Volume 5 has been redacted in its entirety

MTA Capital Construction

CONTRACT #6240

DESIGN-BUILD SERVICES
FOR
LIRR EXPANSION PROJECT
FROM FLORAL PARK TO HICKSVILLE

CONFORMED DOCUMENTS

VOLUME 5
TECHNICAL SPECIFICATIONS

December 27, 2017

(Book 1 of 2)
CONTRACT #6240

DESIGN-BUILD SERVICES
FOR
LIRR EXPANSION PROJECT
FROM FLORAL PARK TO HICKSVILLE

CONFORMED DOCUMENTS

VOLUME 5
TECHNICAL SPECIFICATIONS

December 27, 2017

(Book 2 of 2)
### TECHNICAL SPECIFICATIONS
#### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Civil Work, Structures and Drainage (TP3.4, 3.5, 3.6, 3.7, 3.8, 3.10)</strong></td>
<td>NYSDOT Specification Rev. 1</td>
</tr>
<tr>
<td>02820</td>
<td>High Security Fence</td>
</tr>
<tr>
<td><strong>Alignment and Track (TP3.9)</strong></td>
<td></td>
</tr>
<tr>
<td>34 11 26.13</td>
<td>Track Rail Ballast Rev. 1</td>
</tr>
<tr>
<td>34 11 26.16</td>
<td>Track Rail Subballast Rev. 1</td>
</tr>
<tr>
<td><strong>Stations and Architecture (TP3.12, 3.14)</strong></td>
<td></td>
</tr>
<tr>
<td>05 51 00</td>
<td>Metal Stairs</td>
</tr>
<tr>
<td>07 11 13</td>
<td>Bituminous Dampproofing</td>
</tr>
<tr>
<td>07 25 00</td>
<td>Weather Barrier</td>
</tr>
<tr>
<td>07 62 00</td>
<td>Sheet Metal Flashing and Trim</td>
</tr>
<tr>
<td>07 81 23</td>
<td>Intumescent Mastic Fireproofing</td>
</tr>
<tr>
<td>07 84 00</td>
<td>Firestopping</td>
</tr>
<tr>
<td>07 90 05</td>
<td>Joint Sealers Rev. 1</td>
</tr>
<tr>
<td>08 11 13</td>
<td>Hollow Metal Doors and Frames</td>
</tr>
<tr>
<td>08 31 00</td>
<td>Access Doors and Panels</td>
</tr>
<tr>
<td>08 43 13</td>
<td>Aluminum Framed Storefronts</td>
</tr>
<tr>
<td>08 51 13</td>
<td>Aluminum Windows</td>
</tr>
<tr>
<td>08 71 00</td>
<td>Door Hardware</td>
</tr>
<tr>
<td>08 80 00</td>
<td>Glazing</td>
</tr>
<tr>
<td>08 91 00</td>
<td>Louvers</td>
</tr>
<tr>
<td>08 97 00</td>
<td>Structural Glass Company Rev. 1</td>
</tr>
<tr>
<td>09 21 16</td>
<td>Gypsum Board Assemblies</td>
</tr>
<tr>
<td>09 90 00</td>
<td>Painting and Coating</td>
</tr>
<tr>
<td>10 29 00</td>
<td>Bird Control Rev. 0</td>
</tr>
<tr>
<td>10 42 50</td>
<td>Signage</td>
</tr>
</tbody>
</table>
Traction Power (TP3.17)

08 90 00 Louvers
09 96 01 High Performance Coating (Insulating Floor Covering) Rev. 1
10 44 00 Fire Extinguishers, Cabinets and Accessories Rev. 1
23 05 13 Common Motor Requirements HVAC Equipment
23 05 93 Testing, Adjusting, and Balancing for HVAC Rev. 1
23 08 00 Commissioning of HVAC Rev. 1
23 09 00 Instrumentation and Control for HVAC
23 09 93 Sequence of Operations for HVAC Controls
23 31 13 Metal Ducts
23 31 16 Nonmetal Ducts
23 33 00 Air Duct Accessories
23 34 23 HVAC Power Ventilators
23 41 00 Particular Air Filtration
23 82 39 Electric Space Heating Unit Rev. 1
26 01 26 Field Testing Rev. 1
26 05 00 Basic Electrical Materials and Methods Rev. 1
26 05 19 Conductors and Cables Rev. 1
26 05 23 Supervisory Control Cables
26 05 26 Grounding and Bonding Rev. 1
26 08 00 Factory Testing Rev. 1
26 09 00 PLC, SCADA & MPR Rev. 1
26 09 13 AC Control Cabinet Rev. 1
26 11 13 Prefabricated Electrical Equipment Building Rev. 1
26 13 00 Medium Voltage AC Switchgear Rev. 2
26 20 00 Auxiliary Electrical Equipment Rev. 1
26 23 00 DC Switchgear Rev. 1
26 25 00 Enclosed Bus Assemblies Rev. 1
26 26 00 AC to DC Conversion Assemblies Rev. 1
26 32 10 Signal Power Motor Generator
26 32 20 Motor-Generator Control & PLC Cabinets Rev. 1
26 33 00 Battery Power Systems Rev. 1
26 51 00 Interior Luminaires Rev. 1
26 56 00 Exterior Lighting Rev. 1
28 10 00 Intrusion Alarm & CCTV Systems Rev. 1
28 31 00 Fire Alarm System Rev. 1
29 00 00 Wireless Snowmelter Control

**Signals and Train Protection (TP3.19)**

01500 Product and System Testing Rev. 1
01510 Signal Microprocessor Compliance Plans Rev. 1
01730 Operation & Maintenance Manuals
13570 Railroad Control and Instrumentation Rev. 1
13571 Signal Enclosures Rev. 1
13572 Event Recorders Rev. 1
13574 DC Electric Switch Heater Enclosures
13576 Local Control Panels Rev. 1
16100 Common Work Results for Electrical
16110 Underground Ducts and Raceways for Electrical Systems
16120 Above-Ground Raceways and Boxes
16121 Single Conductor Power Cable
16122 Multi-Conductor Power Cable
16123 Track Wire
16124 Signal Wire
16125 Shielded Twisted Pair Signal Cable
16126 Signal Cable
16750 Vital Programmable Logic Controller (VPLC) Rev. 1
16751 Non-vital Programmable Logic Controller (NVPLC) Rev. 1
16752 Signal SCADA