspections to be performed during and after completion of rehabilitation activities
Notification to MDE of completion of rehabilitation and update schedule	Contractor mobilization	M	Milestone task
<i>Prepare Construction Completion Report</i>			
Prepare draft report	Completion of final inspections and performance monitoring	90–120	Not a critical path task
Submit draft report to MDE	Completion of draft report	M	Milestone task

### First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Submit final report to MDE	Response to MDE comments	10–20	Not a critical path task
<b>15th Street Storm Drain (Start Date: March 2009, Planning Estimate End Date: October 2018)</b>			
<b>2009 Storm Drain Rehabilitation Program (Completed November 2010)</b>			
Rehabilitate/replace inlets and manholes, and storm drain lines	Additional conditions assessment and design	100–200	Completed: Lining 6,186 LF of pipe; replacement of 72 LF of pipe; installation of 2 new manholes completed 2010; and installation of 200 LF of liner plate on B1 line
<b>2013 Storm Drain Rehabilitation Program (Completed February 2014)</b>			
Rehabilitate/replace inlets and manholes, and storm drain lines	Additional conditions assessment and design	100–200	Completed: Lining of 12 inlets with HDPE; replacement of 1 inlet and 1 manhole
<b>2014 Storm Drain Rehabilitation Program (Completed November 2014)</b>			
Rehabilitate/replace inlets and manholes, and storm drain lines	Conditions assessment and design	150–200	Completed: MH-332 replaced, MH-327 replaced. 35 inlets/manholes. 1,700 LF of CIPP UV lining completed Q4 2014
<b>2016 Storm Drain Rehabilitation Program (G Line – Work delayed in 2015 due to limited access)</b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Clean and CCTV G Line lateral	Contractor mobilization	5–10	Complete in Q2 2016
QA/QC inspection of drain	Ongoing during cleaning	5–10	Complete in Q2 2016
Evaluate inspection documentation	Completion of inspection	5–10	Complete in Q2 2016
Prepare design and specifications	Completion of inspection report	15–30	Complete in Q3 2016
<i>Implement Storm Drain Rehabilitation Program</i>			
Prepare SOW G Line lateral	Completion of design	5–10	Work to start following completion of design
Procurement	Completion of SOW and bid documents	30–45	Complete in Q3 2016
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, provide MDE with updated schedule
Rehabilitate inlets and storm drain	Procurement	60–75	Schedule depends on extent of repairs and/or need for rehabilitation; work to be performed in Q3 2016



### First Quarter 2016 Storm Drain Rehabilitation Schedule

Task	When Task Starts/Predecessor	Duration* (Calendar Days)	Status/Comments/Assumptions
QA/QC inspection of drain repairs	Ongoing during and after construction	5–10	Inspections to be performed during and after completion of rehabilitation activities
Notification to MDE of completion	Completion of final inspection	M	Milestone task; following lining
<b>2017 Storm Drain Rehabilitation Program (Trunk Line - Planning Estimate Start Date: Q2 2017; Planning Estimate End Date: Q4 2018)</b>			
<i>Inspection and Design of Storm Drain Rehabilitation Program</i>			
Conditions assessment			Complete in Q2 2017
Prepare design and specifications	Conditions assessment	30–45	Complete in Q2 2017
<i>Implement Storm Drain Rehabilitation Program</i>			
Prepare SOW and bid documents	Completion of design	5–10	Extent of trunk line repair dependent on conditions assessment; work to start following completion of design
Procurement	Completion of SOW and bid documents	30–45	Complete in Q3 2017
Notification to MDE of initiation of rehabilitation and update schedule	Contractor mobilization	M	Milestone task, provide MDE with updated schedule
Rehabilitate trunk line and manholes	Procurement	200–300	Work anticipated to be commence Q3/Q4 2017 and completed during 2018.
QA/QC inspection of trunk repairs	Ongoing during and after construction	30–60	Inspections to be performed during and after completion of rehabilitation activities
Notification to MDE of completion of rehabilitation and update schedule	Completion of final construction QA/QC inspection	M	Milestone task
<i>Prepare Construction Completion Report</i>			
Prepare draft report	Completion of final QA/QC inspection	60–90	Not a critical path task
Submit draft report to MDE	Completion of draft report	M	Milestone task
MDE review and comment period	Submittal of draft report	TBD	Not a critical path task
Address MDE comments	Receipt of MDE comments	30–45	Not a critical path task
Submit final report to MDE	Response to MDE comments	10–20	Not a critical path task

\* Task durations could vary based on inspection results and severity and scope of rehabilitation. M = milestone task; TBD = to be determined; NA = not applicable