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| **Tunnel Project Inspection Form** |
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| **Date of Report** |       |
| **Completed By** |       |

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| **Project** |       |
| **Contract Number** |       |
| **General Contractor** |       |
| **Project Superintendent** |       |
| **Start Date**  |       |
| **Expected Completion Date** |       |
| **No. of Workers in below ground p/shift** |       |
| **Number of Shifts** |       |
| **Hazardous Classification** | Gassy [ ]  Non-Gassy [ ]   |

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| **Monitoring/Ventilation** |
| **Oxygen Level (%)** |       |
| **Methane LEL (%)** |       |
| **CO2 Level (PPM)** |       |
| **H2S Level (PPM)** |       |
| **NO2 Level (PPM)** |       |
| **Other Gasses/Particulates**  |       |
| **Other Gasses/Particulates**  |       |
| **Other Gasses/Particulates**  |       |
| **Other Gasses/Particulates**  |       |
| **Cu ft. Fresh Air p/min** |       |
| **Velocity of Airflow p/min When Drilling/Blasting** |       |
| **Direction of Mechanical Air Flow is Reversible** | Yes [ ]  No [ ]  |

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| **Tunnel Operations/Activities in Progress** |       |
| **Summarize Claims Activities To Date** |       |
| **Summarize New Claims Since Last Report** |       |

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| **Item #** | **Check List** | **Rating****(S), (NI), (U), (NA)****(ratings defined below)** | **Action Required** |
| **1** | **Project Specific Safety & Health Program in Place*** **Compliance with Project Specific Safety & Health Program by all workers**
 |       | **[ ]**  |
| **2** | **Contractor Management Accountability Procedures/Measures in Place** |       | **[ ]**  |
| **3** | **Disciplinary Procedures/Measures in Place** |       | **[ ]**  |
| **4** | **Job Safety Task Analysis (JSTA) completed prior to commencing activities** |       | **[ ]**  |
| **4a** | **JSTA reviewed and documented w/crews prior to commencing activity** |       | **[ ]**  |
| **5** | **Subcontractor submitted pre-job safety plan prior to commencing activity** |       | **[ ]**  |
| **6** | **Employee Orientation Provided To All Employees & Documentation Log In Place*** **Minimum criteria established**
 |       | **[ ]**  |
| **6a** | **Subcontractor Employee Orientation Provided & Documentation Log In Place**  |       | **[ ]**  |
| **7** | **Visitor Control Procedures/Measures in Place** |       | **[ ]**  |
| **8** | **Site Worker Check-in/Check-out Procedures/Measures in Place** |       | **[ ]**  |
| **9** | **Weekly Tool Box Safety Meetings & Documentation Log** |       | **[ ]**  |
| **10** | **Weekly Management Safety Meetings & Documentation Log** |       | **[ ]**  |
| **11** | **Worker Safety Training Provided & Documentation Log In Place** |       | **[ ]**  |
| **12** | **Supervisor Safety Training Provided & Documentation Log In Place** |       | **[ ]**  |
| **13** | **Formal Contractor Safety Audits Performed - Safety Audits & Documentation Log** |       | **[ ]**  |
| **14** | **Fire Prevention Procedures/Measures in Place – compliance w/ 1926.800(m)*** **No more than 24 hours supply of diesel fuel stored underground**
 |       | **[ ]**  |
| **14a** | **Hot work permit system in place w/documentation maintain on site** |       | **[ ]**  |
| **14b** | **Fire Suppression System in place inside tunnel and along conveyor systems**  |       | **[ ]**  |
| **15** | **Written 100% Fall Protection Program in place for all operations 6ft or above – compliant w/OSHA Subpart M 1926.500** |       | **[ ]**  |
| **15a** | **Competent Persons designated as required by OSHA and on-site during active operations with fall exposures** |       | **[ ]**  |
| **15b** | **Personal fall arrest systems including single point anchorages, horizontal and vertical lifelines and other system components are designed and installed under the supervision of a “Qualified Person”** |       | **[ ]**  |
| **16** | **General Contractor, Competent Site Supervisor assigned and on-site at all times during construction*** **Site Supervisor meets established qualification requirements**
 |       | **[ ]**  |

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| **17** | **Designated Site Specific Site Supervisor, Safety Representative and Competent Foreman assigned and on-site for each subcontractor*** **Assignment criteria for above based on established requirements**
* **Designated persons meet established qualification requirements for those assignments**
 |       | **[ ]**  |
| **18** | **Competent Persons designated were required by OSHA and on-site during active operations*** **Required for; excavation, scaffolding, fall protection**
 |       | **[ ]**  |
| **19** | **De-Watering Systems - Flooding and Water Pumping Procedures/Measures in Place** |       | **[ ]**  |
| **19a** | **Back-up systems in place to ensure de-watering systems do not go off line** |       | **[ ]**  |
| **20** | **Air Monitoring Procedures In Place/Measures in Place (see table above)** |       | **[ ]**  |
| **21** | **Ventilation/Fresh Air Supply Procedures/Measures in Place (see table above)** |       | **[ ]**  |
| **22** | **Compressed Air Work - Hyperbaric Intervention Procedures/Measures in Place - compliance w/ 1926.803(a)** |       | **[ ]**  |
| **23** | **Shaft Under Construction in Compliance w/ 1926.800(4)** * **Full depth of the shaft face supported by casing or bracing**
 |       | **[ ]**  |
| **24** | **Tunnel Wall Stabilization and Support Procedures/Measures in Place - compliance w/ 1926.800(o)** * **Rock bolts torqued & tested**
* **Roof, face & walls inspected to determine ground stability**
* **Lose rock/ground scaled or supported**
 |       | **[ ]**  |
| **25** | **Communication Procedures/Measures b/t Underground & Above Ground Personnel in Place - compliance w/ 1926.800(f)** |       | **[ ]**  |
| **26** | **Self-Rescuers Readily Available and Provided Throughout Tunnel** |       | **[ ]**  |
| **27** | **Coordination of Emergency Services/Emergency Evacuations/Railroad or other transit authorities/ Local Fire Department or other Agency** |       | **[ ]**  |
| **28** | **Electrical Systems in Compliance w/ 1926.800(s)** * **Power lines insulated or located away from water lines, telephone lines, air lines, or other conductive materials so that a damaged circuit will not energize the other systems**
 |       | **[ ]**  |
| **29** | **Illumination Measures/Procedures in Place Within Tunnel That Allows Workers to Safely Maneuver and Work*** **Emergency lighting system in place**
 |       | **[ ]**  |
| **30** | **Drilling & Blasting Plan/Procedures in Place - compliance w/ 1926.900*** **Pre-blast surveys of surrounding structures (up to ½ mile radius) performed**
* **Seismic readings taken during each blast**
* **PPV at or below approved levels**
* **Vibration monitors in place on surrounding structures**
* **No overnight storage of explosives**
* **Approved blasting signage posted in surrounding area**
 |       | **[ ]**  |
| **31** | **Industrial Hygiene Procedures/Measures Addressing Silica and Other Environmental Contaminants in Place** |       | **[ ]**  |

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| **32** | **Haulage Equipment equipped with appropriate safety devices (audible alarms, lights, safety chains, seat belts) - compliance w/ 1926.602** |       | **[ ]**  |
| **33** | **Hoisting Procedures Involving Personnel in Place - compliance w/ 1926.800(t)** * **Warning light located and working at shaft bottom whenever load above is in movement**
 |       | **[ ]**  |
| **34** | **Crane Management Program in place and implemented – all site crane operations compliant w/established program** |       | **[ ]**  |
| **34a** | **Crane Operators are licensed and/or certified*** **Operator qualifications/license/certification verified and documentation maintained on site**
 |       | **[ ]**  |
| **34b** | **All cranes have recent annual inspection*** **Inspection verified before crane put into service**
* **Inspection documentation maintained on site**
 |       | **[ ]**  |
| **34c** | **Only qualified riggers authorized to perform rigging operations*** **Rigger’s qualifications have been verified**
* **Rigger’s qualification documentation maintained on site**
 |       | **[ ]**  |
| **34d** | **Operators perform daily pre-shift inspections of cranes**  |       | **[ ]**  |
| **34e** | **Crane inspection program in place w/documentation maintained on site** |       | **[ ]**  |
| **34f** | **Prior to any hoisting operation, verification in place confirming the weight of loads, crane configuration, crane size, ground conditions, and overhead utilities to ensure hoisting operations can be performed per the crane manufacturers load chart and safety requirements** |       | **[ ]**  |
| **35** | **Substance Abuse Policy written and implemented - applicable to all site workers** |       | **[ ]**  |
| **35a** | **Substance abuse testing policy requires Pre-employment, Random, Post-Accident and For Cause testing** |       | **[ ]**  |
| **36** | **Personal Protective Equipment policy in place requiring minimum of: 100% eye protection, hard hats, long pants work boots and short sleeve shirts** |       | **[ ]**  |
| **37** | **Written accident investigation procedures in place for all injuries, incidents and near misses*** **Includes determination of root cause**
 |       | **[ ]**  |
| **37a** | **Investigation reports completed in full and maintained on site*** **Established report format in place to consistently capture all required information**
 |       | **[ ]**  |
| **37b** | **Investigations “Lessons Learned” communicated to site employees** |       | **[ ]**  |
| **38** | **On site or local medical treatment facilities identified to treat worker injuries*** **Facility medical providers are aware of and assist with RTW program efforts**
 |       | **[ ]**  |
| **39** | **Emergency Evacuation Plan & Procedures Established and In Place - compliance w/ 1926.800(g)** * **Rescue personnel secured & trained**
 |       | **[ ]**  |
| **40** | **Coordination of Emergency Services/Emergency Evacuations/Tunnel Rescue w/ Local Fire Department or other Agency** |       | **[ ]**  |
| **41** | **QA/QC program and procedures in place** |       | **[ ]**  |
| **41a** | **Independent 3rd party inspection/engineering firms performing and documenting controlled inspections to verify work is in compliance with approved plans and specifications**  |       | **[ ]**  |
| **42** | **Construction Work Zone is properly segregated from the general public** |       | **[ ]**  |
| **42a** | **Where general public is exposed to the Work Zone, appropriate measures to safeguard the public are in place – compliant w/City, State and Local requirements**  |       | **[ ]**  |

***Checklist Rating Definitions:***

***Satisfactory (S)*** *rating; majority of the safety program/procedures/policy are implemented and are in compliance with project safety requirements*

***Needs Improvement (NI)*** *rating; certain elements of the safety program/procedures/policy are not satisfactorily implemented nor are in compliance with project safety requirements*

***Unsatisfactory (U)*** *rating; critical and/or numerous elements of the safety program/procedures/policy are not satisfactorily implemented nor are in compliance with project safety requirements exposing workers/public to hazardous conditions that may affect their safety and health*

***Not Applicable (NA)*** *rating; program/procedures/policy does not apply at this time, for this particular category*

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| **Overall Tunnel Analysis** |       |
| **Progress Photos** |  |  |  |

 ***See below for any recommended corrective actions***

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| **Recommended Corrective Actions****(Reference applicable check list # in comments)** | **Recommendation Number** | **Repeat Recommendation** | **Completed****Yes / No** | **Date Completed** |
| **Responsible Contractor**       |       | Yes [ ]  No [ ]  | Yes [ ]  No [ ]  |       |
| **Recommendation**       |
| **Photos**  |
|  |
| **Responsible Contractor**       |       | Yes [ ]  No [ ]  | Yes [ ]  No [ ]  |       |
| **Recommendation**       |
| **Photos**  |
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| **Responsible Contractor**       |       | Yes [ ]  No [ ]  | Yes [ ]  No [ ]  |       |
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| **Recommendation**       |
| **Photos**  |
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| **Responsible Contractor**       |       | Yes [ ]  No [ ]  | Yes [ ]  No [ ]  |       |
| **Recommendation**       |
| **Photos**  |
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| **Responsible Contractor**       |       | Yes [ ]  No [ ]  | Yes [ ]  No [ ]  |       |
| **Recommendation**       |
| **Photos**  |
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| **Report Contact Distribution List** |

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| **Company** | **Contact Name** | **Contact Email Address** |
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