# FINAL DOCUMENT Book #

Version 2011

**JOINT TRENCH PARTNERS**

**BOSTON / CAMBRIDGE /SOMERVILLE**

## 

# *Manhole Management*

# *Policies and Procedures*

### FINAL DOCUMENT

### Document History

### Revision Date Description

|  |  |  |
| --- | --- | --- |
| DRAFT | 1/9/2000 | Initial Draft for Client Review |
| DRAFT | 1/12/2000 | Revised Draft for Client Review |
| DRAFT | 1/17/00 | Revised Draft for Client Review |
| DRAFT | 2/1/00 | Revised Draft for Client Review |
| DRAFT | 4/20/2000 | Final from JTP Partners Comments and client review |
| FINAL | 9/27/2000 | JTP-LIMS Ready |
| Revision 1 | 8/24/01 | Revision to Contact Names, and updated references |
| Revision 2 | 4/1/06 | Revision to Contact Names, and updated references |

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**Section 1 – Introduction**

**1.1**

April 1, 2006

Dear Joint Trench Partners:

In an effort to standardize the way we access and work in the JTP Partner manhole system, we have developed this comprehensive document entitled Manhole Management Policies and Procedures. The purpose of this document and process is to maintain the integrity of the manhole facilities, satisfy the local mandatory city requirements and the accompanying infrastructure critical to providing uninterrupted quality service to all the JTP Partners.

This document was designed with four guiding principles in mind:

* Safeguarding Personnel, the Public, Municipalities right-of-way permitting process, each JTP Partners Property and the underground Facilities, ‘meet-me-manholes’.
* Providing the Cities of Boston, Cambridge and Somerville a uniform, fair policy to all JTP Partners that have participated in the build including the lead partner and future participates.
* Standardizing Practices for all JTP Partners for protection and safety of all.
* Providing All Partner and subsequent customers with Outstanding Service.

In order to deploy an effective and streamlined process, Bay State Network Services, LLC (BAY STATE) will serve as the administrator for this procedure on behalf of the lead partner (Level 3). This streamlined process will be deployed via a secure web site which each JTP Partner and the cities of Boston, Cambridge, and Somerville will have 24 by 7 access.

At the completion of each section of construction, the secure web site will post pathway occupancy information, as-built drawings, manhole butterflies, digital photos and other critical information. Each partner will then possess the necessary tools for planning their network infrastructure in a cost effective manner.

We look forward to working with you in concert to deploy a process that will better serve all of our interests now and in the future years of maintenance and network expansions.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Michael Murray

Level 3 OSP Manager

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**Section 2 – Process Flow Chart 2.1**





**Section 3 - Manhole Entry Procedures**

# TO ALL JOINT TRENCH PARTNERS OCCUPYING JOINT

# TRENCH PARTNER CONDUIT SYSTEM

The following is the lead partner’s policy to be followed by all Joint Trench Partners requiring access to the Joint Trench Partner’s pathway system.

**Note:** As a condition of being allowed to enter and work in the JTP manhole system, you are required to comply with all applicable federal, state and local laws, including those relating to the protection of health, safety and the environment.

# MANHOLE POLICY

### 3.1 Routine Scheduled Work

When a Joint Trench Partner requires entrance into a JTP manhole system (future refer to system) to perform routine work, A BAY STATE ENGINEER(s) (Attachment ‘A’ – p13) for the geographical area must be notified at least seven (7) Days in advance. The BAY STATE ENGINEER will coordinate, providing an Inspector to be present during the planned routine work operation and be responsible for updating of manhole records for each partner’s access and to provide the final billing associated with the JTP activity. If the area requires a manhole opening number, the BAY STATE ENGINEER will provide the contact number to the Joint Trench Partner. If multiple vendors need simultaneous access to a particular manhole(s) the BAY STATE ENGINEER will work with the different vendors to coordinate scheduling. All JTP Routine Scheduled Work will be posted on the secure web site for all JTP Partners information to coordinate their respective work without overlapping another partners’ work. This will be a first come first serve schedule for Routine Scheduled Work.

**3.2 Routine Maintenance Work**

When a Joint Trench Partner requires entrance to the system to perform routine maintenance work, the process is the same as 3.1 Routine Scheduled Work.

**3.3 Emergency Repairs**

When a Joint Trench Partner requires emergency access to the system during normal working hours, (8:00 AM to 5:00 PM), the BAY STATE ENGINEER for the geographical area will be the initial point of contact. If the BAY STATE ENGINEER is not available or the emergency occurs outside of normal working hours, the Joint Trench Partner will provide the BAY STATE ENGINEER via THE SECURE WEB SITE, and / or the 24 by 7 page protocol the necessary information identified on the attached JTP – MANHOLE ENTRY NOTIFICATION FORM (Attachment ‘B’ – p14). BAY STATE will dispatch an inspector who will be sent immediately to the location. BAY STATE will notify the respective city permitting office of the emergency activities. The JTP Partner may begin Emergency Repairs immediately after arrival to the site. The BAY STATE ENGINEER will inspect the manhole(s) entered and all repair activities. The BAY STATE Engineer will be responsible after the repairs to update the record information for all JTP partners’ information and for all associated billing. In the event of a major cable failure; multiple partner’s cable, BAY STATE will be on site to coordinate the restoral for all partners.

**Criteria Consideration for Major Failure Restorals:**

|  |
| --- |
| * All things being equal - Earliest reported trouble first |
| * Is the outage service affecting? |
| * Is there redundancy in the cable run? |
| * Regional Bay State Engineer should be called on all failures 24 x 7 @ (508) 304-4723. Tell 24 by 7 operator your **company name** and that you have a **JTP Emergency Alert** for immediate Bay State response. If you have an emergency but it does not require immediate action please specify your **company name** and that you have a **JTP NON Emergency Alert.** The Bay State Engineer will schedule and dispatch pending JTP request. All Emergency contacts shall be updated by each partner by email to bwhitaker@baystatens.com. |
|  |

**3.4 Manhole Sediment / Water**

As a condition of being allowed to enter and work in the system, you are required to comply, at your expense, with all applicable laws, including those relating to the protection of the health, safety and the environment. Therefore, Level (3) Communications – reminds you that if you remove any sediment from manholes, you must manage this waste in full compliance with the law.

The attached lists (Attachment ‘A’ p13) indicate the Engineer(s) for each geographical area as well as fax, telephone, 24 by 7 and secure Web URL information.

Questions pertaining to the above may be directed to your local BAY STATE ENGINEER or Level (3) OSP Manager.

Level (3) / BAY STATE Communications Procedures

The following procedures will apply to all tenants occupying the manhole / conduit system of the Joint Trench Partners

##### 3.5 Planning: Determine the route to be used within the JTP Partner’s manhole conduit system:

1. Notify BAY STATE engineer of your request at least seven (7) Days prior to starting the placement of the fiber cable. This is accomplished via email and or call.
2. Include with this notification a diagram of your intended route, with proposed splice locations and proposed slack coils.
3. When a lateral is required from a JTP manhole, the partner must provide a detailed engineered manhole penetration diagram that comply with the specification titled “Knockout Patch Details” in section drawing within this appendix of this manual.
4. Obtain necessary permissions (i.e. city permits, traffic safety plan, police support, etc.)

A mandatory project meeting will be scheduled to review the procedures and detailed scope of work to be followed while working within the conduit system to insure that all participating tenant’s facilities are protected, all required safety processes will be enforced, municipalities right-of-way permitting process is adhered too, and that there will be no scheduling conflicts with others.

When you wish to schedule a project meeting in the beginning phase of your work, please call the appropriate BAY STATE personnel.

### 3.6 INSURANCE REQUIREMENT:

### 

"Prior to the occupancy and during the term of use of the JTP Manhole and Conduit System, Each tenant shall procure and maintain the following minimum insurance coverage: (a) Workers' Compensation in compliance with all applicable statutes of appropriate jurisdiction. Employer's Liability with limits of **$1,000,000** each accident; (b) Commercial General Liability (for bodily injury, property damage, personal injury and advertising injury) with combined single limits of **$2,000,000** each occurrence; and (c) "All Risk" Property insurance covering all of Tenant's personal property located in the Conduit System and (d) automobile liability (for bodily injury and property damage) of **$1,000,000** combined single limit per accident. Tenant's Commercial General Liability policy shall be endorsed to show Level 3 and BAY STATE as the additional insured (and their parent/sister companies, their members, directors, officers, employees and agents and other parties as may be designated in writing). All policies shall include a waiver of any rights or subrogation against Level 3 and BAY STATE (and their parent/sister companies, their members, directors, officers, employees and agents and other parties as may be designated in writing). Tenant shall furnish Level 3 and BAY STATE with certificates of insurance demonstrating that Tenant has obtained the required insurance coverage prior to entry or occupancy of the Conduit System. Such certificates shall contain a statement that the insurance coverage shall not be materially changed or cancelled without at least thirty - (60) days’ prior written notice to Level 3 and BAY STATE. Tenant shall require any contractor entering the Conduit System on its behalf to procure and maintain the same types, amounts and coverage extensions as required of Tenant above." The certificate holder shall be Bay State Network Services, LLC, 61 North Street, Jefferson, MA 01522.

**3.7 BILLING**

Billing for all cost associated with routine or emergency work for conduit occupancy such as inspector costs and any other cost pertaining to the protection of all tenant’s facilities will be billed directly to the company placing their cable or work. In addition, any additional cost incurred to correct any sub standard condition left by any company and or their sub contractor will be billed directly to the company performing their work.

### 3.8 PERMISSION TO ENTER CONDUIT/ MANHOLES

Three business days prior to scheduled work or entering the system you must contact, via email and/or phone, the local BAY STATE Engineer, to confirm document approval and notice to proceeds. BAY STATE will have an inspector on site during any operations taking place with the system.

### 3.9 Engineer Contact Information Attachment ‘A’

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Fax** | **Office #** | **CELL #** |
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| --- |
| **JOINT TRENCH PARTNERS REQUEST FORM**  **MANHOLE ENTRY NOTIFICATION & REQUEST FOR INSPECTOR**  **Date of Request:\_\_\_\_\_\_/\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Project #:\_\_\_\_\_\_\_\_\_\_\_\_\_\_**    **Company Entering Manhole:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Contact Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Company Number:\_\_( \_\_\_\_)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Fax # For Requesting Company:\_\_(\_\_\_\_)\_\_\_\_\_\_\_\_\_\_\_\_\_**    **Manhole(s) Ids: \_\_\_\_\_\_\_\_\_\_\_\_\_ Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cross Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Town/City:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  )  **Manhole(s) Ids: \_\_\_\_\_\_\_\_\_\_\_\_\_ Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cross Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Town/City:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**    **Manhole(s) Ids: \_\_\_\_\_\_\_\_\_\_\_\_\_ Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cross Street:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Town/City:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**    **Date of Manhole Opening:\_ \_\_\_/\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_ Time of Manhole Entrance:\_\_\_\_\_\_\_\_:\_\_\_\_\_\_am / pm\_**  **Date of Manhole Closing: :\_ \_\_\_/\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Number to Call For Verification:\_\_\_(\_\_\_\_\_)\_\_\_\_\_\_\_\_\_\_**  **Manhole Opening Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Manhole Closing Number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  (Level 3 Ticket # / Obtained By Bay State) (Level 3 Ticket # / Obtained By Bay State)  **Date Received By BAY STATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ BAY STATE Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  ( |

**Attachment ‘B’**

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**MAINTENANCE**

**Methods of Procedures**

**VERSION 2**

#### Last Modified March 12, 2003

# **Table of Contents**

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# 

# Introduction – Maintenance Request Form

This section shall contain an overview / summary of the work to be performed. All of the following fields are required (unless otherwise noted) and failure to submit all required information will lead to a rejection of the MOP.

Requestor’s name:       Requestor’s phone #:

Requestor’s group / organization:

Type of Maintenance:

Scheduled: SA  PSA  NSA

Demand Critical: SA  PSA

Requested Start Date / Time:

Date:       Time:       EST  CST  MST  PST

Requested End Date / Time:

Date:       Time:       EST  CST  MST  PST

Purpose of Maintenance Activity (if Demand Critical, explain in detail why):

Description of Maintenance Activity:

Location of Maintenance Activity:

Area(s) affected by Maintenance Activity:

Equipment Impacted by Maintenance Activity:

|  |
| --- |
| **Approval Information** |

Level 3 Manager’s Name: Michael Wiemer Manager’s Phone #:

Date Maintenance was approved:

Bay State Manager’s Name: Ben Whitaker Manager’ Phone #:

Date Maintenance was approved:

Personnel & Equipment Required

This section shall contain the required personnel & equipment necessary to perform the Maintenance.

Name:       Contact #:       Location:

Name:       Contact #:       Location:

Name:       Contact #:       Location:

|  |
| --- |
| **Sully MAC Maintenance Coordinator & On-site Maintenance Contact** |

|  |
| --- |
| **External Personnel (Contractor Information)** |

Name & Company:       Contact #:

Location and Description of Activities:

Name & Company:       Contact #:

Location and Description of Activities:

Name & Company:       Contact #:

Location and Description of Activities:

Name & Company:       Contact #:

Location and Description of Activities:

# **Tasks to be Completed:**

This section shall contain a detailed list of the specific tasks required to complete this Maintenance activity. Please include all supporting documents (tables, graphs etc…) that will provide a clear understanding of all that needs to be accomplished. This information is required and failure to submit all required information will lead to a rejection of the MOP.



# **Procedures**

This section shall contain the sequential ‘step by step’ instructions for performing specific tasks required to complete this Maintenance activity. Please include all supporting documents, see sections 3.5 thru 3.8, pages 10 and 11, that will provide a clear understanding of all that needs to be accomplished. This information is required and failure to submit all required information would lead to a rejection of the MOP.

1.

2.

3.

# Back-out Plan

This section shall contain the sequential ‘step by step’ instructions for backing out of Maintenance and returning all systems to their original configuration, in the event that the above Maintenance process is unable to be completed successfully. Please include all supporting documents (tables, graphs etc…) that will provide a clear understanding of all that needs to be accomplished.

* **Note: If back-out plan was initiated, please immediately communicate to BAY STATE.**

1. If work must cease the splice case will be sealed and dressed accordingly.
2. The Manhole closed.
3. All vehicles will be removed from street.
4. Return time coordinated with Inspector
5. A detail will be present at each Manhole at all times.
6. A new MOP with the new dates and times and detailed description of activity to be submitted to BAY STATE.

1.

2.

3.

By acceptance of this MOP, the requestor agrees to pay all JTP Network Administration fees incurred by BAY STATE with respect to inspection and asbuilt revision services associated with the MOP SOW.

# \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Requestors Signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name / Title

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date

# Submit Request

E-mail the completed MOP and associated documents (if applicable) to:

[bwhitaker@baystatens.com](mailto:bwhitaker@baystatens.com)

**Revision History of Level 3 MOP**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Reason for Revision** |
| 1.0 | 2/21/00 | Matt Roberts | New MOP Template |
| 1.1 | 9/27/00 | Frank Stanton | New Flow Chart for Norscan |
| 1.2 | 4/1/06 | Ben Whitaker | New Contact Information |

**Revision History of Manhole Management Manual**

|  |  |  |  |
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| **Version** | **Date** | **Author** | **Reason for Revision** |
| 1.0 | 2/21/00 | Matt Roberts | New MOP Template |
| 1.1 | 4/10/2000 | Louis Basantes | New MOP for JTP |
| 1.2 | 4/11/2000 | Frank Stanton | Revised form and MOP |
| 1.3 | 4/20/2000 | Frank Stanton | Removed L3 internal maintenance schedule |
| 1.4 | 8/24/01 | Chris Zack | Contact Personnel |
| 1.5 | 3/12/03 | Ben Whitaker | New Contact Information |
| 1.6 | 3/13/03 | Mike Murray | Updated 2.1 Flow Chart |

**Section 5 – Web Site Information**

**BAY STATE Website:** If you have any questions, comments or concerns pertaining to the JTP website, please address them to [bwhitaker@baystatens.com](mailto:bwhitaker@baystatens.com) and they will be reviewed.

**5.1 BAY STATE WEB SITE SYSTEM MENU**

[**http://www.baystatens.com**](http://www.baystatens.com)



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**Glossary of Terms**

|  |  |
| --- | --- |
| Butterfly Sketch | Simple drawing detailing manhole infrastructure, included number of paths / paths assigned |
| CAD Drawings | Computer Aided Design |
| Inspector | BAY STATE person overseeing all work operations in Level 3 Manhole Systems |
| JTP | Joint Trench Partners |
| LLC | Limited Liability Corporation |
| MOP | Method of Procedure – Level 3 document explaining nature and scope of work to be done in Level 3 system |
| BAY STATE Engineer | BAY STATE person responsible for coordinating work requests to Level 3 as well as managing BAY STATE Inspectors, scheduling work etc. |
| OSP | Outside Plant |
| Paths | Conduits in and out of manhole system |
| Straight Line Diagram | Simple diagram detailing Streets / Intersections / Manholes included in scope of work |
| Substandard Conditions | Conditions outside the realm of generally accepted Telecommunications Industry Standards. This would include leaving behind trash, cable scraps and other miscellaneous items. Also included would be any work outside of the policy guidelines that would compromise the integrity of the manhole infrastructure. |
| Vendor | Any Joint Trench Partner or Designee working in Level 3 Manhole System |

**Appendix**

1. **Manhole Grounding Typical**
2. **Duct Tag Typical**
3. **Typical Splice Manhole Detail**
4. **Knockout Patch Detail**
5. **Typical Manhole Butterfly**
6. **Duct Formation Detail**
7. **Typical Manhole Detail**
8. **Duct Plug Typical**

**Appendix**

1. **Manhole Grounding Typical**



1. **Duct Tag Typical**



1. **Typical Splice Manhole Detail**



1. **Knockout Patch Detail**



1. **Typical Manhole Butterfly**



1. **Duct Formation Detail**



1. **Typical Manhole Detail**



1. **Duct Plug Typical**

