

## **Appendix C: Traffic Management Plan**

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# **Traffic Management Plan For the Construction of the Eversource 115-kV Dual Circuit Underground Transmission Lines from Cos Cob Substation to new Greenwich Substation**

**Greenwich, Connecticut**

**PREPARED FOR**

**Eversource Energy**

**September 18, 2018**



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## SECTION 1 – INTRODUCTION

Alfred Benesch & Company has been retained to review the potential traffic impacts during the construction of Eversource's Greenwich Substation and Line Project, which consists of new double circuit underground transmission lines that will connect Eversource's existing Cos Cob Substation, located on Sound Shore Drive, with the new Greenwich Substation to be constructed at 290 Railroad Avenue, Greenwich Connecticut.

The transmission line route between the Cos Cob and Greenwich Substations is approximately 2.3 miles long and primarily follows town roads (See Exhibit 1). Beginning at Cos Cob Substation, the route will extend northwesterly from the Cos Cob Substation, cross Sound Shore Drive, and then run westerly, through the Cos Cob Train Station parking lot. The route will re-cross Sound Shore Drive in a southwesterly direction and travel to and in parallel between Sound Shore Drive and Interstate 95 (I-95) within the Connecticut Department of Transportation (CTDOT) right-of-way. The route will turn south and cross under the I-95 Southbound Exit 4 off-ramp and continue southwesterly under the mainline I-95 travel lanes. The route will meet the I-95 Northbound on-ramp and travel southwesterly towards Indian Field Road. The route will then continue southerly along Indian Field Road and turn westerly onto Bruce Park Drive. The route will follow Bruce Park Drive and continue southwesterly along Wood Road. At the intersection of Wood Road and Davis Avenue, the route will turn west and travel along Davis Avenue. At the intersection of Davis Avenue and Bruce Park Drive, the route will turn northeast and briefly follow Bruce Park Drive before leaving the roadway and traveling westerly to cross Indian Harbor and rejoin Davis Avenue on the west side of Indian Harbor. The route will travel west along Davis Avenue, continue briefly onto Indian Harbor Drive at the traffic circle, and then continue in a westerly direction onto Museum Drive. The route will follow Museum Drive and continue west along Arch Street, passing under I-95, before turning west onto Railroad Avenue and continuing to its terminal at the Greenwich Substation at 290 Railroad Avenue.

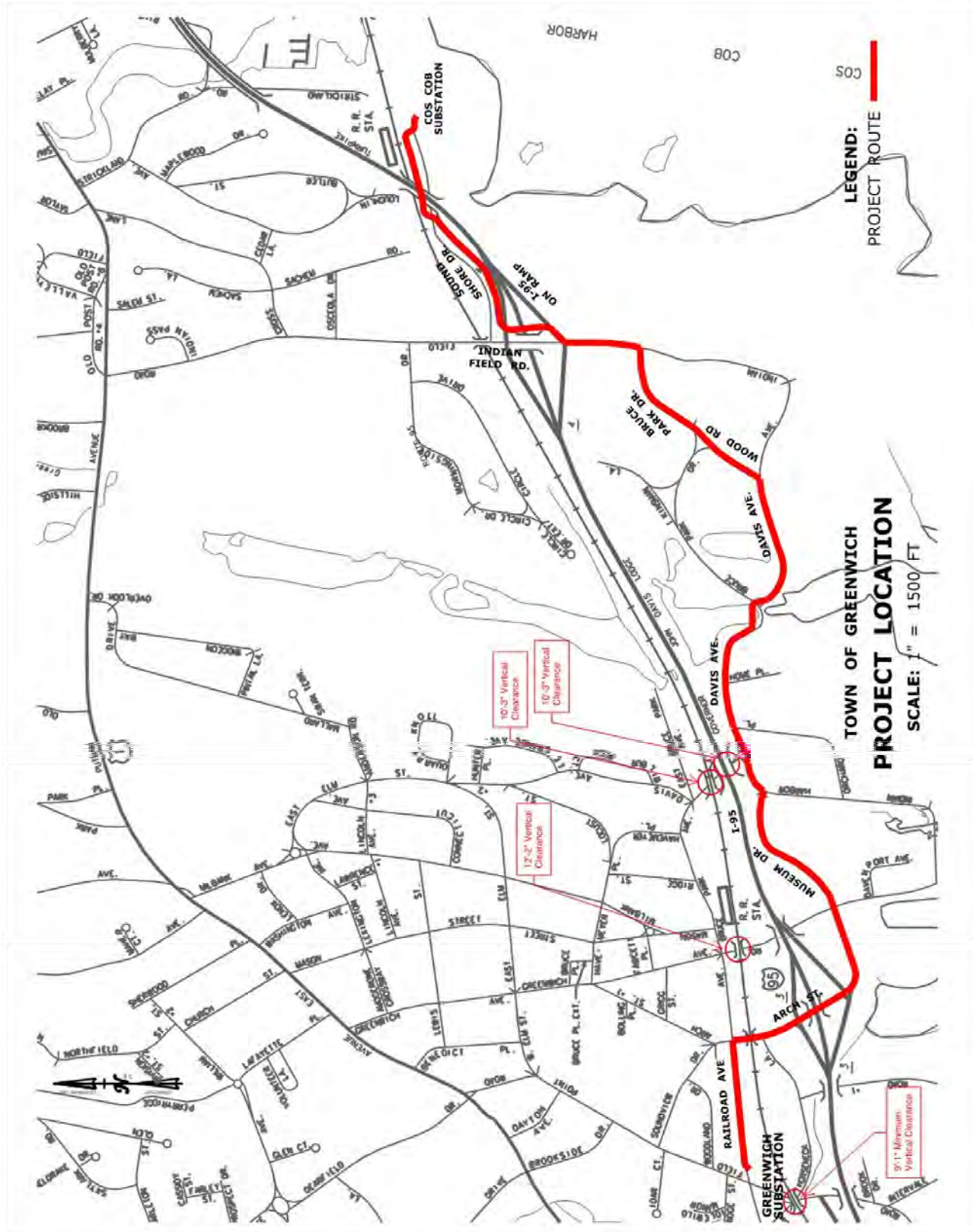
The transmission line route passes through Interchanges 3 and 4 of I-95 which provide two major access points to and from the Town of Greenwich. A major portion of the route passes through Greenwich's Bruce Park. The park is bordered on the south by residential neighborhoods whose only access is through the park. Although traffic data shows that volumes through the park are generally moderate, traffic can increase quickly if there is an incident on I-95, as the park is listed as an I-95 Diversion Route between Exits 3 and 4. The western portion of the route passes through a commercial district including the I-95 Exit 3 ramps which provide access to the nearby town offices and central business district. There are also two Metro North Commuter Rail stations within the limits of the project, the Greenwich and Cos Cob Train Stations, which provide a transportation link to the surrounding metropolitan areas.

The scope of work involved in the preparation of this document includes:

- Review the proposed construction methods proposed for the installation of the transmission line duct bank.
- Make visual observations of the surrounding area along the route.
- Obtain data pertaining to the physical characteristics of the roadways.
- Discuss traffic issues with the engineering staff of the Town of Greenwich.
- Obtain guidance from CTDOT and discuss traffic issues with CTDOT staff.



# EXHIBIT 1 – PROJECT LOCATION



## SECTION 2 - INSTALLATION CONSIDERATIONS

The transmission line route passes along a significant commuter route in the Town of Greenwich. This route has heavy traffic volumes during peak hours in certain segments of the corridor. In addition, much of the transmission route is also the I-95 Diversion Route for any traffic incidents which would force the closure of I-95 between Exits 3 and 4.

The installation of the cable duct bank, which will require the excavation of a continuous trench, in the travel way of town streets along with 6 pairs of vaults, including one pair within the Cos Cob Substation, placed at intervals ranging from 1,900 and 2,800 feet.

For safety, stoppages of traffic will be required to install the duct bank system. In certain areas, traffic will be directed around a work zone in a one-way alternating traffic operation. At other locations, a road may be closed, with traffic directed around the construction on signed detours. Any construction detours will require approval by the Greenwich Board of Selectmen.

Due to the size of the duct bank, and the anticipated construction methods required for the installation of the duct bank, these activities will require the excavation of a  $\pm$  4-foot-wide trench, with trenching expected to progress at an average rate of approximately 50 feet per day. Where one lane of traffic in each direction is to be maintained, the length of work zone will have minimal impact on the passage of traffic.

In addition to the traffic volumes, several other factors must be taken into consideration for lane closures including the following: the number of intersecting roadways and driveways, length of work area, lane and shoulder widths, and roadway grades.

In areas with primarily commercial development, the duct bank installation can be accomplished at night as allowed by local ordinances or applicable permits. In all other areas work is proposed to be completed during the day when there is less disturbance to residents and traffic is light enough to permit closure of a road or one lane of traffic.

There are 7 signalized intersections along the route at the following intersections:

- I-95 Southbound ramps and Indian Field Road
- I-95 Northbound ramps and Indian Field Road
- Arch Street, Museum Drive and Steamboat Road
- I-95 Northbound ramps and Arch Street
- I-95 Southbound Ramps and Arch Street
- Arch Street and Horseneck Lane
- Arch Street and Railroad Avenue
- Railroad Avenue and Field Point Road

The traffic signals must remain operational as construction progresses. Modified signal timings may be required. Greenwich Police Officers will be allowed to operate traffic signals in congested areas during construction. This operation must be coordinated with Greenwich Highway Traffic Operations and Police Departments prior to the initiation of construction near the traffic signals.

Any loop detectors observed along the project route are legacy equipment, are defunct, and will not be required to be restored.

### **SECTION 3 – DESCRIPTION OF PROPOSED ROUTE**

Listed below is a more detailed summary of the route. A brief narrative describes the roadway characteristics and the surrounding region within the segment.

The route exits the Cos Cob Substation at the northern side of the property and crosses Sound Shore Drive northwesterly to an existing parking lot for the Metro-North Railroad Cos Cob Station. It then travels west through the Cos Cob Train Station parking lot before crossing Sound Shore Drive again. The route crosses Sound Shore Drive to the grassed area between I-95 and Sound Shore Drive (highway right-of-way line). There is a sidewalk on the southern curb line of Sound Shore Drive from the Cos Cob Park entrance to the driveway to an office building opposite the east entrance to the Cos Cob Train Station parking lot. At this location the sidewalk crosses to the north side of Sound shore Drive. Sound Shore Drive is approximately 24 feet wide with one travel lane in each direction and is a Greenwich municipal road.

Just east of the intersection of Sound Shore Drive and Indian Field Road, the route turns southerly to cross the I-95 Southbound Exit 4 off-ramp. The off-ramp is 26 feet wide with two 11-foot wide travel lanes and 2-foot wide left and right shoulders. The route continues in a southerly direction, crossing under the I-95 travel lanes through a trenchless excavation, to the grassed area between the I-95 Northbound Exit 4 on-ramp and I-95 Northbound travel lanes.

The duct bank travels southwest along the I-95 Northbound Exit 4 on-ramp. The on-ramp is approximately 24 feet wide with one lane, a 2-foot wide left shoulder, and a 10-foot wide right shoulder.

At the signalized intersection of the on-ramp and Indian Field Road the route turns south. The western side of the intersection is the off-ramp for I-95 Northbound, which is striped for two lanes. The northern side of the intersection carries Indian Field Road and travels over I-95, it is striped for three lanes with 2 lanes entering the intersection and 1 lane exiting the intersection. On the southern side of the intersection. Heading south, Indian Field Road is striped for 2 lanes with a painted median in the middle.

Heading south, Indian Field Road narrows from approximately 36 feet in width down to 21 feet as it approaches the intersection of Bruce Park Drive, which is controlled by stop signs. There are no painted shoulders on Indian Field Road. The route turns onto Bruce Park Drive, which travels southwest with a width of 24 feet with 1-foot shoulders on either side and carries one lane in each direction. There is a pedestrian walkway south of Bruce Park Drive separated by a landscaped strip.

As Bruce Park Drive turns west, Wood Road intersects with Bruce Park Drive as a one-way street northbound street entering Bruce Park Drive from the south. The route turns south along Wood Road, which is approximately 24 feet wide with no painted shoulders and is used for park access. There are pedestrian walkways on both sides of Wood Road, separated by a landscaped strip.

The intersection of Davis Avenue and Woods Road is uncontrolled. Davis Avenue carries one lane in each direction with a total width of about 24 feet with no painted shoulders. The route crosses Indian Harbor Pond, north of the existing Davis Avenue bridge and re-emerges on Davis Avenue, west of its intersection with Bruce Park Drive, where Davis Avenue diverges around a small landscaped traffic island. The route continues off the roadway pavement through the landscaped area and back into the Davis Avenue roadway where the east and west bound roadways merge at the west end of the landscaped area.

The travel lanes at the intersection of Davis Avenue and Indian Harbor Drive are split by landscaped traffic islands. Davis Avenue heads northerly under I-95 while the transmission line route proceeds westerly through the intersection with Indian Harbor Drive on the eastbound travel path. The westbound roadway narrows to approximately 17 feet wide, while the eastbound roadway is 27 feet wide. There are no painted shoulders on either Davis Avenue or Indian Harbor Drive. West of the intersection, the travel paths merge back to a 30-foot-wide roadway. There is a paved pedestrian walkway on the north curb line separated from the roadway by a 3-foot-wide grass strip of both Davis Avenue and Indian Harbor Drive.

At the intersection of Indian Harbor Drive and Museum Drive, the route continues west onto Museum Drive. There is a traffic island on Museum Drive which allows both directions of traffic to split around the island. The intersection is controlled by stop signs on Museum Drive. Museum Drive carries one lane in each direction with a total width of about 29 feet with no painted shoulders. The Bruce Museum has two driveways on the north side of Museum Drive. West of the eastern entrance to Bruce Museum there is on-street parking along the south curb line. Bruce Park playground is also situated along the route with one driveway on the south side of Museum Drive, across the street from the eastern entrance to Bruce Museum. There is a paved pedestrian walkway on the north curb line separated from the roadway by a 3-foot-wide grass strip along the entire frontage of Bruce Museum, west of this entrance the walkway is at the south curb line.

The route continues west through the signalized intersection of Museum Drive, Arch Street and Steamboat Road. From this intersection to the intersection with the I-95 northbound ramps, Arch Street is 40 feet wide with one lane in each direction and a right turn lane to the southerly leg of Steamboat Road. There are walkways on each curb line separated by 3' wide grass strips.

Arch Street curves northerly through the intersection with the I-95 Exit 3 Northbound ramps and under the overpass of I-95 to the intersection of the I-95 Exit 3 Southbound ramps. Each intersection with the I-95 ramps is signalized with video detection. Arch Street is 3 lanes wide approaching the I-95 Northbound ramps with one through lane in each direction and a right turn lane to the I-95 Northbound On-Ramp. The southbound direction of Arch Street at this intersection has one through lane and a double left turn lane to the I-95 Northbound on-ramp and two northbound lanes. At this location Arch Street is 56 feet wide. There are no painted shoulders on this segment of Arch Street. There are pedestrian sidewalks at the curb line in each direction of travel.

North of the I-95 overpass Arch Street is 56 feet wide with 2 through lanes in each direction and a northbound left turn lane to the I-95 Southbound on-ramp which continues to the Arch Street/Horseneck Lane intersection. There are sidewalks on each curb line for the length of Arch Street. There are no painted shoulders on this segment of Arch Street.

Arch Street continues north through the intersections of Horseneck Lane and Greenwich Place and under a railroad overpass bridge to the intersection with Railroad Avenue. This section of Arch Street is 56 feet wide with 2 through lanes in each direction and a northbound left turn lane to Railroad Avenue.

The intersections of Arch Street with Horseneck Lane and Railroad Avenue are both signalized with video detection. There are sidewalks on each curb line for the length of Arch Street. The development along Arch Street is commercial.

Railroad Avenue heading westerly from the intersection with Arch Street carries one lane of traffic in each direction and is generally 36 feet wide. There is on street parking which transitions from the north curb on the eastern end to the south curb further west. There is a sidewalk along the north curb on the east end the road and transitions to the south curb along the western end near the new substation.

#### **SECTION 4 – MAINTENANCE AND PROTECTION OF TRAFFIC**

Traffic control patterns for the placement of construction signs, traffic cones and drums and other appurtenances will be developed as necessary to direct traffic through construction zones. Where alternating one-way traffic, lane closures, detours, or maintenance of traffic through intersections is required, Town of Greenwich Police Officers will direct traffic through the construction zones. When Town of Greenwich Police Officers are not available, certified flaggers will be allowed to direct traffic. See Appendix A for standard CT DOT traffic control plans.

At locations where a segment of road may be closed during construction, proposed detour routes are described. Roads may only be closed during the allowable working hours (noted below in Section 4.1) All work areas must be restored to normal traffic patterns after each shift. The contractor shall be responsible to maintain safe, ADA compliant pedestrian walkways around areas of construction.

Listed below is a description of the Maintenance and Protection of Traffic operation to be used for the construction of each segment of transmission line including the allowable hours of construction. All work on CTDOT roadways will be performed in accordance with an encroachment permit to be obtained prior to the initiation of construction on these roadways. All work on Town of Greenwich Roadways will be performed in accordance with a Highway Permit to be obtained prior to construction. Eversource will obtain the Town Highway Permits and will follow the conditions outlined in this Maintenance and Protection of Traffic Section. Eversource will also obtain the CTDOT Encroachment Permits. The contractor shall comply with all conditions of CTDOT and Town permits.

The Contractor shall provide written notice to Eversource a minimum of 3 weeks prior to the start of construction on any segment of duct bank as delineated below in Section 4.1. Eversource shall provide written notice to the Town of Greenwich a minimum of 2 weeks prior to the start of construction on any segment of duct bank as delineated in Section 4.1. At a minimum the notice shall include the time for implementation of any detour or closure of traffic lanes.

When the Contractor is not actively working, the existing travel paths on all roadways shall be maintained. On Town roadways plating over the duct bank trench will be permitted only when the plates are recessed and pinned. Road plates will not be allowed to remain on the road over a weekend, holiday, or when a snow event is predicted.

The contractor will be responsible for snow plowing any sections of roads that are closed for construction to maintain access for local traffic.

Certain segments of duct bank construction cannot occur simultaneously due to interferences with detour routes. A segment interference chart, highlighting the segments that cannot be completed simultaneously, can be found at the end of Section 4.1.

There are four major impact areas to traffic on I-95 and they are summarized below. See appropriate segments for additional details.

- Shoulder closures for pipe jacking under I-95
  - State Police on-site for all access on I-95 Southbound side
  - Drainage from Indian Field Rd bridge to be maintained on I-95 South work area
  - Catch basins along I-95 North and South to be protected
  - No impact to existing lighting permitted
  - On the I-95 South work area the “Adopt a Highway” sign shall be removed for construction and replaced during restoration
  - On the I-95 North side no access to I-95 is permitted except installation of jersey barriers
  - Police or flaggers shall be used on the I-95 North work area for construction entry/exit on the Exit 4 Northbound entrance ramp
- Exit 4 Southbound exit ramp
  - Road plates must be recessed and pinned. No plates after last shift of the week or when there is a predicted snow event. Signs must note “uneven surfaces” to motorcyclists
  - Detour message must be posted one week in advance
  - Full time shoulder closure for duct bank/vault installation in grassy area between ramp and Sound Shore Drive
  - Exit ramp may only be closed for duct bank installation
  - Jersey barriers to remain until restoration is complete
- Exit 4 Northbound entrance ramp
  - Road plates must be recessed and pinned. No plates after last shift of the week or when there is a predicted snow event. Signs must note “uneven surfaces” to motorcyclists
  - Detour message must be posted one week in advance
  - Once duct bank construction clears the Indian Field Rd intersection no closures will be allowed
- Exit 3 I-95 North Exit and South Entrance ramps at Arch Street
  - One leg of each “Y” must remain open at all times
  - Police must be used to support traffic control at all times

Special requirements for Bruce Park are summarized below. Bruce Park is defined as the area from the intersection at Indian Field Road and Bruce Park Drive, to the Davis Avenue bridge over Indian Harbor. Special requirements for this section of the route include:

- Construction is limited to November 1 through April 30
- Wood Road may be closed “permanently” only while active construction is taking place in Bruce Park
- Contractor must install 6-foot tall chain link fence with visual screening around Wood Road (all four sides) while it is closed
- Contractor may store up to 6 pieces of construction equipment, up to 2,000 feet of pipe, and 2 loads of backfill/stone on Wood Road while it is closed.
- No concrete washout shall occur within Bruce Park
- The contractor shall install construction barricades along the park side of the work area

#### **4.1 Duct Bank - Vault Construction/Installation**

Listed below is a description of the Maintenance and Protection of Traffic operation to be used for the construction of each segment of the duct bank and splice vaults including the allowable hours of construction. Allowable hours of construction have been discussed with the Town of Greenwich. Work that occurs outside of Town Noise Ordinance Hours will need approval through a Noise Ordinance Variance.

##### **Segment # 1: Cos Cob Sub-Station to Sound Shore Drive**

###### **Station 1+20 to Station 6+60 including Splice Vault #1 A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**
- This segment is within the Cos Cob substation
- Access to the Cos Cob Park shall be maintained during construction.

##### **Segment # 2: Sound Shore Drive to Cos Cob Train Station Parking Lot**

###### **Station 6+60 to Station 7+30**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**
- This segment crosses Sound Shore Drive to the Cos Cob Rail station parking lot on the south side of the railroad.
- The contractor shall be allowed to close Sound Shore Drive during the allowable working hours. Traffic will be detoured from Sound Shore Drive to Sachem Lane to Station Drive to Strickland Road, **See Detour Plan 1.**
- Pedestrian traffic shall be maintained on a 4’ minimum width paved walkway through the construction site protected by construction fencing.
- The Contractor will implement provisions to allow emergency vehicle access at all times. Emergency Vehicle access shall be provided on an existing or temporary paved surface. The Contractor shall coordinate emergency vehicle access with the Town of Greenwich Emergency Services providers.

### **Segment # 3: Cos Cob Train Station Parking Lot**

#### **Station 7+30 to Station 14+00**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone. Pedestrian access through the parking lot to the train platforms shall be maintained at all times. In addition, the contractor shall off-set parking impacts in an adjacent parking lot. See Appendix C for Cos Cob Train Station Parking Lot Impact Plan.

### **Segment # 4: Sound Shore Drive crossing from Cos Cob Train Station Parking Lot to infield area between Sound Shore Drive and I-95**

#### **Station 14+00 to Station 16+00**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**
- The contractor shall be allowed to close Sound Shore Drive during the allowable work hours. Traffic will be detoured from Sound Shore Drive to Sachem Road to Station Drive to Strickland Road, **See Detour Plan 1A.**
- During construction in the west end of the parking lot, the Contractor will be allowed to close the west parking lot entrance during active work hours while maintaining the east entrance. See Appendix C – Cos Cob Train Station Parking Lot Impact Plan.
- The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- The Contractor will implement provisions to allow emergency vehicle access at all times. Emergency Vehicle access shall be on an existing or temporary paved surface. The Contractor shall coordinate emergency vehicle access with the Town of Greenwich Emergency Services providers.

### **Segment # 5: Sound Shore Drive infield area between Sound Shore Drive and I-95 Southbound Exit 4 off-ramp**

#### **Station 16+00 to Station 25+80 including Splice Vault #2 A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- Traffic lane closures on Sound Shore Drive will only be allowed between **9AM to 3PM Monday to Saturday (until 5PM on Saturday).** The contractor shall maintain one lane of alternating traffic at all times on a minimum of 14' wide travel path (Sound Shore Drive) on existing pavement at this location.
- The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- The contractor shall close the right shoulder of the I-95 Southbound Exit 4 off-ramp during duct bank installation between Sound Shore Drive and the ramp. Access to this construction area will be from Sound Shore Drive.



**Segment # 6: I-95 Southbound Exit 4 off-ramp from infield area between Sound Shore Drive and ramp to infield area between ramp and I-95 Southbound travel lanes**

**Station 25+80 to Station 26+80**

- Closure of one travel lane on the ramp will only be permitted between the hours of **9 PM to 5 AM Sunday to Thursday**. Closures would be limited to installation and removal of temporary precast concrete barrier along the shoulder.
- The contractor shall be allowed to close the Southbound Off-Ramp (duct bank installation only) between the hours of **9 PM to 5 AM Sunday to Thursday**. Traffic will be detoured to the I-95 Southbound Exit 3 off-ramp to Arch Street to I-95 Exit 3 Northbound On-Ramp to the I-95 Exit 4 Northbound off-ramp to Indian Field Road. **See Detour Plan 2.**
- The contractor shall close the right shoulder of the I-95 Southbound Exit 4 off-ramp during duct bank installation between Sound Shore Drive and the ramp. Access to this construction area will be from Sound Shore Drive.
- This segment cannot be closed at the same as Segment #8

**Segment # 7: Crossing I-95 Southbound and Northbound travel lanes**

**Station 26+80 to Station 30+00**

- Closure of one travel lane on I-95 northbound and southbound will only be permitted between the hours of **10PM to 5AM Sunday to Thursday**. Closures would be limited to installation and removal of temporary precast concrete barrier along the shoulder of I-95 and removal of construction spoils from the excavation.
- The contractor shall close the right shoulder of the I-95 in southbound direction. Access to this construction area will be from I-95.
- The contractor shall close the right shoulder of the I-95 in the northbound direction. Access to this construction area will be from the Exit 4 Northbound on-Ramp.

**Segment # 8: I-95 Northbound Exit 4 on-ramp to Indian Field Road**

**Station 30+00 to Station 31+40**

- The contractor shall be allowed to close the Northbound On-Ramp between the hours of **9PM to 5AM Sunday to Thursday**. Traffic will be detoured from the southbound Exit 4 on-ramp to the I-95 Southbound Exit 3 off-ramp to Arch Street to I-95 Exit 3 Northbound on-ramp. **See Detour Plan 3.**
- This segment cannot be closed at the same time as Segment #6

**Segment # 9: Indian Field Road from I-95 Exit 4 Northbound on-ramp to south of the Greenwich DPW facility entrance**

**Station 31+40 to Station 34+00**

- Working hours will be limited to **8PM to 5AM Sunday to Thursday**.
- The contractor shall maintain one lane of alternating one-way traffic during active work periods.

- Coordination with the Town of Greenwich will be required to maintain access to the DPW facility during active construction periods.
- This roadway segment is on the I-95 incident diversion route.

### **Segment # 10: Indian Field Road from the south of the Greenwich DPW facility entrance to Bruce Park Drive**

#### **Station 34+00 to Station 38+20**

- Working hours will be limited to **8PM to 5AM Sunday to Thursday**.
- The contractor shall be allowed to close Indian Field Road during the allowable working hours. Southbound traffic will be detoured onto I-95 southbound to Exit 3- Arch Street to Museum Drive to Davis Avenue to Bruce Park Drive. Northbound traffic will be detoured onto Bruce Park Drive to Davis Avenue to Museum Drive to Arch Street to the I-95 northbound Exit 3 on-ramp to I-95 northbound Exit 4 off-ramp to Indian Field Road. **See Detour Plan 4.**
- Coordination with residents along this roadway will be required to maintain access to Residential properties on Indian Field Road and Cobb Island Drive during active construction periods. The contractor will be allowed to work only one of the following two sections at a time: DPW facility to Cobb Island Drive or Cobb Island Drive to Bruce Park Drive.
- Coordination with the Town of Greenwich will be required to maintain access to the DPW facility during active construction periods.
- This roadway segment is on the I-95 incident diversion route.
- This segment cannot be closed at the same time as segments 20, 21, 22, and 23.

### **Segment # 11: Bruce Park Drive from Indian Field Road to Wood Road**

#### **Station 38+20 to Station 48+00**

- Working hours will be limited to **7AM to 5PM Monday to Friday and 9AM to 5PM Saturday**.
- The contractor shall be allowed to close Bruce Park Drive during construction. Bruce Park Drive must be restored at the end of each work day. No road plates may be left over the weekend, on a holiday or when a snow event is predicted. Both directions of traffic will be detoured on Davis Avenue to Indian Field Road. **See Detour Plan 5.**
- Pedestrian traffic shall be maintained on existing walkways. The active construction work area will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited to November 1 through April 30.
- Coordination with residents along this roadway will be required to maintain residential access during active construction periods.
- This roadway segment is on the I-95 incident diversion route.
- This section cannot be closed at the same time as Segments #13 and #14.

## **Segment # 12: Wood Road from Bruce Park Drive to Davis Avenue**

### **Station 48+00 to Station 54+60 including Splice Vault # 3 A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall be allowed to close Wood Road while there is active construction within Bruce Park. Traffic will be detoured on Davis Avenue to Indian Field Road. **See Detour Plan 6.**
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited to November 1 through April 30.

## **Segment # 13: Davis Avenue from Wood Road to Indian Chase Drive**

### **Station 54+60 to Station 61+40**

- Working hours will be limited to **7AM to 5PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall be allowed to close Davis Avenue during construction. No road plates may be left over the weekend, on a holiday or when a snow event is predicted. Both directions of traffic will be detoured on Bruce Park Drive to Indian Field Road. **See Detour Plan 7.**
- Coordination with residents along this roadway will be required to maintain residential access during active construction periods.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited to November 1 through April 30.
- This section cannot be closed at the same time as Segments #11 and #14.

## **Segment # 14: Davis Avenue from Indian Chase Drive to Bruce Park Drive**

### **Station 61+40 to Station 65+45**

- Working hours will be limited to **7AM to 5PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall be allowed to close Davis Avenue during construction. No road plates may be left over the weekend, on a holiday or when a snow event is predicted. Both directions of traffic will be detoured on Bruce Park Drive to Indian Field Road. **See Detour Plan 8.**
- Coordination with residents along this roadway will be required to maintain residential access during active construction periods.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited to November 1 through April 30.
- This section cannot be closed at the same time as Segments #11 and #13.

### **Segment # 15: Indian Harbor Crossing**

- Maintenance of Traffic at this location to be determined based on finalization of the proposed water crossing.

### **Segment # 16: Davis Avenue traffic split from Indian Harbor to traffic merge west of traffic island Station 72+00 to Station 75+40 including Splice Vault # 4 A & B**

- Working hours will be limited to **9AM to 3PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall maintain two-way traffic on the eastbound travel path of the split roadway.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

### **Segment # 17: Davis Avenue from Traffic Merge to Intersection of Indian Harbor Drive**

#### **Station 75+40 to Station 80+20**

- Working hours will be limited to **9AM to 3PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall maintain one lane of alternating traffic at all times on a minimum 11-foot-wide travel path on existing pavement at this location.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

### **Segment # 18: Intersection of Davis Avenue and Indian Harbor Drive**

#### **Station 80+20 to Station 83+00**

- Working hours will be limited to **9AM to 3PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall maintain one lane of alternating through traffic at all times on the westbound travel path around the traffic islands at the intersection. (The transmission line is located within the eastbound travel path south of the traffic islands.)
- The contractor shall maintain existing traffic on Davis Avenue north of the intersection to the I-95 underpass
- Traffic through this section will be controlled by Town of Greenwich Police Officers, Officers will be located at the traffic islands at each end of the construction zone maintaining through traffic and another Police Officer will be located at the intersection of Indian Harbor Drive and the northbound leg of Davis Avenue.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

## **Segment # 19: Indian Harbor Drive from Davis Avenue to Museum Drive**

### **Station 83+00 to Station 87+00**

- Working hours will be limited to **9AM to 3PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall maintain one lane of alternating traffic at all times on a minimum of 11-foot-wide travel path on existing pavement at this location.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

## **Segment # 20: Museum Drive from Indian Harbor Drive to Bruce Park Playground**

### **Station 87+00 to Station 90+00**

- Working hours will be limited to **8PM to 5 AM Sunday to Thursday.**
- The contractor shall be allowed to close Museum Drive during construction. Passenger cars will be detoured on Indian Harbor Drive to Bruce Park Drive to Steamboat Road. Trucks will be detoured from Arch Street to I-95 Northbound to Indian Field Road to Bruce Park Drive to Davis Avenue to Indian Harbor Drive. **See Detour Plan 9.**
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- Access to Bruce Museum shall be maintained at all times
- Access to Bruce Park Playground shall be maintained at all times.
- Temporary access to the W.R. Berkley Corp. shall be maintained from Davenport Avenue via Steamboat Road.
- This roadway segment is on the I-95 incident diversion route.

## **Segment # 21: Museum Drive from Bruce Park Playground to Steamboat Road**

### **Station 90+00 to Station 99+60**

- Working hours will be limited to **8PM to 5AM Sunday to Thursday.**
- The contractor shall be allowed to close Museum Drive during construction. Passenger cars will be detoured on Indian Harbor Drive to Bruce Park Drive to Steamboat Road. Trucks will be detoured from Arch Street to I-95 Northbound to Indian Field Road to Bruce Park Drive to Davis Avenue to Indian Harbor Drive. **See Detour Plan 9.**
- On street parking will be suspended during construction through this segment, coordination with the Greenwich Department of Parking Services is required prior to impacting parking spaces. The contractor will need to purchase each parking space (\$25/space/day) affected by the work
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- Access to Bruce Museum shall be maintained at all times.
- Access to Bruce Park Playground shall be maintained at all times.

- Temporary access to the W.R. Berkley Corp. shall be maintained from Davenport Avenue via Steamboat Road.
- This roadway segment is on the I-95 incident diversion route.

**Segment # 22: Arch Street/Museum Drive/Steamboat Road Intersection – Station 99+60 to Station 100+20**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday**
- The contractor will be allowed to close the Steamboat Road leg north of the intersection. Traffic will be detoured on onto Railroad Avenue to Arch Street. **See Detour Plan 10.**
- On street parking will be suspended during construction through this segment, coordination with the Greenwich Department of Parking Services is required prior to impacting parking spaces. The contractor will need to purchase each parking space (\$25/space/day) affected by the work.
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year’s Day.
- Traffic on Arch Street to Museum Drive and Steamboat Road to the south shall be maintained at all times.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

**Segment # 23: Arch Street from Steamboat Road to I-95 northbound ramps Station 100+20 to Station 105+50 including Splice Vault # 5 A & B**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday**
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year’s Day.
- The contractor shall maintain one lane of alternating traffic at all times on a minimum 12-foot-wide travel path on existing pavement at this location.
- When construction crosses the I-95 Northbound off ramp the contractor shall maintain a minimum of one lane of ramp traffic on a minimum 14’ travel path on existing pavement.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

**Segment # 24: Arch Street from I-95 northbound ramps to Railroad Avenue Station 105+50 to Station 116+20**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday**
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year’s Day.
- The contractor shall maintain one lane of traffic in each direction at all times on a minimum of 2-12-foot-wide travel paths on existing pavement at this location.

- When construction crosses the I-95 Southbound on ramp the contractor shall maintain a minimum of one lane of ramp traffic on a minimum 14'-wide-travel path on existing pavement.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- This roadway segment is on the I-95 incident diversion route.

### **Segment # 25: Intersection of Arch Street and Railroad Avenue**

#### **Station 116+20 to Station 117+20**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday**
- The contractor shall maintain one lane of alternating traffic at all times on a minimum of 11- foot-wide travel path on existing pavement at this location.
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year's Day.

### **Segment # 26: Railroad Avenue from Arch Street to Greenwich Substation**

#### **Station 117+20 to Station 128+88 including Splice Vault # 6 A & B**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday**
- The contractor shall maintain one lane of alternating traffic at all times on a minimum of
- On street parking will be suspended during construction through this segment, coordination with the Greenwich Department of Parking Services is required prior to impacting parking spaces. The contractor will need to purchase each parking space (\$25/space/day) affected by the work.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- Construction at this location will not be permitted between the Saturday before Thanksgiving to the Sunday after New Year's Day.
- During the installation of Splice Vaults 6 A & B The contractor shall be allowed to close Railroad Avenue, between Arch Street and Field Point Road. Eastbound traffic will be detoured onto Field Point Road to Sound View Drive to Arch Street. West bound Traffic will be detoured to Arch Street to Havemeyer Place to Mason Street to East Putnam Avenue (Route 1) to Field Point Road. **See Detour Plan 11.**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
1																										
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Red indicates Segments from the Traffic Management Plan that cannot overlap due to detour interference.

## 4.2 Cable Installation

Listed below is a description of the Maintenance and Protection of Traffic operation to be used for the cable installation at each splice vault including the allowable hours of construction. Cable installation will generally be in conformance with the corresponding Splice Vault segment maintenance of traffic plan as outlined in Section 4.1.

### Splice Vault #1A & B

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5 PM Saturday.**
- Construction at this location will be within the existing Cos Cob Sub Station.
- Access to the Cos Cob Park shall be maintained

### Splice Vault #2A & B

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- Traffic lane closures on Sound Shore Drive will only be allowed between **9AM to 3PM Monday to Saturday.** The contractor shall maintain one lane of alternating traffic at all times on a minimum of 14'-wide-travel path on existing pavement on Sound Shore Drive at this location.



- Access to the construction area will not be permitted from the I-95 southbound off-ramp. In addition, no lane closures on the off-ramp will be permitted during cable installation.
- Temporary Precast Concrete Barrier Curb will be placed along the right edge of pavement of the off-ramp to protect construction from ramp traffic.

### **Splice Vault #3A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- The contractor shall be allowed to close Wood Road during construction along this segment. Traffic will be detoured on Davis Avenue to Indian Field Road. **See Detour Plan 4.**
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited from November 1 to April 30.

### **Splice Vault #4 A & B**

- For cable installation between Splice Vault # 3 A & B and Splice Vault # 4 A & B, the contractor's work hours will be limited to **9AM to 3PM Monday to Friday and 9AM to 5 PM Saturday.**
- For cable installation between Splice Vault # 4 A & B and Splice Vault # 5 A & B, the contractor's work hours will be limited to **8PM to 5AM Sunday to Thursday.**
- The contractor shall maintain two-way traffic on the eastbound travel path of the split roadway.
- This roadway segment is on the I-95 incident diversion route.

### **Splice Vault #5 A & B**

- Working hours will be limited to **8PM to 5AM Sunday to Thursday.**
- The contractor shall maintain one-way alternating traffic on existing pavement during cable installation at this location.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year's Day.
- This roadway segment is on the I-95 incident diversion route.

### **Splice Vault #6 A & B**

- Working hours will be limited to **9PM to 5AM Sunday to Thursday.**
- The contractor shall maintain one-way alternating traffic on existing pavement during cable installation at this location
- On Street Parking will be suspended during construction through this segment, coordination with the Greenwich Department of Parking Services is required prior to

impacting parking spaces. The contractor will need to purchase each parking space (\$25/space/day) affected by the work

- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year's Day.

### 4.3 Cable Splicing

Listed below is a description of the Maintenance and Protection of Traffic operation to be used for the cable splicing at each splice vault including the allowable hours of construction. Vault installation will be in accordance with the corresponding Splice Vault segment maintenance of traffic plan as outlined in Section 4.2. A twenty-four hour a day/seven day per week splice trailer set-up over splice vaults will only be allowed while cable splicing is actively being performed. If active splicing is not being performed the splice trailer must de-mobilize and open the roadway to normal traffic operations.

#### Splice Vault #1A & B

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**.
- Construction at this location will be within the existing Cos Cob Sub Station.
- Access to the Cos Cob Park will be maintained
- Splicing equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed

#### Splice Vault #2A & B

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**.
- Traffic lane closures on Sound Shore Drive will only be allowed between **9AM to 3PM Monday to Saturday**. The contractor shall maintain one lane of alternating traffic at all times on a minimum of 14'-wide-travel path on existing pavement on Sound Shore Drive at this location.
- Splicing Equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed.
- Access to the construction area will not be permitted from the I-95 Southbound Exit 4 off-ramp.
- Temporary Precast Concrete Barrier Curb will be placed along the right edge of pavement of the off-ramp to protect construction from ramp traffic.

#### Splice Vault #3A & B

- The contractor shall be allowed to close Wood Road during construction along this segment. Traffic will be detoured on Davis Avenue to Indian Field Road. **See Detour Plan 4.**
- Splicing Equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed.

- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- Detour/Construction in Bruce Park is limited from November 1 to April 30.

### **Splice Vault #4 A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday.**
- Splicing Equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.
- The contractor shall maintain two-way traffic on the eastbound travel path of the split roadway.

### **Splice Vault #5 A & B**

- Working hours will be limited to **7AM to 6PM Monday to Friday and 9AM to 5PM Saturday**
- Splicing Equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed.
- The contractor shall maintain one-way alternating traffic on existing pavement during cable installation at this location.
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction barricades to prevent access by pedestrians into the construction zone.

### **Splice Vault #6 A & B**

- Working hours will be limited to **9 PM to 5 AM Sunday to Thursday.**
- The contractor shall maintain one-way alternating traffic on existing pavement during cable installation at this location.
- Splicing Equipment shall be allowed to remain over the splice vaults for the duration of splicing operations, **24 hours a day 7 days a week**, if splicing is being performed.
- On Street Parking will be suspended during construction through this segment, coordination with the Greenwich Department of Parking Services is required prior to impacting parking spaces. The contractor will need to purchase each parking space (\$25/space/day) affected by the work
- Pedestrian traffic shall be maintained on existing walkways. The active construction site will be protected by construction fencing to prevent access by pedestrians into the construction zone.
- Construction at this location will not be permitted from the Saturday before Thanksgiving to the Sunday after New Year's Day.

## **SECTION 5 – PAVEMENT RECONSTRUCTION**

At the completion of the installation of the duct bank and splice vaults the pavement will be restored according to the guidelines of the Town of Greenwich (when on local roads) and CTDOT specifications (on state roads).

Pavement restoration will be in accordance with the maintenance of traffic plan corresponding to the Duct Bank segment outlined in Section 4.1.

Contractor shall mill and pave both traffic lanes within the entirety of each segment, except for Sound Shore Drive. Refer to Appendix E: Restoration Plan for Disturbed Areas of Volume II-Part 1 – 115kV Double-Circuit Underground Transmission Line

Milled surfaces must be restored within 48 hours

# Appendix A

## CT DOT TRAFFIC PLANS

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## **SECTION 1.08 - PROSECUTION AND PROGRESS**

### **Article 1.08.04 - Limitation of Operations - Add the following:**

In order to provide for traffic operations as outlined in the Special Provision "Maintenance and Protection of Traffic," the Contractor will not be permitted to perform any work which will interfere with the described traffic operations on all project roadways as follows:

#### **Route I-95**

On the following State observed Legal Holidays:

New Year's Day  
Good Friday, Easter\*  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day\*\*  
Christmas Day

The following restrictions also apply:

On the day before and the day after any of the above Legal Holidays.

On the Friday, Saturday, and Sunday immediately preceding any of the above Holidays celebrated on a Monday.

On the Saturday, Sunday, and Monday immediately following any of the above Holidays celebrated on a Friday.

\* From 6:00 a.m. the Thursday before the Holiday to 8:00 p.m. the Monday after the Holiday.

\*\* From 6:00 a.m. the Wednesday before the Holiday to 8:00 p.m. the Monday after the Holiday.

#### During all other times

The Contractor shall maintain and protect traffic as shown on the accompanying "Limitation of Operations" charts, which dictate the minimum number of lanes that must remain open for each day of the week.

The Contractor will be allowed to halt Route I-91 traffic for a period not to exceed 10 minutes to perform necessary work, as approved by the Engineer, between 12:01 a.m. and 5:00 a.m. on all non-Holiday days.

**I-95 Exit 3 Southbound Off-Ramp**

Monday through Friday between 6:00 a.m. and 11:00 a.m. & between 3:00 p.m. and 6:00 p.m.

**All other Ramps and Turning Roadways**

Monday through Friday between 6:00 a.m. and 9:00 a.m. & between 3:00 p.m. and 6:00 p.m.

The Contractor will be allowed to close the Exit 4 Southbound Exit Ramp and detour traffic Sunday through Thursday between 9:00 p.m. and 5:00 a.m.

The Contractor will be allowed to close the Exit 4 Northbound On-Ramp and detour traffic Sunday through Thursday between 9:00 p.m. and 5:00 a.m.

**Additional Lane Closure Restrictions**

It is anticipated that work on adjacent projects will be ongoing simultaneously with this project. The Contractor shall be aware of those projects and anticipate that coordination will be required to maintain proper traffic flow at all times on all project roadways, in a manner consistent with these specifications and acceptable to the Engineer.

The Contractor will not be allowed to perform any work that will interfere with traffic operations on a roadway when traffic operations are being restricted on that same roadway, unless there is at least a one mile clear area length where the entire roadway is open to traffic or the closures have been coordinated and are acceptable to the Engineer. The one mile clear area length shall be measured from the end of the first work area to the beginning of the signing pattern for the next work area.



Eversource Facility Location I-95 NB in Greenwich Number of Through Lanes: 3							
Hour Beginning	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Mid	2	2	1	1	1	2	2
1 AM	2	1	1	1	1	1	1
2 AM	1	1	1	1	1	1	1
3 AM	1	1	1	1	1	1	1
4 AM	1	1	1	1	1	1	1
5 AM	1	2	2	2	2	2	1
6 AM	1	E	E	E	E	E	2
7 AM	2	E	E	E	E	E	3
8 AM	2	E	E	E	E	E	E
9 AM	3	E	E	E	E	E	E
10 AM	E	E	E	E	E	E	E
11 AM	E	E	E	E	E	E	E
Noon	E	E	E	E	E	E	E
1 PM	E	E	E	E	E	E	E
2 PM	E	E	E	E	E	E	E
3 PM	E	E	E	E	E	E	E
4 PM	E	E	E	E	E	E	E
5 PM	E	E	E	E	E	E	E
6 PM	3	E	E	E	E	E	3
7 PM	3	E	E	E	E	E	3
8 PM	3	3	3	3	E	E	3
9 PM	3	3	3	3	3	E	3
10 PM	2	2	2	2	2	3	3
11 PM	2	2	2	2	2	2	2

Eversource Facility Location I-95 SB in Greenwich Number of Through Lanes: 3							
Hour Beginning	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Mid	2	1	1	1	1	1	1
1 AM	1	1	1	1	1	1	1
2 AM	1	1	1	1	1	1	1
3 AM	1	1	1	1	1	1	1
4 AM	1	1	1	1	1	1	1
5 AM	1	2	2	2	2	2	2
6 AM	2	E	E	E	E	E	2
7 AM	2	E	E	E	E	E	3
8 AM	2	E	E	E	E	E	3
9 AM	3	E	E	E	E	E	E
10 AM	E	E	E	E	E	E	E
11 AM	E	E	E	E	E	E	E
Noon	E	E	E	E	E	E	E
1 PM	E	E	E	E	E	E	E
2 PM	E	E	E	E	E	E	E
3 PM	E	E	E	E	E	E	E
4 PM	E	E	E	E	E	E	E
5 PM	E	E	E	E	E	E	E
6 PM	E	3	3	3	3	E	E
7 PM	3	3	3	3	3	E	E
8 PM	3	3	3	3	3	3	3
9 PM	3	2	2	2	2	3	3
10 PM	3	2	2	2	2	3	3
11 PM	2	1	1	1	2	2	2

**On Holidays and within Holiday Periods, all Hours shall be 'E.'**

**‘E’ = maintain existing traffic operations = all available travel lanes, including exit only lanes, climbing lanes and all available shoulder widths shall be open to traffic during this period**

## **ITEM NO. 0971001A – MAINTENANCE AND PROTECTION OF TRAFFIC**

### **Article 9.71.01 – Description is supplemented by the following:**

The Contractor shall maintain and protect traffic as described by the following and as limited in the Special Provision "Prosecution and Progress":

#### **Route I-95**

The Contractor shall maintain and protect the minimum number of through lanes and shoulders as dictated in the Special Provision for Section 1.08 - Prosecution and Progress "Limitations of Operations - Minimum Number of Lanes to Remain Open" Chart, on a paved travel path not less than 12 feet in width per lane.

The Contractor shall be allowed to halt traffic for a period of time not to exceed 10 minutes for the purpose of erecting / removing overhead utilities. If more than one 10-minute period is required, the Contractor shall allow all stored vehicles to proceed through the work area prior to the next stoppage.

#### **Ramps and Turning Roadways**

The Contractor shall maintain and protect existing traffic operations.

Excepted therefrom will be those periods, during the allowable periods, when the Contractor is actively working, at which time the Contractor shall be allowed to maintain and protect a minimum of one lane of traffic, on a paved travel path not less than 12 feet in width.

The Contractor will be allowed to close the Exit 4 Southbound Exit Ramp and detour traffic as shown on Detour Plan 2 contained in the contract plans during the allowable periods.

The Contractor will be allowed to close the Exit 4 Northbound On-Ramp and detour traffic as shown on the Detour Plan 3 contained in the contract plans during the allowable periods.

### **Article 9.71.03 - Construction Method is supplemented as follows:**

#### **General**

The Contractor is required to delineate any raised structures within the travel lanes, so that the structures are visible day and night, unless there are specific contract plans and provisions to temporarily lower these structures prior to the completion of work.

When the Contractor is excavating adjacent to the roadway, the Contractor shall provide a 3-foot shoulder between the work area and travel lanes, with traffic drums spaced every 50 feet. At the end of the workday, if the vertical drop-off exceeds 3 inches, the Contractor shall provide a temporary traversable slope of 4:1 or flatter that is acceptable to the Engineer.

The Contractor, during the course of active construction work, shall close the lanes directly below the work area for the entire length of time overhead work is being undertaken. At no time shall an overhead sign be left partially removed or installed.

The Contractor shall not store any material on-site which would present a safety hazard to motorists or pedestrians (e.g. fixed object or obstruct sight lines).

The field installation of a signing pattern shall constitute interference with existing traffic operations and shall not be allowed, except during the allowable periods.

Construction vehicles entering travel lanes at speeds less than the posted speed are interfering with traffic, and shall not be allowed without a lane closure. The lane closure shall be of sufficient length to allow vehicles to enter or exit the work area at posted speeds, in order to merge with existing traffic.

### **Existing Signing**

The Contractor shall maintain all existing overhead and side-mounted signs throughout the project limits during the duration of the project. The Contractor shall temporarily relocate signs and sign supports as many times as deemed necessary, and install temporary sign supports if necessary and as directed by the Engineer.

### **Signing Patterns**

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein. Proper distances between advance warning signs and proper taper lengths are mandatory.

## **TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS**

The following guidelines shall assist field personnel in determining when and what type of traffic control patterns to use for various situations. These guidelines shall provide for the safe and efficient movement of traffic through work zones and enhance the safety of work forces in the work area.

### **TRAFFIC CONTROL PATTERNS**

Traffic control patterns shall be used when a work operation requires that all or part of any vehicle or work area protrudes onto any part of a travel lane or shoulder. For each situation, the installation of traffic control devices shall be based on the following:

- Speed and volume of traffic
- Duration of operation
- Exposure to hazards

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic.

If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.

When installing a traffic control pattern, a Buffer Area should be provided and this area shall be free of equipment, workers, materials and parked vehicles.

Typical traffic control plans 19 through 25 may be used for moving operations such as line striping, pot hole patching, mowing, or sweeping when it is necessary for equipment to occupy a travel lane.

Traffic control patterns will not be required when vehicles are on an emergency patrol type activity or when a short duration stop is made and the equipment can be contained within the shoulder. Flashing lights and appropriate trafficperson shall be used when required.

Although each situation must be dealt with individually, conformity with the typical traffic control plans contained herein is required. In a situation not adequately covered by the typical traffic control plans, the Contractor must contact the Engineer for assistance prior to setting up a traffic control pattern.

### **PLACEMENT OF SIGNS**

Signs must be placed in such a position to allow motorists the opportunity to reduce their speed prior to the work area. Signs shall be installed on the same side of the roadway as the work area. On multi-lane divided highways, advance warning signs shall be installed on both sides of the highway. On directional roadways (on-ramps, off-ramps, one-way roads), where the sight distance to signs is restricted, these signs should be installed on both sides of the roadway.

### **ALLOWABLE ADJUSTMENT OF SIGNS AND DEVICES SHOWN ON THE TRAFFIC CONTROL PLANS**

The traffic control plans contained herein show the location and spacing of signs and devices under ideal conditions. Signs and devices should be installed as shown on these plans whenever possible.

The proper application of the traffic control plans and installation of traffic control devices depends on actual field conditions.

Adjustments to the traffic control plans shall be made only at the direction of the Engineer to improve the visibility of the signs and devices and to better control traffic operations. Adjustments to the traffic control plans shall be based on safety of work forces and motorists, abutting property requirements, driveways, side roads, and the vertical and horizontal curvature of the roadway.

The Engineer may require that the traffic control pattern be located significantly in advance of the work area to provide better sight line to the signing and safer traffic operations through the work zone.

Table I indicates the minimum taper length required for a lane closure based on the posted speed limit of the roadway. These taper lengths shall only be used when the recommended taper lengths shown on the traffic control plans cannot be achieved.

**TABLE I – MINIMUM TAPER LENGTHS**

POSTED SPEED LIMIT MILES PER HOUR	MINIMUM TAPER LENGTH IN FEET FOR A SINGLE LANE CLOSURE
30 OR LESS	180
35	250
40	320
45	540
50	600
55	660
65	780

## **SECTION 1. WORK ZONE SAFETY MEETINGS**

- 1.a) Prior to the commencement of work, a work zone safety meeting will be conducted with representatives of DOT Construction, Connecticut State Police (Local Barracks), Municipal Police, the Contractor (Project Superintendent) and the Traffic Control Subcontractor (if different than the prime Contractor) to review the traffic operations, lines of responsibility, and operating guidelines which will be used on the project. Other work zone safety meetings during the course of the project should be scheduled as needed.
- 1.b) A Work Zone Safety Meeting Agenda shall be developed and used at the meeting to outline the anticipated traffic control issues during the construction of this project. Any issues that can't be resolved at these meetings will be brought to the attention of the District Engineer and the Office of Construction. The agenda should include:
- Review Project scope of work and time
  - Review Section 1.08, Prosecution and Progress
  - Review Section 9.70, Trafficpersons
  - Review Section 9.71, Maintenance and Protection of Traffic
  - Review Contractor's schedule and method of operations.
  - Review areas of special concern: ramps, turning roadways, medians, lane drops, etc.
  - Open discussion of work zone questions and issues
  - Discussion of review and approval process for changes in contract requirements as they relate to work zone areas

## **SECTION 2. GENERAL**

- 2.a) If the required minimum number of signs and equipment (i.e. one High Mounted Internally Illuminated Flashing Arrow for each lane closed, two TMAs, Changeable Message Sign, etc.) are not available; the traffic control pattern shall not be installed.
- 2.b) The Contractor shall have back-up equipment (TMAs, High Mounted Internally Illuminated Flashing Arrow, Changeable Message Sign, construction signs, cones/drums, etc.) available at all times in case of mechanical failures, etc. The only exception to this is in the case of sudden equipment breakdowns in which the pattern may be installed but the Contractor must provide replacement equipment within 24 hours.
- 2.c) Failure of the Contractor to have the required minimum number of signs, personnel and equipment, which results in the pattern not being installed, shall not be a reason for a time extension or claim for loss time.
- 2.d) In cases of legitimate differences of opinion between the Contractor and the Inspection staff, the Inspection staff shall err on the side of safety. The matter shall be brought to



the District Office for resolution immediately or, in the case of work after regular business hours, on the next business day.

### **SECTION 3. INSTALLING AND REMOVING TRAFFIC CONTROL PATTERNS**

- 3.a) Lane Closures shall be installed beginning with the advance warning signs and proceeding forward toward the work area.
- 3.b) Lane Closures shall be removed in the reverse order, beginning at the work area, or end of the traffic control pattern, and proceeding back toward the advance warning signs.
- 3.c) Stopping traffic may be allowed:
  - As per the contract for such activities as blasting, steel erection, etc.
  - During paving, milling operations, etc. where, in the middle of the operation, it is necessary to flip the pattern to complete the operation on the other half of the roadway and traffic should not travel across the longitudinal joint or difference in roadway elevation.
  - To move slow moving equipment across live traffic lanes into the work area.
- 3.d) Temporary road closures using Rolling Road Blocks (RRB) may be allowed on limited access highways for operations associated with the installation and removal of temporary lane closures. RRB may be allowed for the installation and removal of lead signs and lane tapers only and shall meet the following requirements:
  - RRB may not start prior to the time allowed in the contract Limitations of Operation for sign pattern installation. Sign pattern removal must be complete prior to the time indicated in the Limitations of Operation for restoring the lanes to traffic.
  - On limited access highways with 4 lanes or more, a RRB may not start until the Limitations of Operation Chart allows a 2 lane closure. In areas with good sight lines and full shoulders, opposite side lead signs should be installed in a separate operation.
  - Truck-Mounted Impact Attenuators (TMAs) equipped with arrow boards shall be used to slow traffic to implement the RRB. State Police Officers in marked vehicles may be used to support the implementation of the RRB. The RRB shall start by having all vehicles, including Truck-Mounted Impact Attenuators TMAs and police vehicles leave the shoulder or on-ramp and accelerate to a normal roadway speeds in each lane, then the vehicles will position themselves side by side and decelerate to the RRB speed on the highway.
  - An additional Truck-Mounted Impact Attenuator TMAs equipped with a Portable Changeable Message Sign shall be utilized to advise the motorists that sign pattern installation / removal is underway. The Pre-Warning Vehicle (PWV) should be initially positioned in the right shoulder ½ mile prior to the RRB operation. If a traffic queue reaches the PWV's initial location, the contractor shall slowly reverse the PWV along the shoulder to position itself prior to the new back of queue. A Pre-

- Warning Vehicle, as specified elsewhere in the contract, shall be utilized to advise the motorists that sign pattern installation / removal is underway.
- The RRB duration shall not exceed 15 minutes from start of the traffic block until all lanes are opened as designated in the Limitation of Operation chart. If the RRB duration exceeds 15 minutes on 2 successive shifts, no further RRB will be allowed until the Contractor obtains approval for a revised installation procedure from the respective construction District.
  - RRB should not be utilized to expand a lane closure pattern to an additional lane during the shift. The workers and equipment required to implement the additional lane closure should be staged from within the closed lane. Attenuator trucks (and State Police if available) should be used to protect the workers installing the taper in the additional lane.
  - Exceptions to these work procedures may be submitted to the District Office for consideration. A minimum of 2 business days should be allowed for review and approval by the District.
  - The RRB procedures (including any approved exceptions) will be reviewed and discussed by the inspection team and the Contractor in advance of the work. The implementation of the agreed upon plan will be reviewed with the State Police during the Work Zone Safety meeting held before each shift involving temporary lane closures. If the State Police determine that alternative procedures should be implemented for traffic control during the work shift, the Department and Contractor will attempt to resolve any discrepancies with the duty sergeant at the Troop. If the discrepancies are unable to be resolved prior to the start of the shift, the work will proceed as recommended by the Department Trooper. Any unresolved issues will be addressed the following day.
- 3.e) The Contractor must adhere to using the proper signs, placing the signs correctly, and ensuring the proper spacing of signs.
- 3.f) Additional devices are required on entrance ramps, exit ramps, and intersecting roads to warn and/or move traffic into the proper travel path prior to merging/exiting with/from the main line traffic. This shall be completed before installing the mainline pattern past the ramp or intersecting roadway.
- 3.g) Prior to installing a pattern, any conflicting existing signs shall be covered with an opaque material. Once the pattern is removed, the existing signs shall be uncovered.
- 3.h) On limited access roadways, workers are prohibited from crossing the travel lanes to install and remove signs or other devices on the opposite side of the roadway. Any signs or devices on the opposite side of the roadway shall be installed and removed separately.

**SECTION 4. USE OF HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW**

- 4.a) On limited access roadways, one Flashing Arrow shall be used for each lane that is closed. The Flashing Arrow shall be installed concurrently with the installation of the traffic control pattern and its placement shall be as shown on the traffic control plan. For multiple lane closures, one Flashing Arrow is required for each lane closed. If conditions warrant, additional Flashing Arrows should be employed (i.e.: curves, major ramps, etc.).
- 4.b) On non-limited access roadways, the use of a Flashing Arrow for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the Flashing Arrow.
- 4.c) The Flashing Arrow shall not be used on two lane, two-way roadways for temporary alternating one-way traffic operations.
- 4.d) The Flashing Arrow board display shall be in the “arrow” mode for lane closure tapers and in the “caution” mode (four corners) for shoulder work, blocking the shoulder, or roadside work near the shoulder. The Flashing Arrow shall be in the “caution” mode when it is positioned in the closed lane.
- 4.e) The Flashing Arrow shall not be used on a multi-lane roadway to laterally shift all lanes of traffic, because unnecessary lane changing may result.

**SECTION 5. USE OF TRUCK MOUNTED OR TRAILER MOUNTED IMPACT ATTENUATOR VEHICLES (TMAs)**

- 5.a) For lane closures on limited access roadways, a minimum of two TMAs shall be used to install and remove traffic control patterns. If two TMAs are not available, the pattern shall not be installed.
- 5.b) On non-limited access roadways, the use of TMAs to install and remove patterns closing a lane(s) is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to utilize the TMAs.
- 5.c) Generally, to establish the advance and transition signing, one TMA shall be placed on the shoulder and the second TMA shall be approximately 1,000 feet ahead blocking the lane. The flashing arrow board mounted on the TMA should be in the “flashing arrow” mode when taking the lane. The sign truck and workers should be immediately ahead of the second TMA. In no case shall the TMA be used as the sign truck or a work truck. Once the transition is in place, the TMAs shall travel in the closed lane until all Changeable Message Signs, signs, Flashing Arrows, and cones/drums are installed. The flashing arrow board mounted on the TMA should be in the “caution” mode when traveling in the closed lane.

- 5.d) A TMA shall be placed prior to the first work area in the pattern. If there are multiple work areas within the same pattern, then additional TMAs shall be positioned at each additional work area as needed. The flashing arrow board mounted on the TMA should be in the “caution” mode when in the closed lane.
- 5.e) TMAs shall be positioned a sufficient distance prior to the workers or equipment being protected to allow for appropriate vehicle roll-ahead in the event that the TMA is hit, but not so far that an errant vehicle could travel around the TMA and into the work area. For additional placement and use details, refer to the specification entitled “Truck-Mounted or Trailer-Mounted Impact Attenuator”. Some operations, such as paving and concrete repairs, do not allow for placement of the TMA(s) within the specified distances. In these situations, the TMA(s) should be placed at the beginning of the work area and shall be advanced as the paving or concrete operations proceed.
- 5.f) TMAs should be paid in accordance with how the unit is utilized. If it is used as a TMA and is in the proper location as specified, then it should be paid at the specified hourly rate for “Truck-Mounted or Trailer-Mounted Impact Attenuator”. When the TMA is used as a Flashing Arrow, it should be paid at the daily rate for “High Mounted Internally Illuminated Flashing Arrow”. If a TMA is used to install and remove a pattern and is also used as a Flashing Arrow in the same day, then the unit should be paid as a “Truck-Mounted or Trailer-Mounted Impact Attenuator” for the hours used to install and remove the pattern, typically 2 hours (1 hour to install and 1 hour to remove). If the TMA is also used as a Flashing Arrow during the same day, then the unit should be paid at the daily rate as a “High Mounted Internally Illuminated Flashing Arrow”.

## **SECTION 6. USE OF TRAFFIC DRUMS AND TRAFFIC CONES**

- 6.a) Traffic drums shall be used for taper channelization on limited-access roadways, ramps, and turning roadways and to delineate raised catch basins and other hazards.
- 6.b) Traffic drums shall be used in place of traffic cones in traffic control patterns that are in effect for more than a 36-hour duration.
- 6.c) Traffic Cones less than 42 inches in height shall not be used on limited-access roadways or on non-limited access roadways with a posted speed limit of 45 mph and above.
- 6.d) Typical spacing of traffic drums and/or cones shown on the Traffic Control Plans in the Contract are maximum spacings and may be reduced to meet actual field conditions as required.

**SECTION 7. USE OF (REMOTE CONTROLLED) CHANGEABLE MESSAGE SIGNS (CMS)**

- 7.a) For lane closures on limited access roadways, one CMS shall be used in advance of the traffic control pattern. Prior to installing the pattern, the CMS shall be installed and in operation, displaying the appropriate lane closure information (i.e.: Left Lane Closed - Merge Right). The CMS shall be positioned ½ - 1 mile ahead of the lane closure taper. If the nearest Exit ramp is greater than the specified ½ - 1 mile distance, than an additional CMS shall be positioned a sufficient distance ahead of the Exit ramp to alert motorists to the work and therefore offer them an opportunity to take the exit.
- 7.b) CMS should not be installed within 1000 feet of an existing CMS.
- 7.c) On non-limited access roadways, the use of CMS for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the CMS.
- 7.d) The advance CMS is typically placed off the right shoulder, 5 feet from the edge of pavement. In areas where the CMS cannot be placed beyond the edge of pavement, it may be placed on the paved shoulder with a minimum of five (5) traffic drums placed in a taper in front of it to delineate its position. The advance CMS shall be adequately protected if it is used for a continuous duration of 36 hours or more.
- 7.e) When the CMS are no longer required, they should be removed from the clear zone and have the display screen cleared and turned 90° away from the roadway.
- 7.f) The CMS generally should not be used for generic messages (ex: Road Work Ahead, Bump Ahead, Gravel Road, etc.).
- 7.g) The CMS should be used for specific situations that need to command the motorist's attention which cannot be conveyed with standard construction signs (Examples include: Exit 34 Closed Sat/Sun - Use Exit 35, All Lanes Closed - Use Shoulder, Workers on Road - Slow Down).
- 7.h) Messages that need to be displayed for long periods of time, such as during stage construction, should be displayed with construction signs. For special signs, please coordinate with the Office of Construction and the Division of Traffic Engineering for the proper layout/dimensions required.
- 7.i) The messages that are allowed on the CMS are as follows:

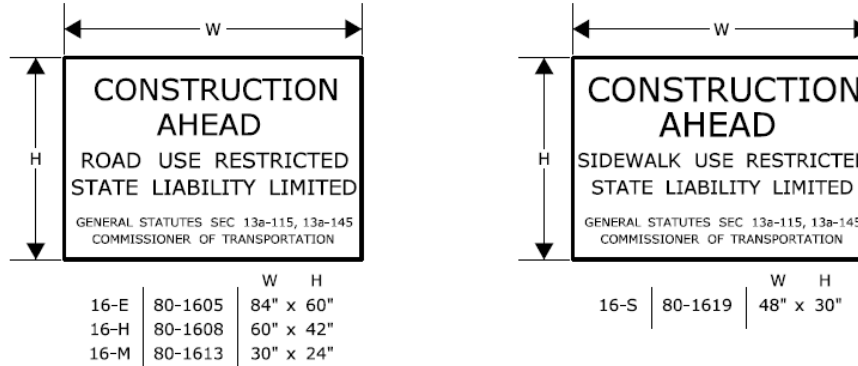
<u>Message No.</u>	<u>Frame 1</u>	<u>Frame 2</u>	<u>Message No.</u>	<u>Frame 1</u>	<u>Frame 2</u>
1	LEFT LANE CLOSED	MERGE RIGHT	9	LANES CLOSED AHEAD	REDUCE SPEED
2	2 LEFT LANES CLOSED	MERGE RIGHT	10	LANES CLOSED AHEAD	USE CAUTION
3	LEFT LANE CLOSED	REDUCE SPEED	11	WORKERS ON ROAD	REDUCE SPEED
4	2 LEFT LANES CLOSED	REDUCE SPEED	12	WORKERS ON ROAD	SLOW DOWN
5	RIGHT LANE CLOSED	MERGE LEFT	13	EXIT XX CLOSED	USE EXIT YY
6	2 RIGHT LANES CLOSED	MERGE LEFT	14	EXIT XX CLOSED USE YY	FOLLOW DETOUR
7	RIGHT LANE CLOSED	REDUCE SPEED	15	2 LANES SHIFT AHEAD	USE CAUTION
8	2 RIGHT LANES CLOSED	REDUCE SPEED	16	3 LANES SHIFT AHEAD	USE CAUTION

For any other message(s), approval must be received from the Office of Construction prior to their use. No more than two (2) displays shall be used within any message cycle.

## **SECTION 8. USE OF STATE POLICE OFFICERS**

- 8.a) State Police may be utilized only on limited access highways and secondary roadways under their primary jurisdiction. One Officer may be used per critical sign pattern. Shoulder closures and right lane closures can generally be implemented without the presence of a State Police Officer. Likewise in areas with moderate traffic and wide, unobstructed medians, left lane closures can be implemented without State Police presence. Under some situations it may be desirable to have State Police presence, when one is available. Examples of this include: nighttime lane closures; left lane closures with minimal width for setting up advance signs and staging; lane and shoulder closures on turning roadways/ramps or mainline where sight distance is minimal; and closures where extensive turning movements or traffic congestion regularly occur, however they are not required.
- 8.b) Once the pattern is in place, the State Police Officer should be positioned in a non-hazardous location in advance of the pattern. If traffic backs up beyond the beginning of the pattern, then the State Police Officer shall be repositioned prior to the backup to give warning to the oncoming motorists. The State Police Officer and TMA should not be in proximity to each other.
- 8.c) Other functions of the State Police Officer(s) may include:
- Assisting entering/exiting construction vehicles within the work area.
  - Enforcement of speed and other motor vehicle laws within the work area, if specifically requested by the project.
- 8.d) State Police Officers assigned to a work site are to only take direction from the Engineer.

### SERIES 16 SIGNS



THE 16-S SIGN SHALL BE USED ON ALL PROJECTS THAT REQUIRE SIDEWALK RECONSTRUCTION OR RESTRICT PEDESTRIAN TRAVEL ON AN EXISTING SIDEWALK.

SERIES 16 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE TRAFFIC CONTROL PATTERNS TO ALLOW MOTORISTS THE OPPORTUNITY TO AVOID A WORK ZONE. SERIES 16 SIGNS SHALL BE INSTALLED ON ANY MAJOR INTERSECTING ROADWAYS THAT APPROACH THE WORK ZONE. ON LIMITED-ACCESS HIGHWAYS, THESE SIGNS SHALL BE LOCATED IN ADVANCE OF THE NEAREST UPSTREAM EXIT RAMP AND ON ANY ENTRANCE RAMPS PRIOR TO OR WITHIN THE WORK ZONE LIMITS.

THE LOCATION OF SERIES 16 SIGNS CAN BE FOUND ELSEWHERE IN THE PLANS OR INSTALLED AS DIRECTED BY THE ENGINEER.

SIGNS 16-E AND 16-H SHALL BE POST-MOUNTED.

SIGN 16-E SHALL BE USED ON ALL EXPRESSWAYS.

SIGN 16-H SHALL BE USED ON ALL RAMPS, OTHER STATE ROADWAYS, AND MAJOR TOWN/CITY ROADWAYS.

SIGN 16-M SHALL BE USED ON OTHER TOWN ROADWAYS.

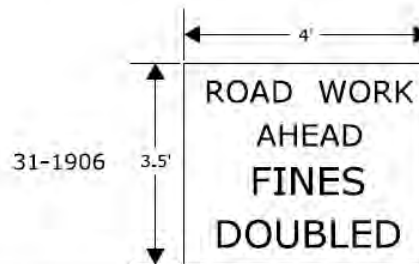
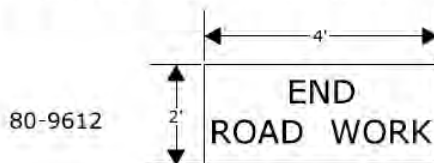
### REGULATORY SIGN "ROAD WORK AHEAD, FINES DOUBLED"

THE REGULATORY SIGN "ROAD WORK AHEAD FINES DOUBLED" SHALL BE INSTALLED FOR ALL WORK ZONES THAT OCCUR ON ANY STATE HIGHWAY IN CONNECTICUT WHERE THERE ARE WORKERS ON THE HIGHWAY OR WHEN THERE IS OTHER THAN EXISTING TRAFFIC OPERATIONS.

THE "ROAD WORK AHEAD FINES DOUBLED" REGULATORY SIGN SHALL BE PLACED AFTER THE SERIES 16 SIGN AND IN ADVANCE OF THE "ROAD WORK AHEAD" SIGN.

### "END ROAD WORK" SIGN

THE LAST SIGN IN THE PATTERN MUST BE THE "END ROAD WORK" SIGN.



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN  
REQUIRED SIGNS



## NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A), AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE 1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
5. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA SHALL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT, AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS RE-OPENED TO ALL LANES OF TRAFFIC.
6. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN ANY EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED, AND TEMPORARY PAVEMENT MARKINGS THAT DELINEATE THE PROPER TRAVELPATHS SHALL BE INSTALLED.
7. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 100' ON LOW-SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
8. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
9. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
10. SIGN (P) SHALL BE MOUNTED A MINIMUM OF 7 FEET FROM THE PAVEMENT SURFACE TO THE BOTTOM OF THE SIGN.

TABLE 1 - MINIMUM TAPER LENGTHS

POSTED SPEED LIMIT (MILES PER HOUR)	MINIMUM TAPER LENGTH FOR A SINGLE LANE CLOSURE
30 OR LESS	180' (55m)
35	250' (75m)
40	320' (100m)
45	540' (165m)
50	600' (180m)
55	660' (200m)
65	780' (240m)

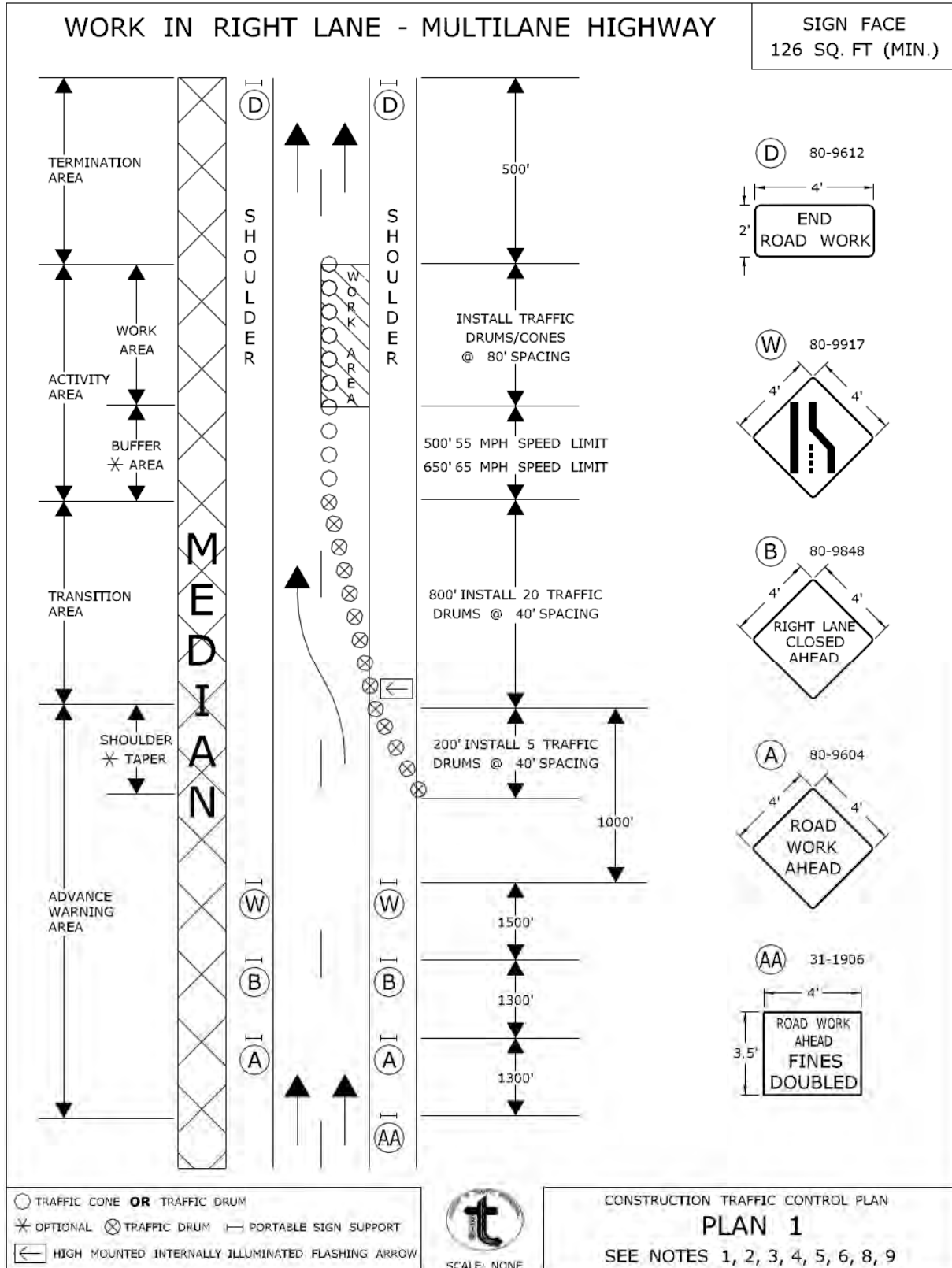
METRIC CONVERSION CHART (1" = 25mm)

ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
12"	300mm	42"	1050mm	72"	1800mm
18"	450mm	48"	1200mm	78"	1950mm
24"	600mm	54"	1350mm	84"	2100mm
30"	750mm	60"	1500mm	90"	2250mm
36"	900mm	66"	1650mm	96"	2400mm



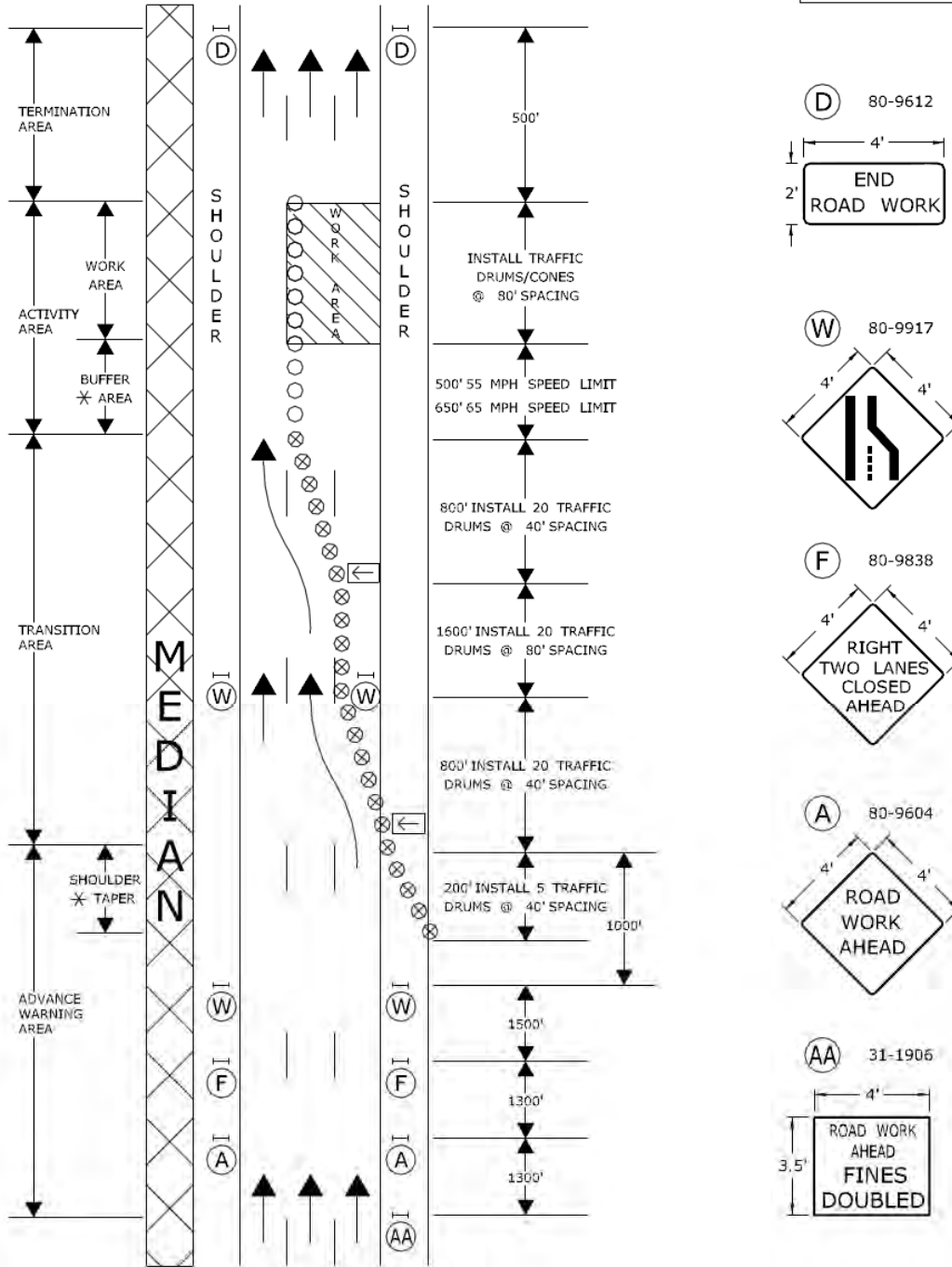
SCALE: NONE

### CONSTRUCTION TRAFFIC CONTROL PLAN NOTES



# WORK IN RIGHT TWO LANES - MULTILANE HIGHWAY

SIGN FACE  
158 SQ. FT (MIN.)



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

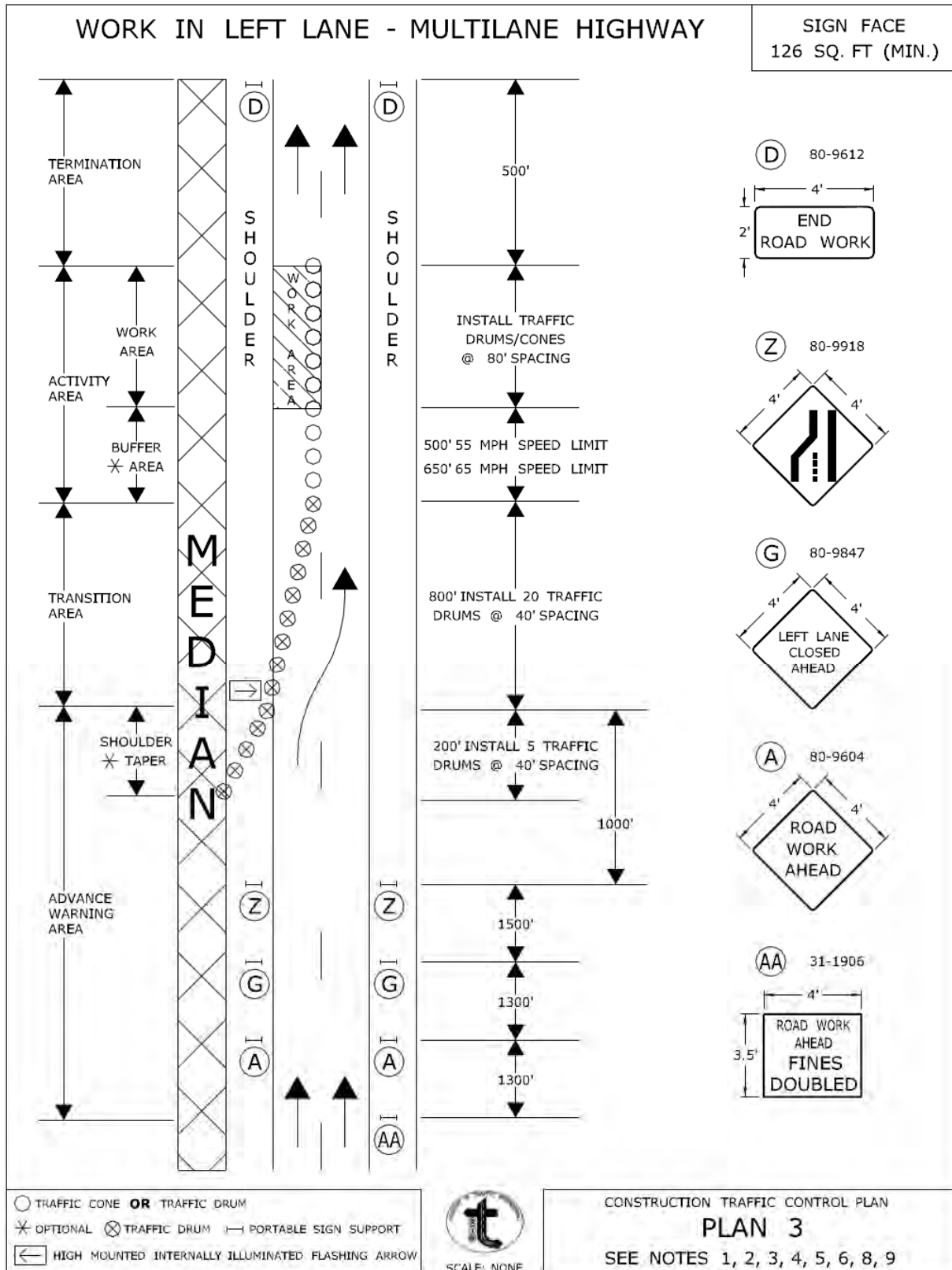


SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 2**  
SEE NOTES 1, 2, 3, 4, 5, 6, 8, 9

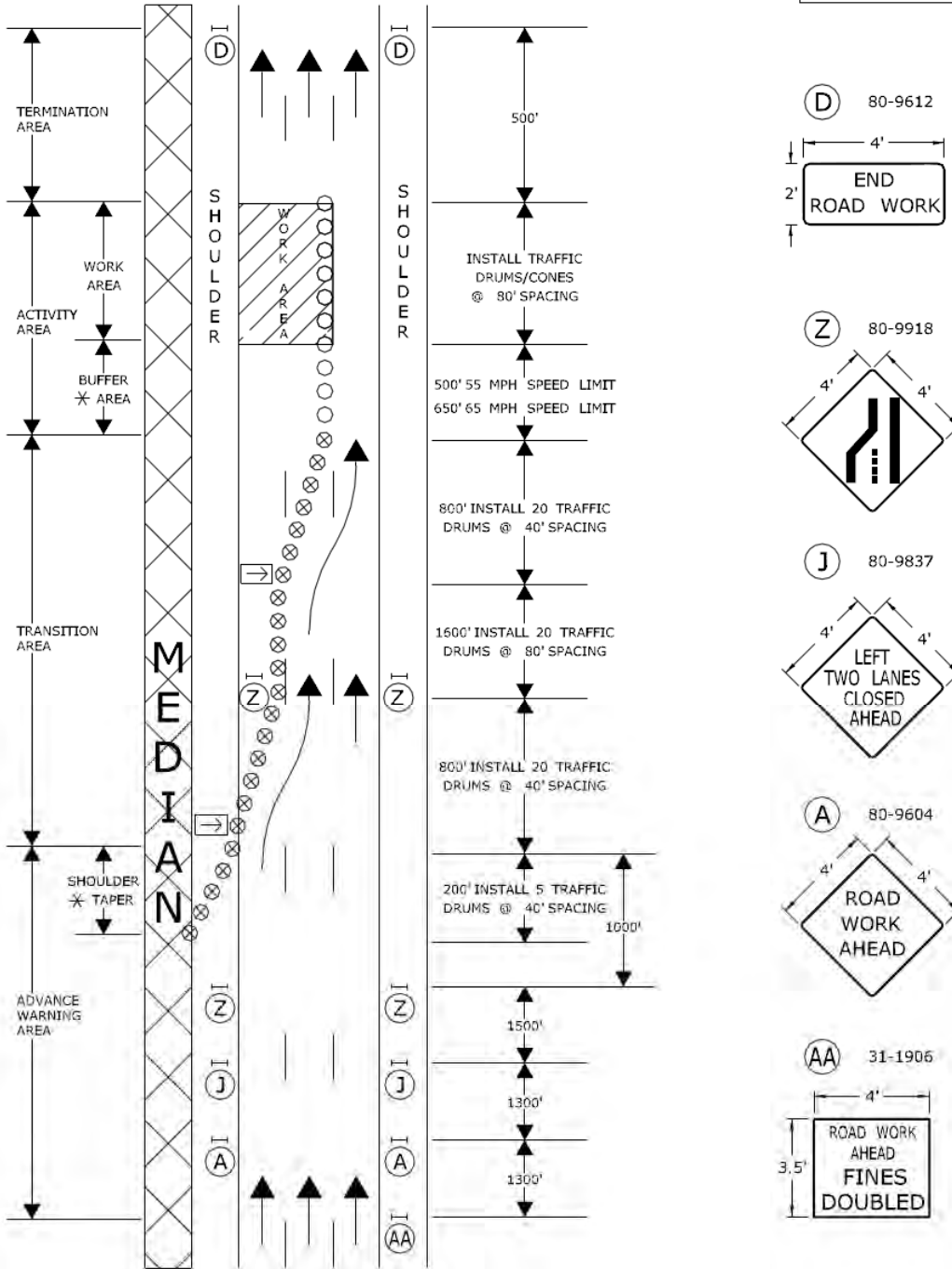
CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED:  Charles S. Harlow  
2012.06.05 15:51:23-04:00  
PRINCIPAL ENGINEER



# WORK IN LEFT TWO LANES - MULTILANE HIGHWAY

SIGN FACE  
158 SQ. FT (MIN.)



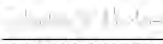
- TRAFFIC CONE **OR** TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

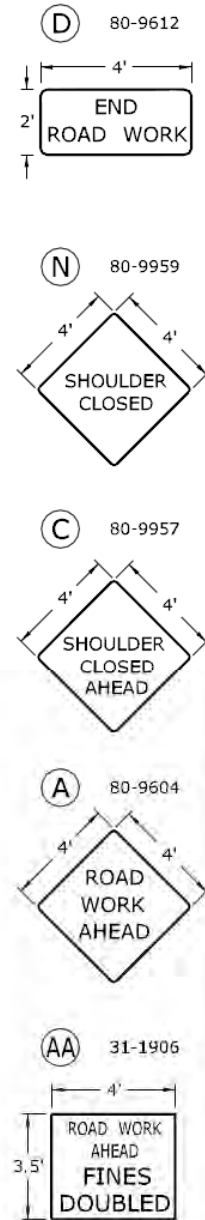
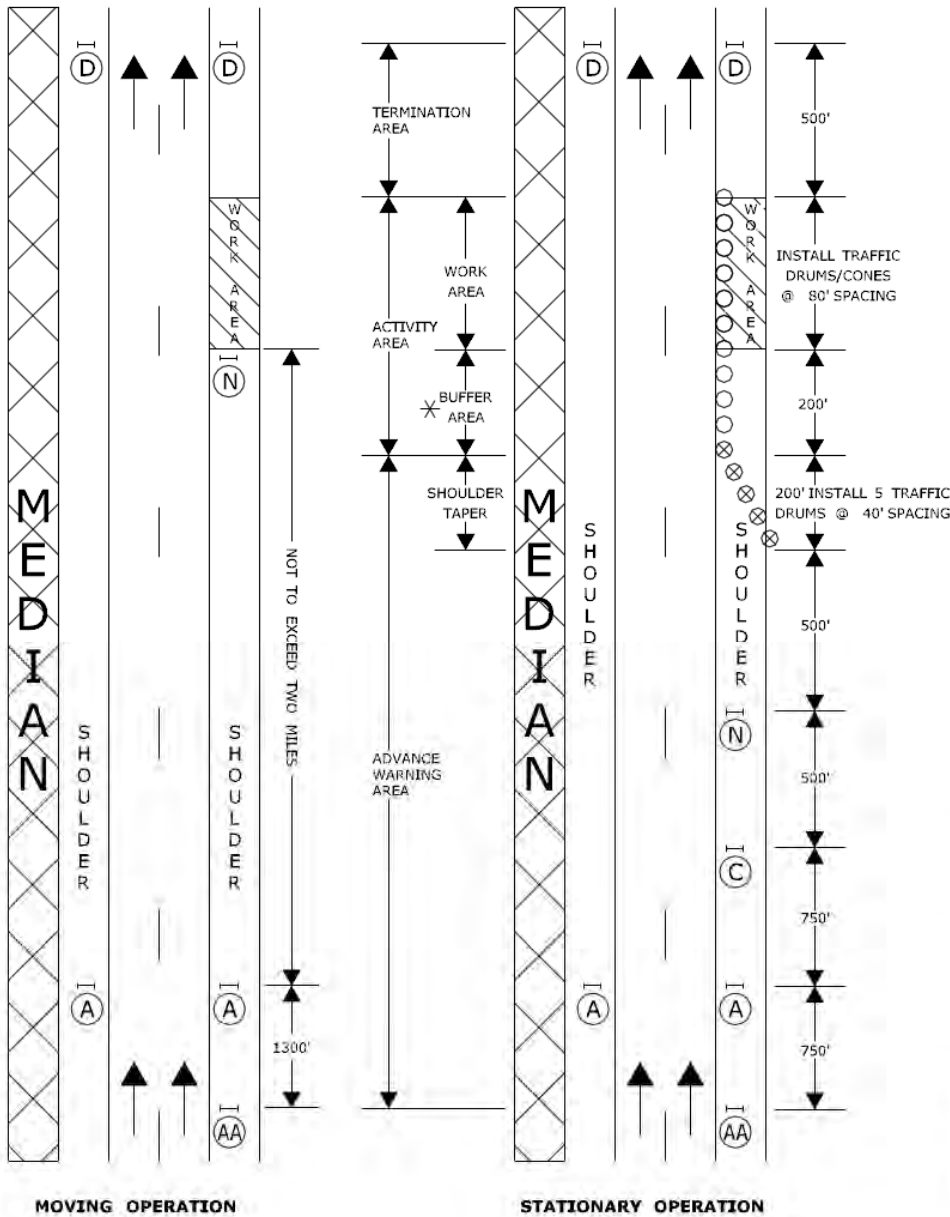
CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 4**  
SEE NOTES 1, 2, 3, 4, 5, 6, 8, 9

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2012.06.05 15:52:10-040g  
PRINCIPAL ENGINEER

WORK IN SHOULDER AREA - MULTILANE HIGHWAY

SIGN FACE  
94 SQ. FT (MIN.)



- TRAFFIC CONE OR TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

PLAN 6

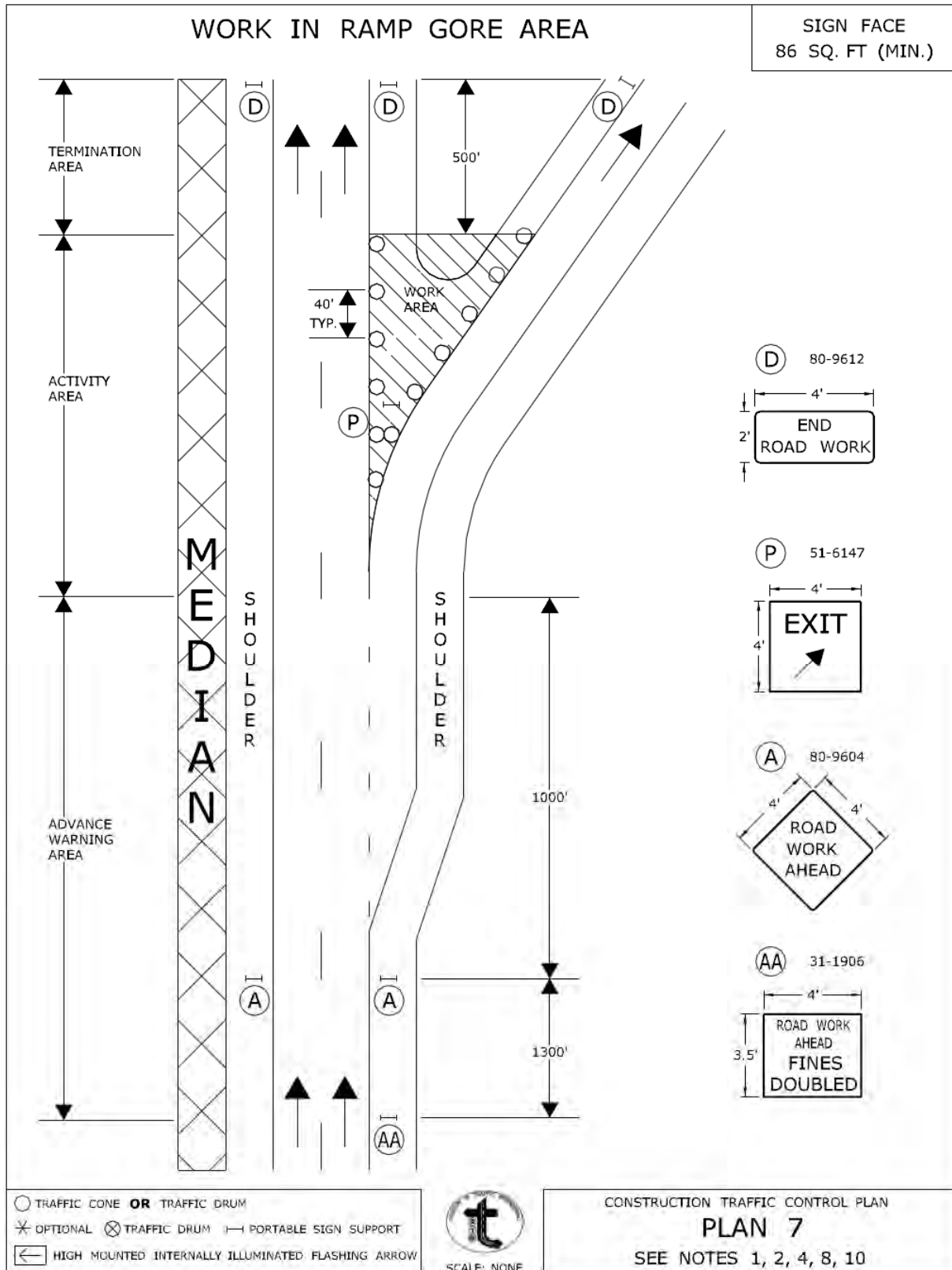
SEE NOTES 1, 2, 4, 8

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APPROVED

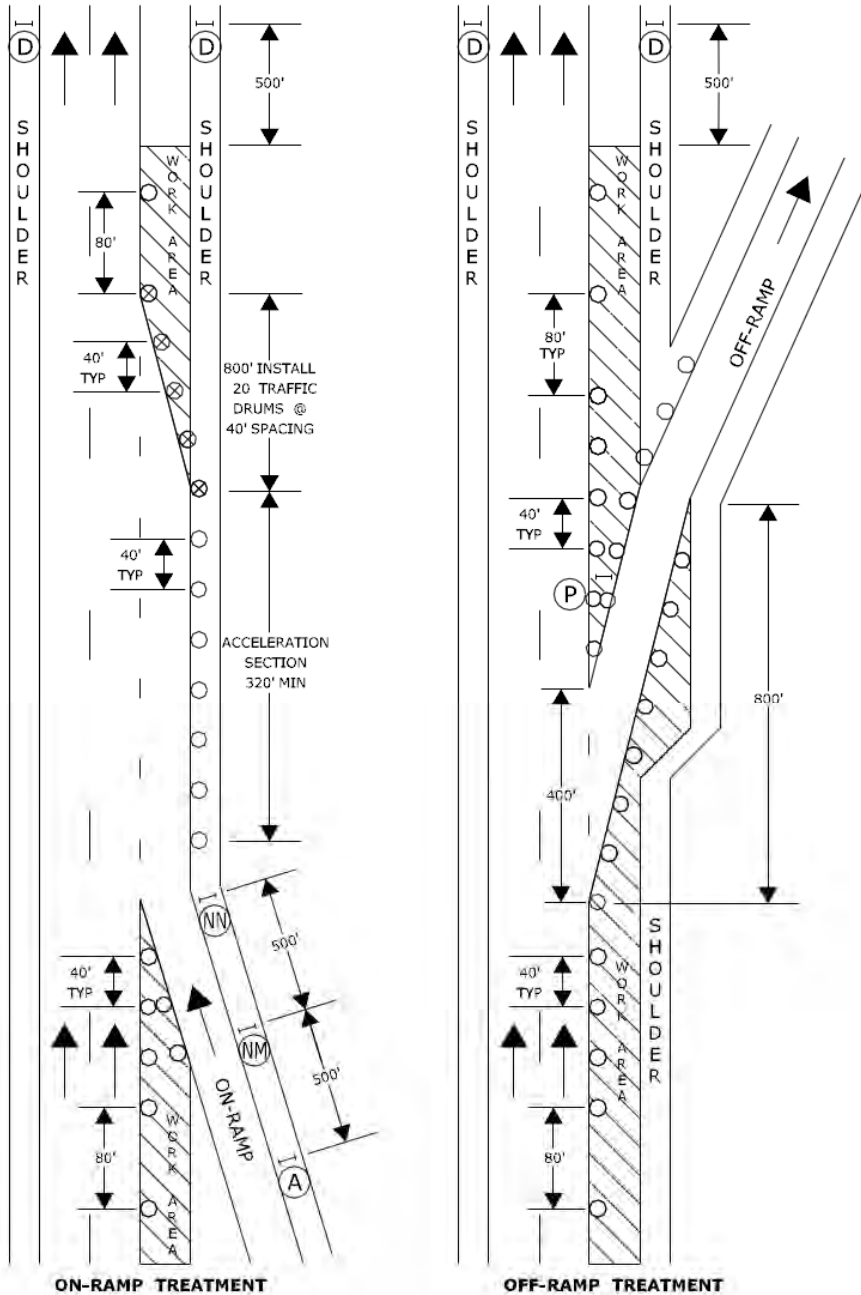
PRINCIPAL ENGINEER

Charles S. Harlow  
2012.06.05 15:52:38-04'00'



## TYPICAL RAMP TREATMENTS FOR MAINLINE LANE CLOSURE - MULTILANE HIGHWAY

SIGN FACE  
SQ. FT VARIES



- (D) 80-9612  
4' x 2' END ROAD WORK
- (P) 51-6147  
4' x 4' EXIT
- (NN) 31-0528  
5' YIELD
- (NM) 80-9055  
4' x 4' SHIELD
- (A) 80-9604  
4' x 4' ROAD WORK AHEAD

USE TRAFFIC CONTROL PLAN 1 TO CLOSE THE RIGHT LANE

- TRAFFIC CONE OR TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ⇐ HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

### PLAN 8

SEE NOTES 1, 2, 3, 4, 5, 6, 8, 9, 10

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
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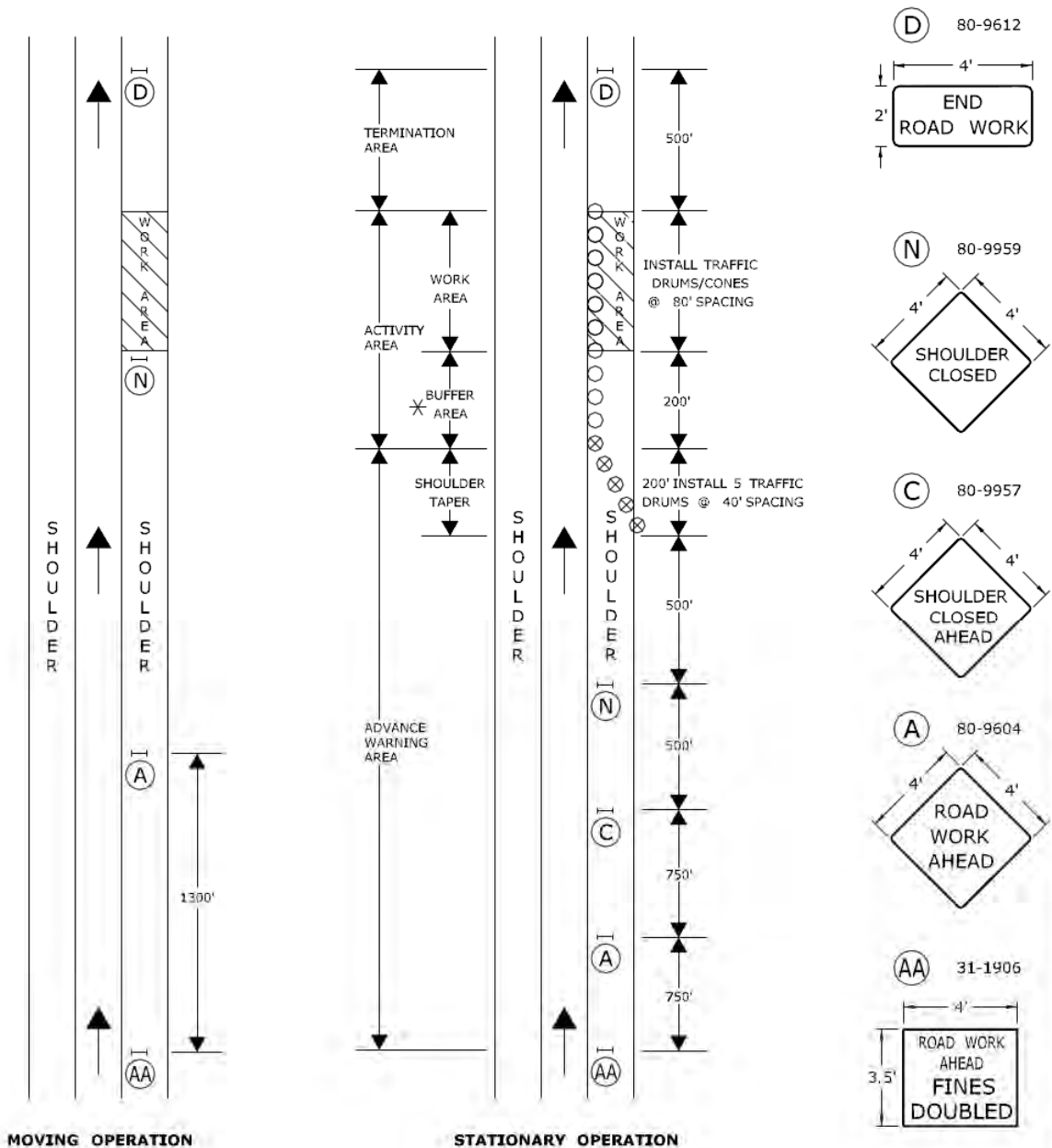
PRINCIPAL ENGINEER

Charles S. Harlow  
2012 06 05 15:53:31-0400



WORK IN SHOULDER AREA - TURNING ROADWAYS / RAMPS

SIGN FACE  
70 SQ. FT (MIN.)



- TRAFFIC CONE OR TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

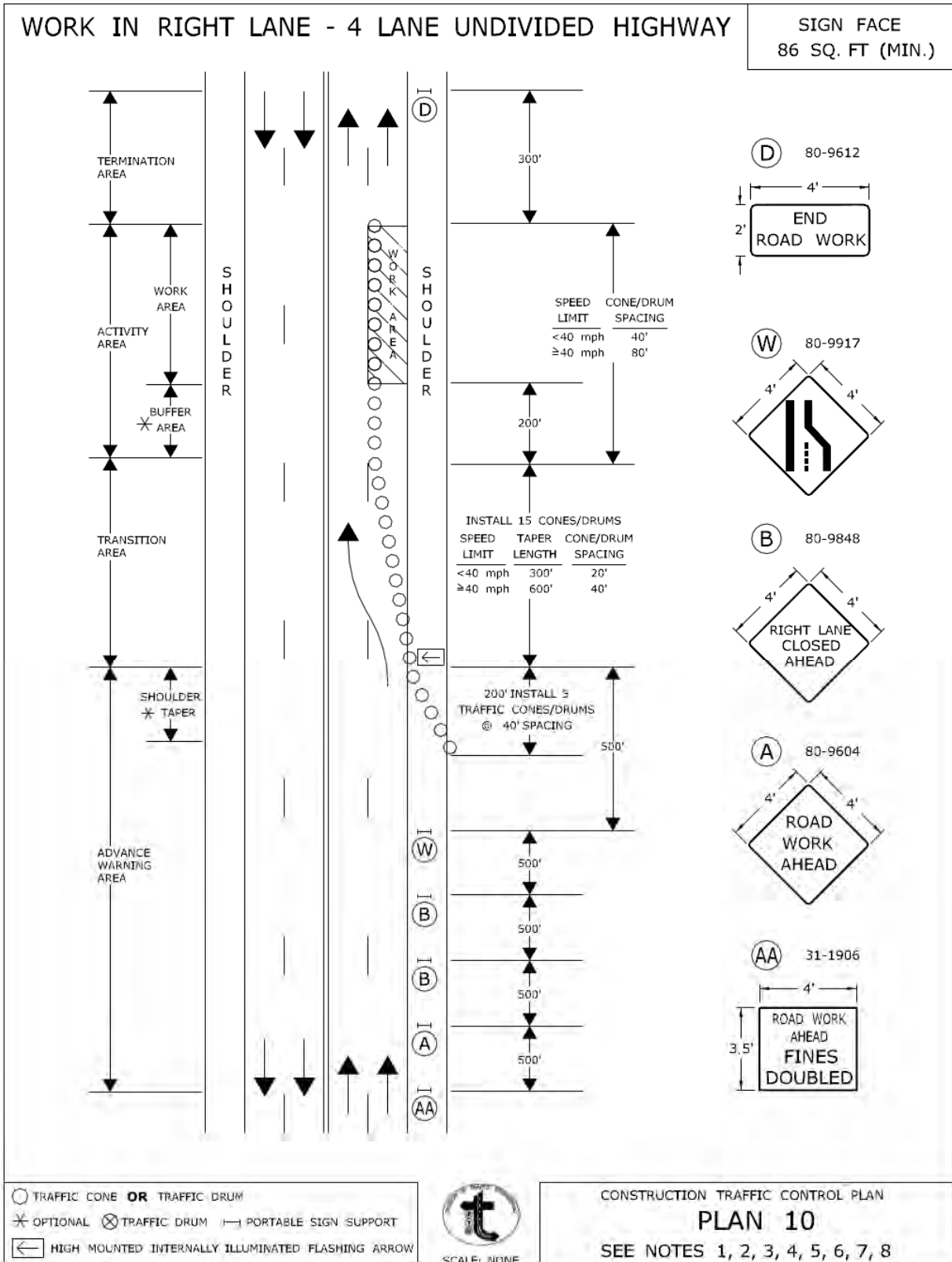


SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 9**  
SEE NOTES 1, 2, 4, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
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APPROVED \_\_\_\_\_  
Charles S. Harlow  
2012.06.05 15:53:53-0400  
PRINCIPAL ENGINEER



CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

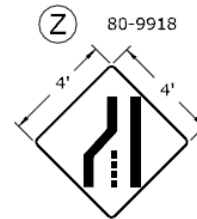
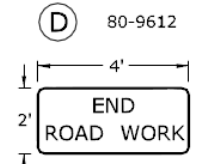
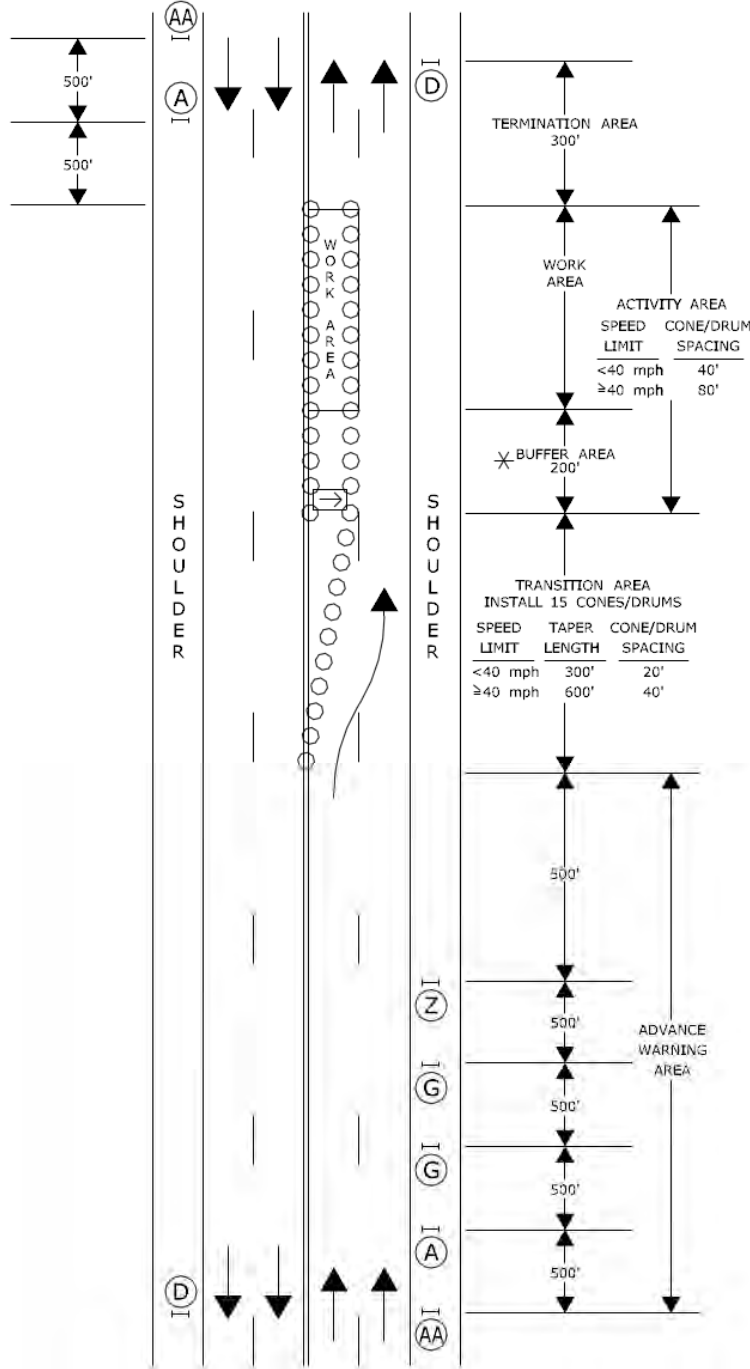
APPROVED

PRINCIPAL ENGINEER

Charles S. Harlow  
2012.06.05 15:54 15-0480

# WORK IN LEFT LANE - 4 LANE UNDIVIDED HIGHWAY

SIGN FACE  
124 SQ. FT (MIN.)



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

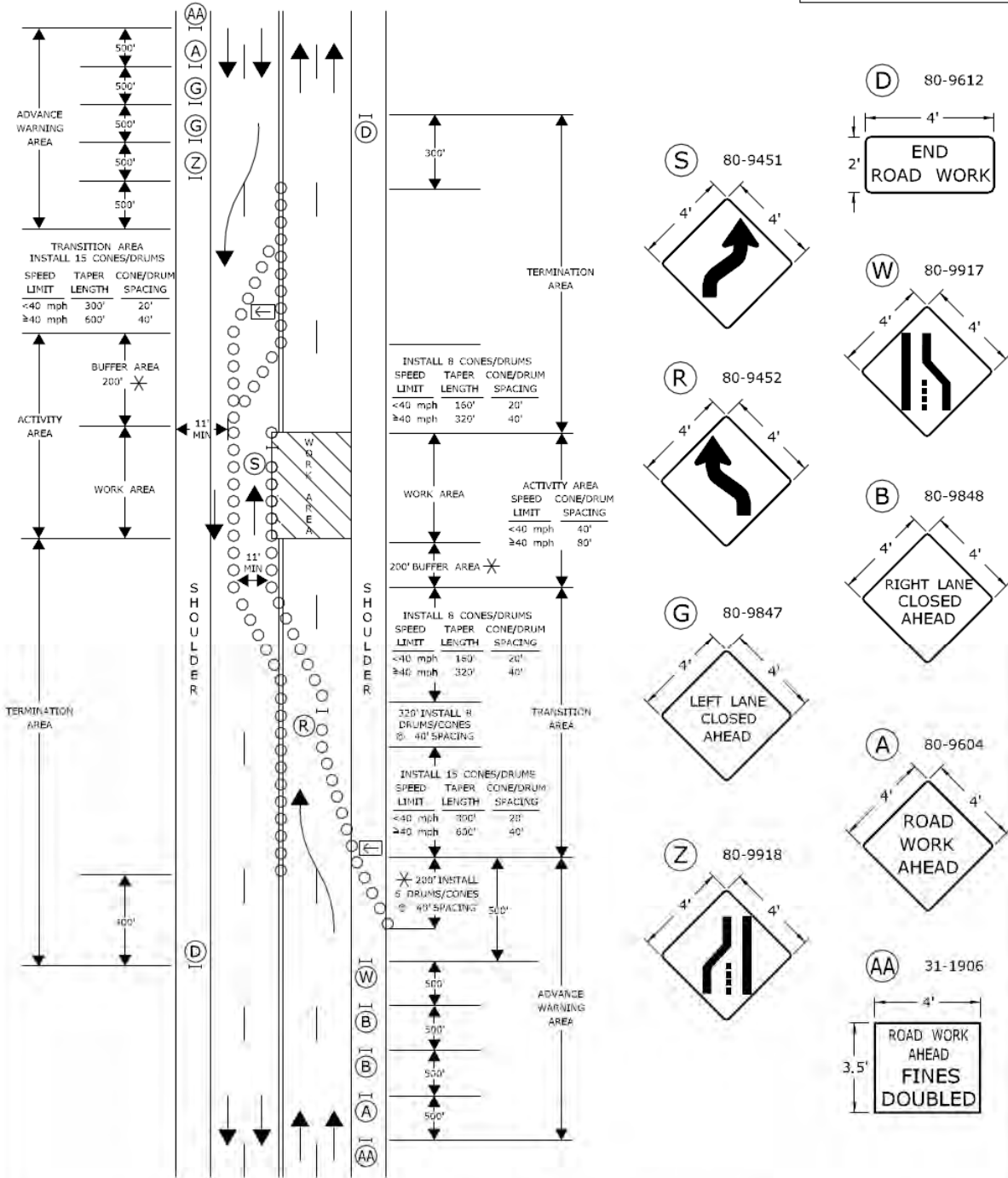
CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 11**  
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED  Charles S. Harlow  
2012.08.05 15:54:56-0400  
PRINCIPAL ENGINEER

# WORK IN BOTH LANES - 4 LANE UNDIVIDED HIGHWAY

SIGN FACE  
204 SQ. FT (MIN.)



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



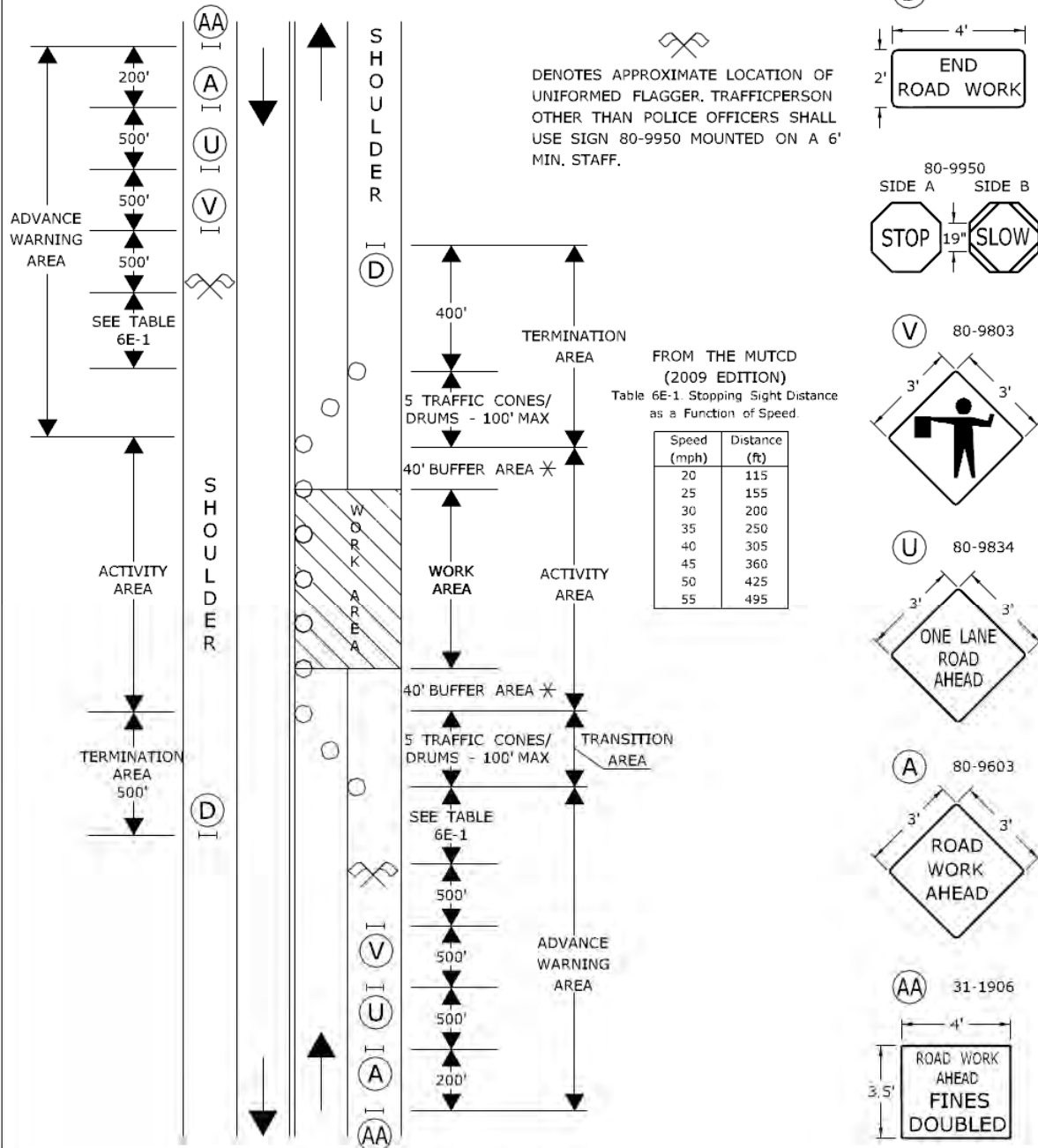
CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 12**  
SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED \_\_\_\_\_  
PRINCIPAL ENGINEER  
Charles S. Harlow  
2012.06.05 15:55:01-0400

## WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE  
108 SQ. FT (MIN.)



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ✕ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 13 - SHEET 1 OF 2**  
SEE NOTES 1, 2, 4, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED: \_\_\_\_\_  
Charles S. Harlow  
2012.08.05 15:55:23-04:00  
PRINCIPAL ENGINEER

# WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE  
108 SQ. FT (MIN.)

## HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.07, FLAGGER PROCEDURES, IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TRAFFIC STANDARD SHEET TR-1220 01 ENTITLED, "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

**A. TO STOP TRAFFIC**

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



**B. TO DIRECT TRAFFIC TO PROCEED**

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



**C. TO ALERT OR SLOW TRAFFIC**

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



- TRAFFIC CONE **OR** TRAFFIC DRUM
- ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT
- ◀ HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



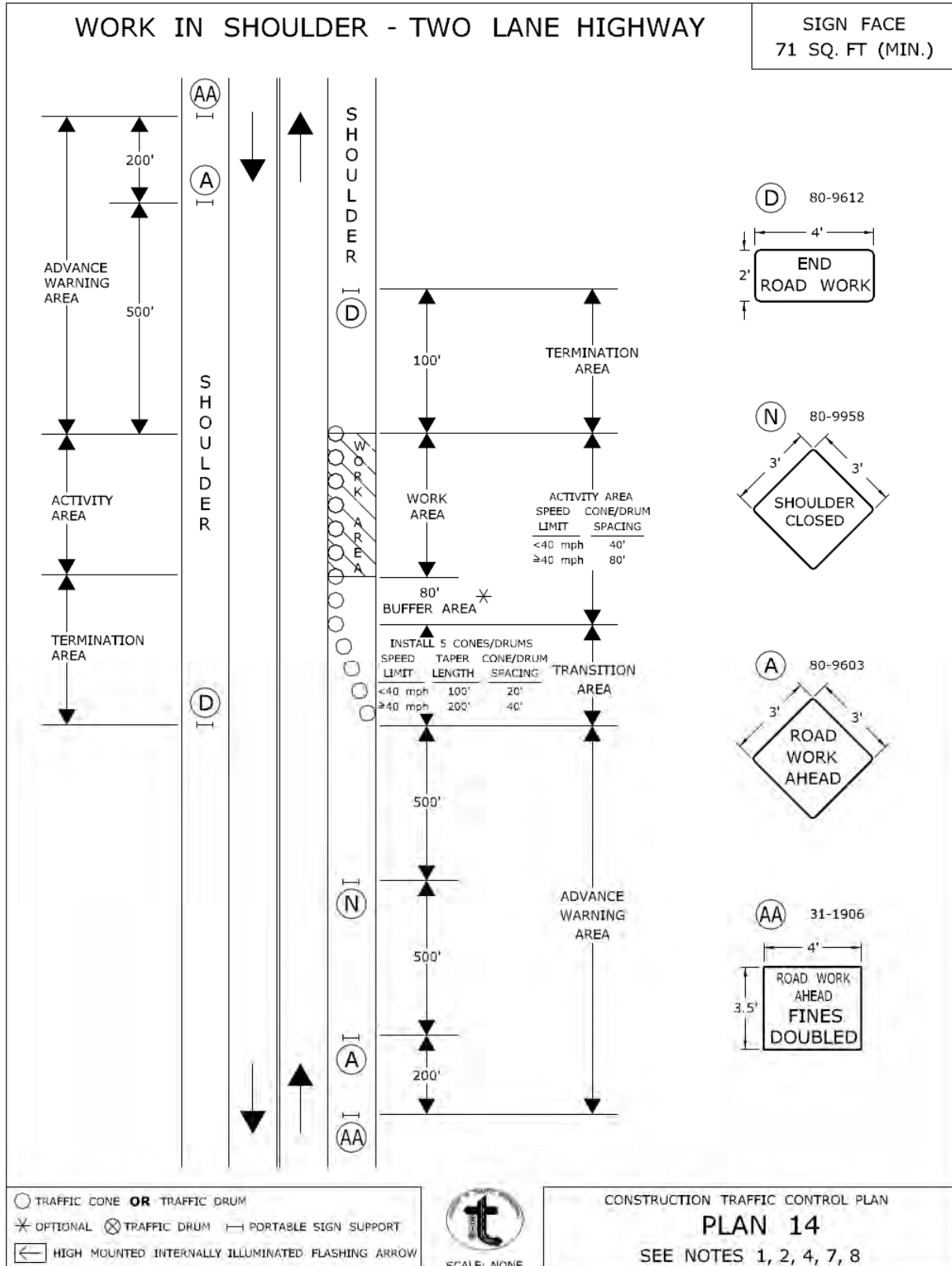
SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 13 - SHEET 2 OF 2**  
SEE NOTES 1, 2, 4, 6, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

APPROVED \_\_\_\_\_  
PRINCIPAL ENGINEER

Charles S. Harlow  
2012.06.05 15:55:45-04'00"



- TRAFFIC CONE **OR** TRAFFIC DRUM
- \* OPTIONAL ⊗ TRAFFIC DRUM — PORTABLE SIGN SUPPORT
- ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



SCALE: NONE

CONSTRUCTION TRAFFIC CONTROL PLAN

### PLAN 14

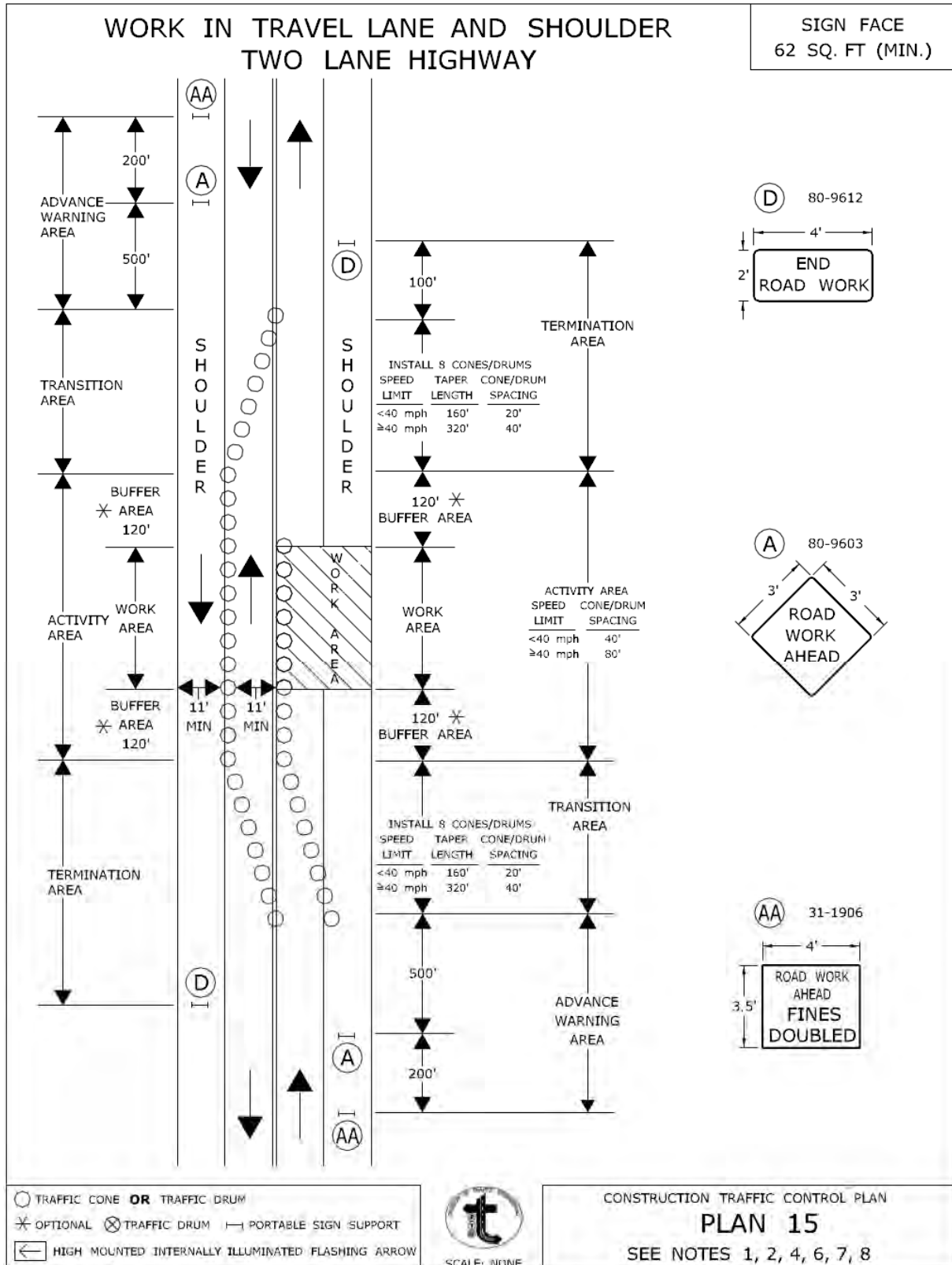
SEE NOTES 1, 2, 4, 7, 8

CONNECTICUT DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING & CONSTRUCTION

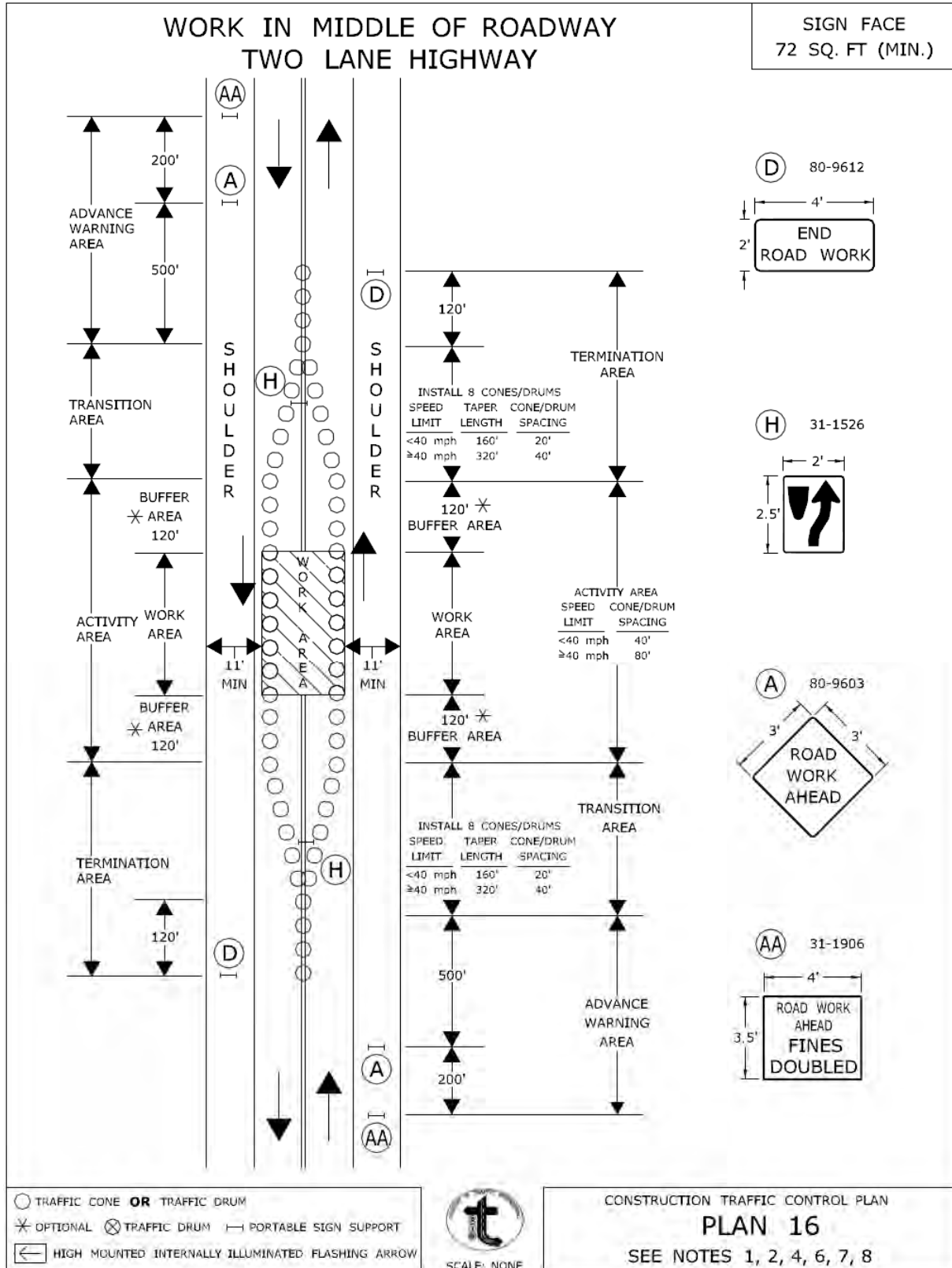
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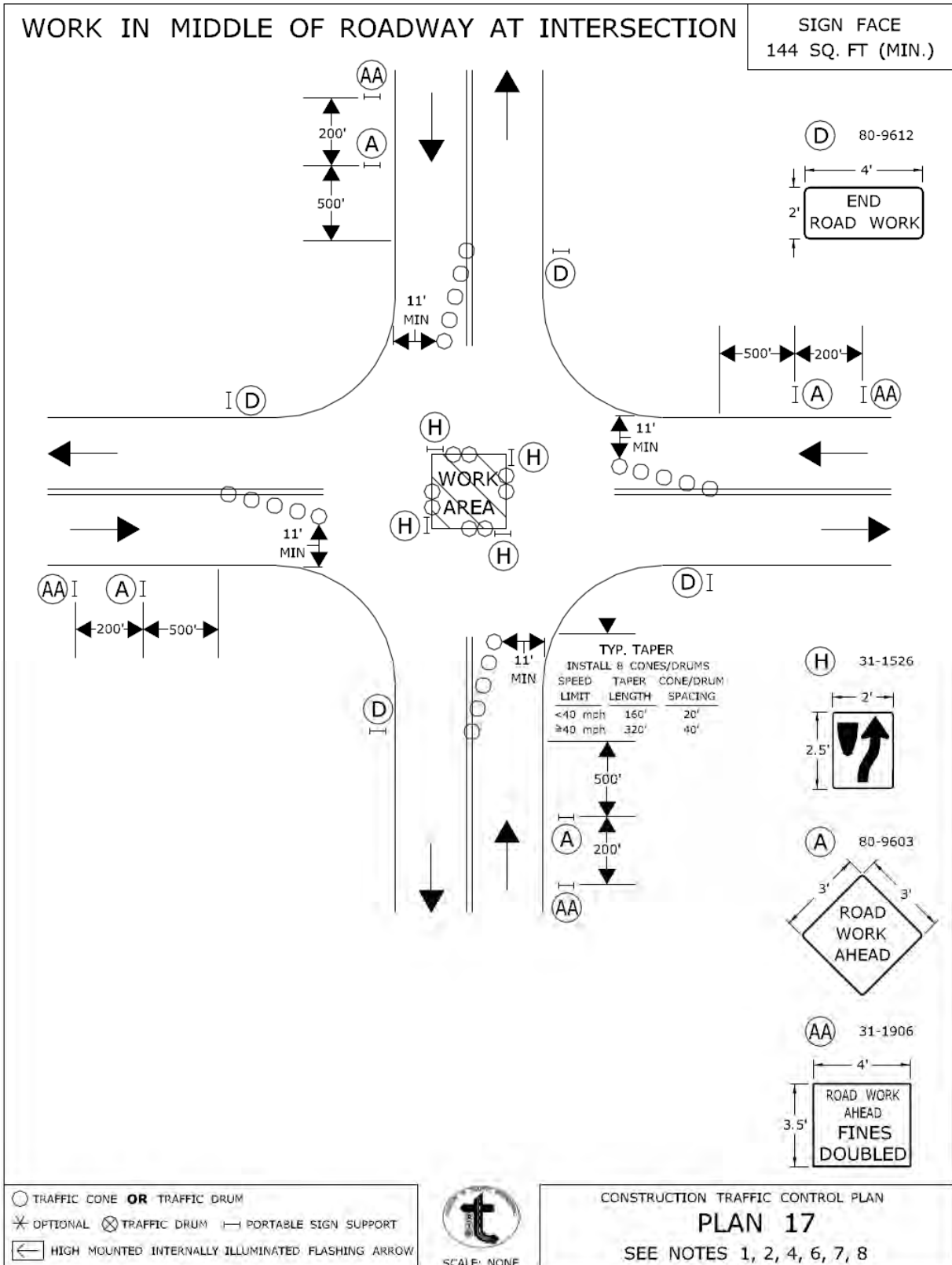
PRINCIPAL ENGINEER

Charles S. Harlow  
2012.08.05 15:56:09-04'00"







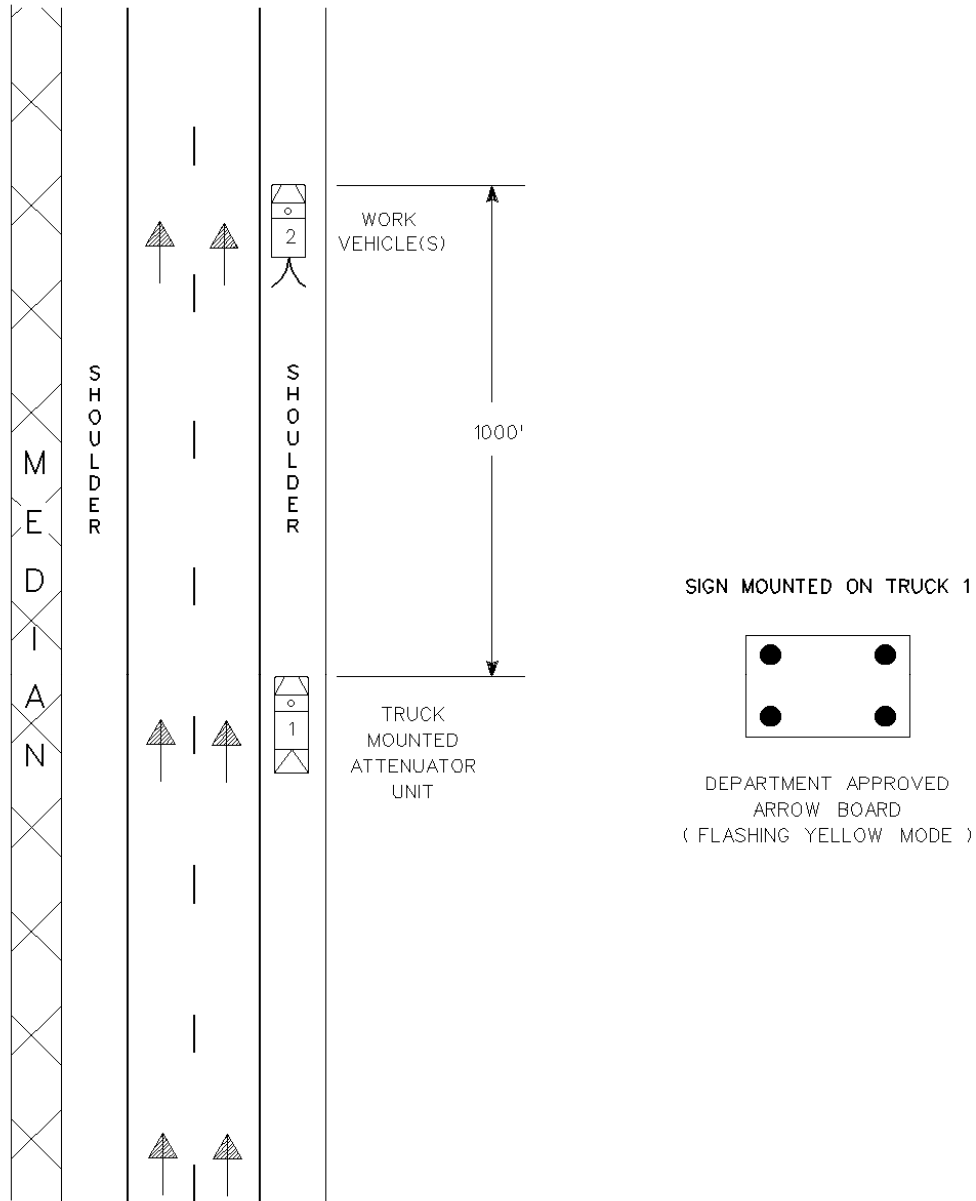


○ TRAFFIC CONE **OR** TRAFFIC DRUM  
 ✱ OPTIONAL ⊗ TRAFFIC DRUM |—| PORTABLE SIGN SUPPORT  
 ← HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW



CONSTRUCTION TRAFFIC CONTROL PLAN  
**PLAN 17**  
 SEE NOTES 1, 2, 4, 6, 7, 8

### MOVING OPERATION ON RIGHT SHOULDER MULTILANE HIGHWAY & SECONDARY ROADWAYS



REV'D 1-02

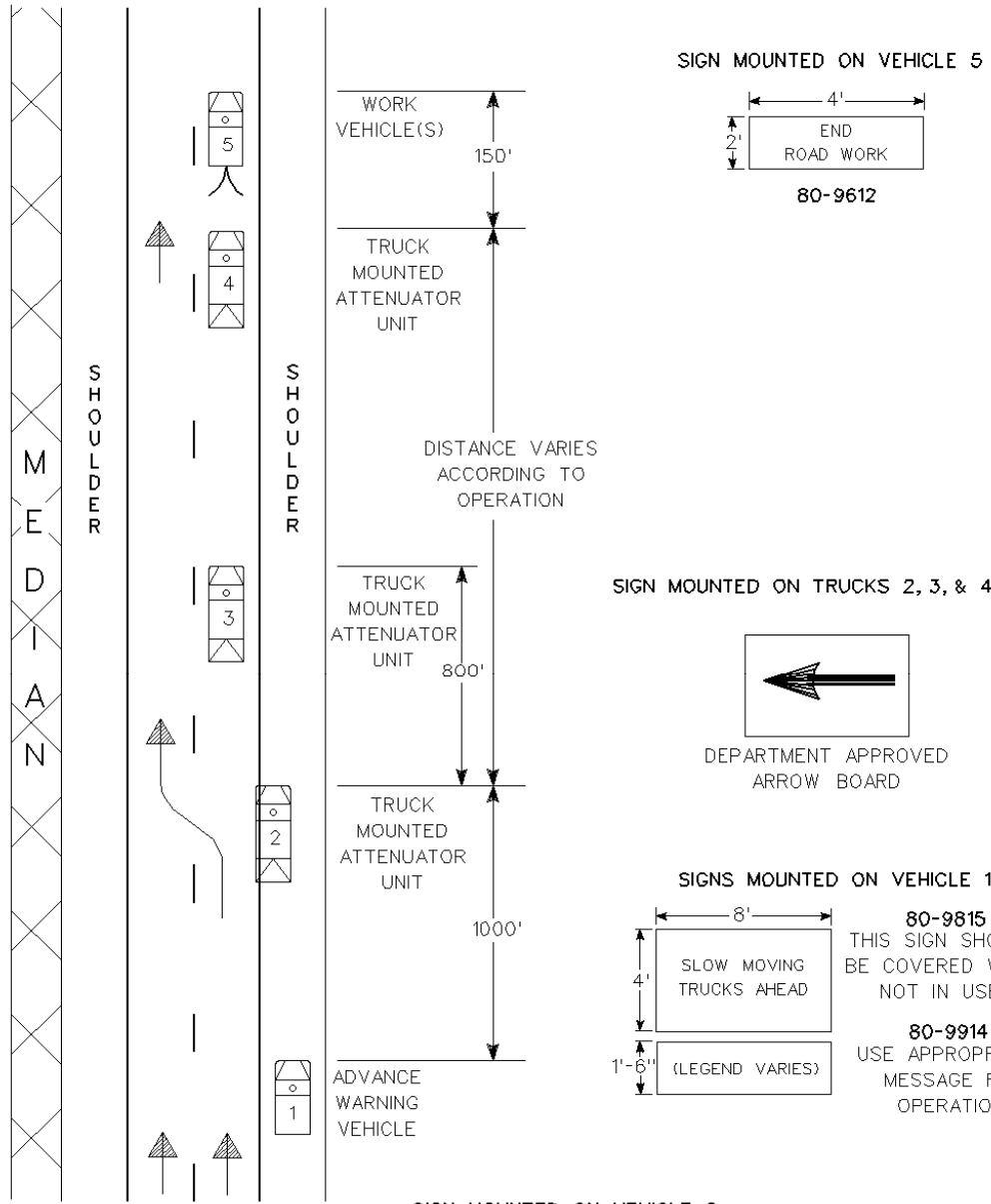


CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING &  
HIGHWAY OPERATIONS  
DIVISION OF TRAFFIC ENGINEERING

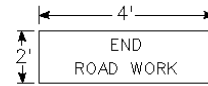
CONSTRUCTION  
TRAFFIC CONTROL PLAN  
PLAN 19  
SCALE NONE

APPROVED J. McCall DATE 1-30-02  
PRINCIPAL ENGINEER

MOVING OPERATION IN RIGHT LANE  
AND OUTSIDE SHOULDER AT THE SAME TIME  
MULTILANE HIGHWAY

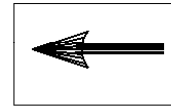


SIGN MOUNTED ON VEHICLE 5



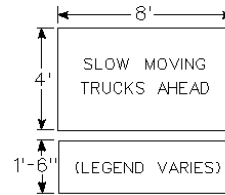
80-9612

SIGN MOUNTED ON TRUCKS 2, 3, & 4



DEPARTMENT APPROVED  
ARROW BOARD

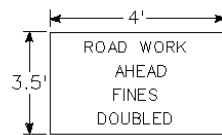
SIGNS MOUNTED ON VEHICLE 1



80-9815  
THIS SIGN SHOULD  
BE COVERED WHEN  
NOT IN USE.

80-9914  
USE APPROPRIATE  
MESSAGE FOR  
OPERATION.

SIGN MOUNTED ON VEHICLE 2



31-1906

REV'D I-02



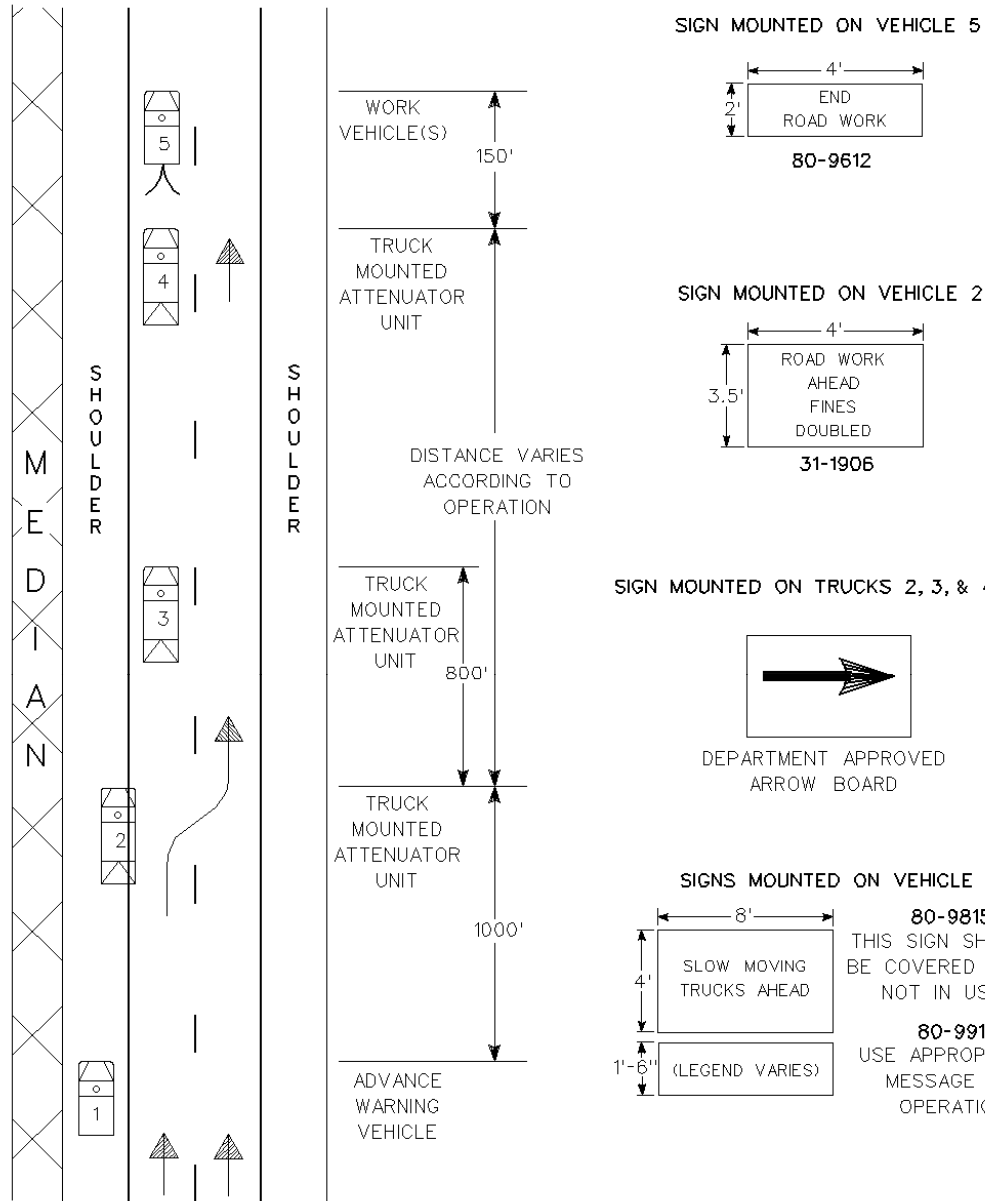
CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING &  
HIGHWAY OPERATIONS  
DIVISION OF TRAFFIC ENGINEERING

CONSTRUCTION  
TRAFFIC CONTROL PLAN  
PLAN 20

SCALE NONE

APPROVED John D. McCall DATE I-30-02  
PRINCIPAL ENGINEER

### MOVING OPERATION IN LEFT LANE AND INSIDE SHOULDER AT THE SAME TIME MULTILANE HIGHWAY



WHEN THE LEFT SHOULDER WIDTH CANNOT ACCOMMODATE A VEHICLE, THEN  
ADVANCE WARNING VEHICLE 1 MAY DRIVE PARTIALLY IN THE LANE.

REV'D 1-02



CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING &  
HIGHWAY OPERATIONS  
DIVISION OF TRAFFIC ENGINEERING

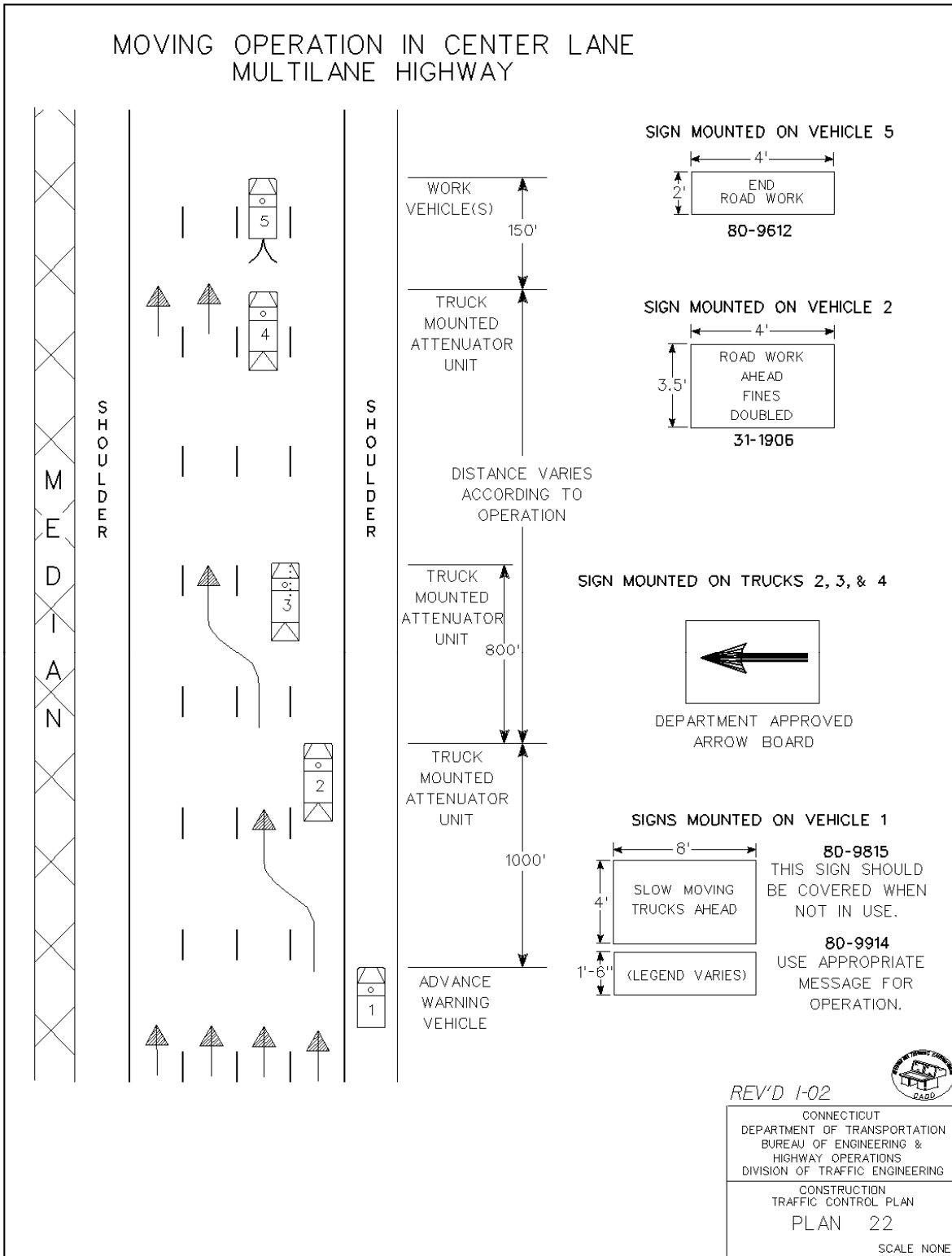
CONSTRUCTION  
TRAFFIC CONTROL PLAN

PLAN 21

SCALE NONE

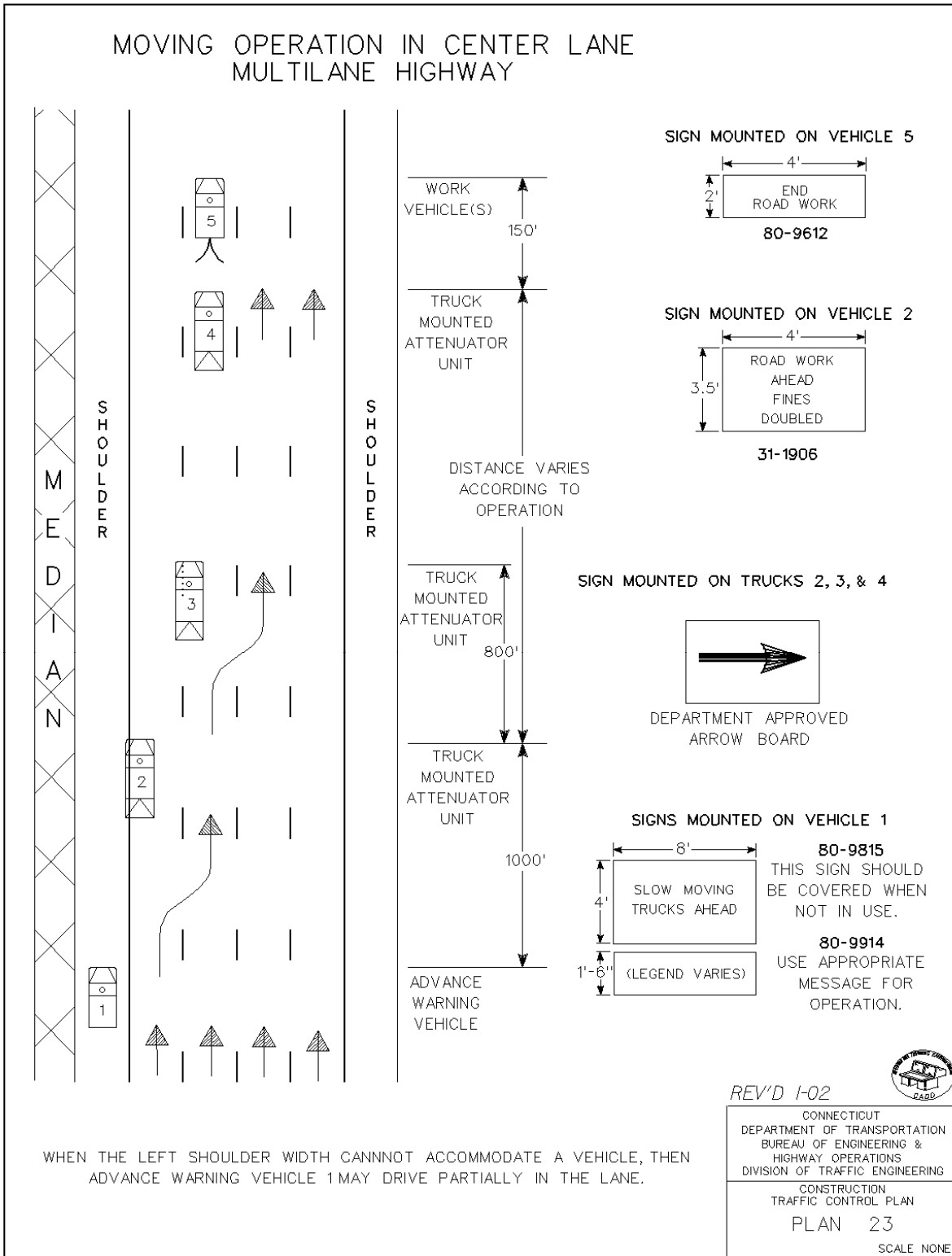
APPROVED John D. McCall DATE 1-30-02  
PRINCIPAL ENGINEER

### MOVING OPERATION IN CENTER LANE MULTILANE HIGHWAY



APPROVED John D. McCall DATE 1-30-02  
PRINCIPAL ENGINEER

### MOVING OPERATION IN CENTER LANE MULTILANE HIGHWAY



WHEN THE LEFT SHOULDER WIDTH CANNOT ACCOMMODATE A VEHICLE, THEN ADVANCE WARNING VEHICLE 1 MAY DRIVE PARTIALLY IN THE LANE.

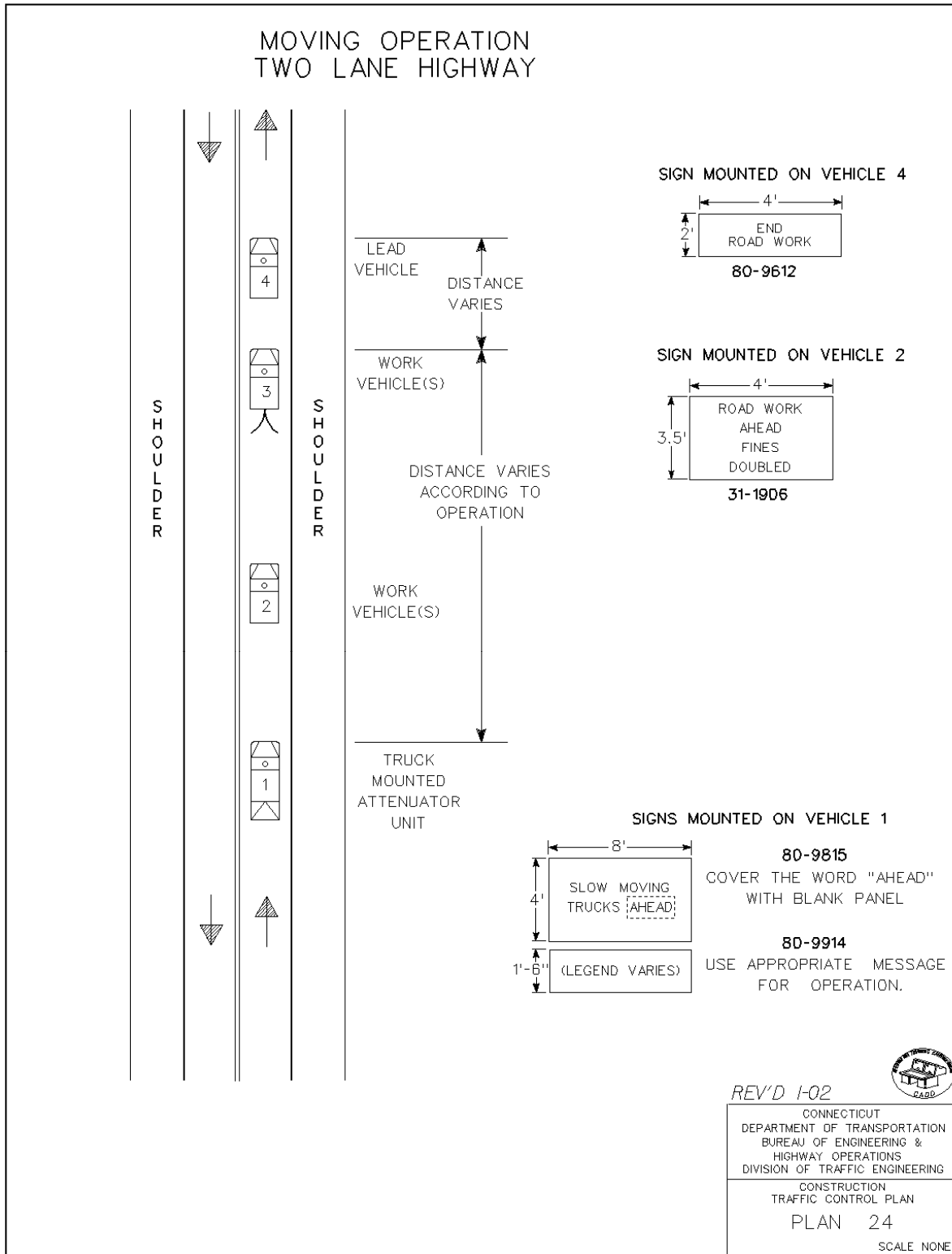
REV'D I-02

CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING &  
HIGHWAY OPERATIONS  
DIVISION OF TRAFFIC ENGINEERING

CONSTRUCTION  
TRAFFIC CONTROL PLAN  
PLAN 23

SCALE NONE

APPROVED John D. Micali PRINCIPAL ENGINEER DATE I-30-02



APPROVED John D. McCall DATE 1-30-02  
 PRINCIPAL ENGINEER



# Appendix B

## DETOUR ROUTES

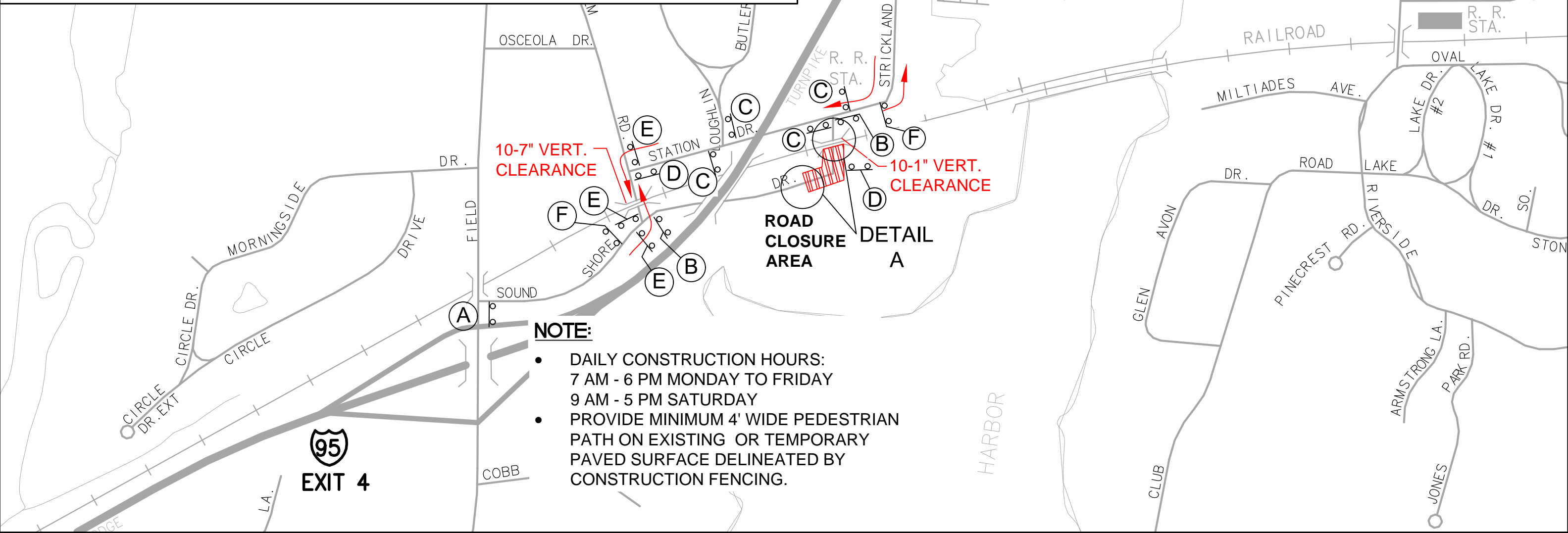
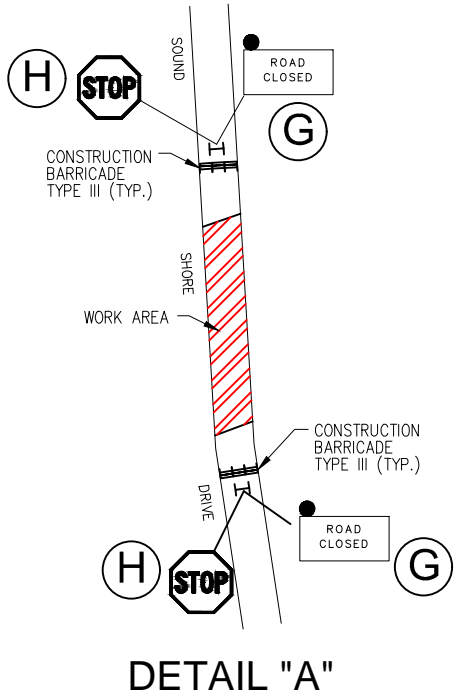
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# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b> SOUND SHORE DRIVE CLOSED AHEAD NO THRU TRAFFIC	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>F</b> END DETOUR	80-9708 24"x18"
<b>B</b> ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	80-9077 60"x30"	<b>G</b> ROAD CLOSED	80-9080 48"x30"
<b>C</b> SOUND SHORE DRIVE DETOUR ↑	80-9916 48"x10" 80-9710 24"x30"	<b>H</b> STOP	31-0557 48"
<b>D</b> SOUND SHORE DRIVE DETOUR →	80-9916 48"x10" 80-9710 24"x30"		
<b>E</b> SOUND SHORE DRIVE DETOUR ←	80-9916 48"x10" 80-9710 24"x30"		

- NOTE**
1. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
  2. DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
  3. DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
  4. SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
  5. "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- ⊥ PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- ▬ TYPE III BARRICADE



- NOTE:**
- DAILY CONSTRUCTION HOURS:  
7 AM - 6 PM MONDAY TO FRIDAY  
9 AM - 5 PM SATURDAY
  - PROVIDE MINIMUM 4' WIDE PEDESTRIAN PATH ON EXISTING OR TEMPORARY PAVED SURFACE DELINEATED BY CONSTRUCTION FENCING.



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Phone: (860) 633-8341 • Fax: (860) 633-1068



1" = 500'

## DETOUR PLAN 1 SOUND SHORE DRIVE DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

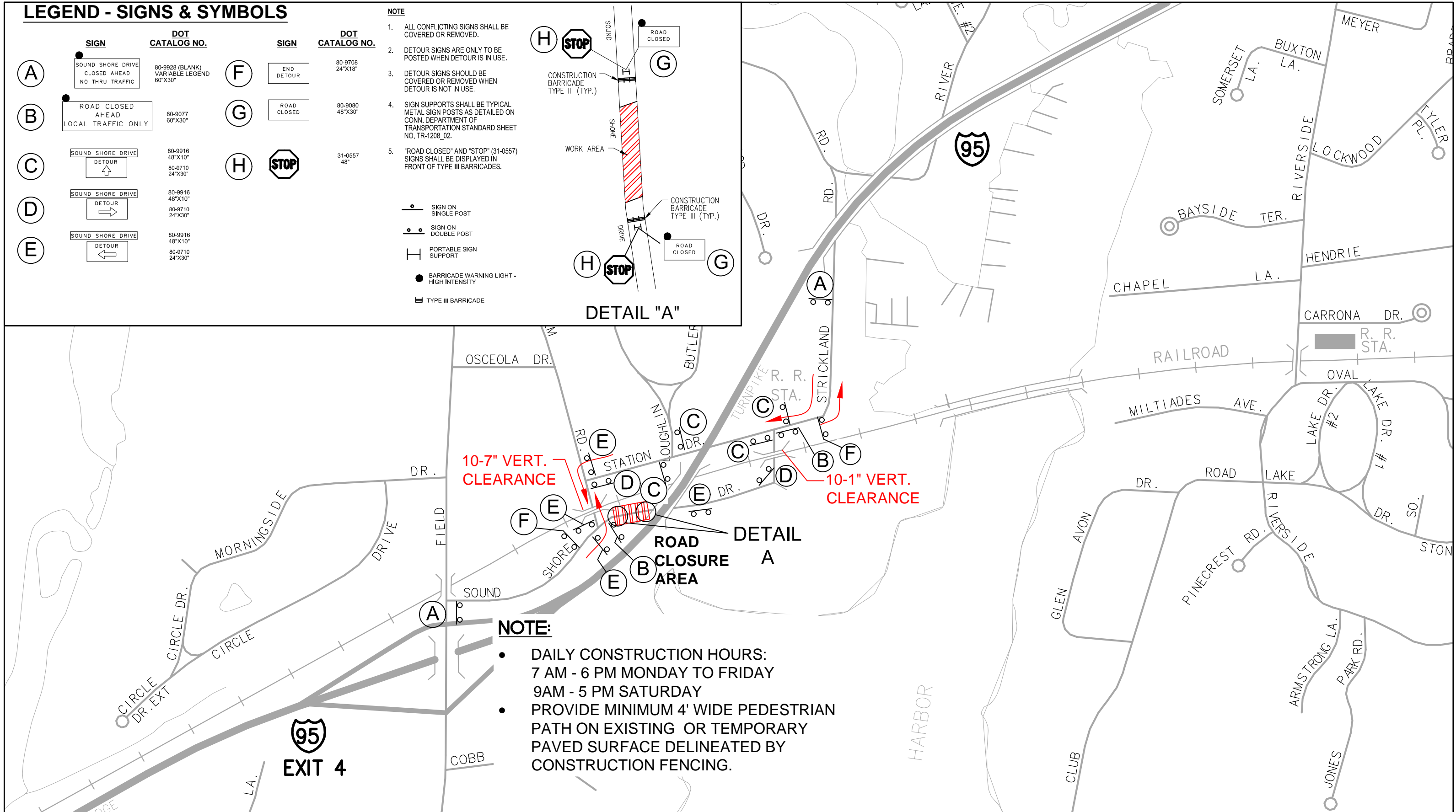
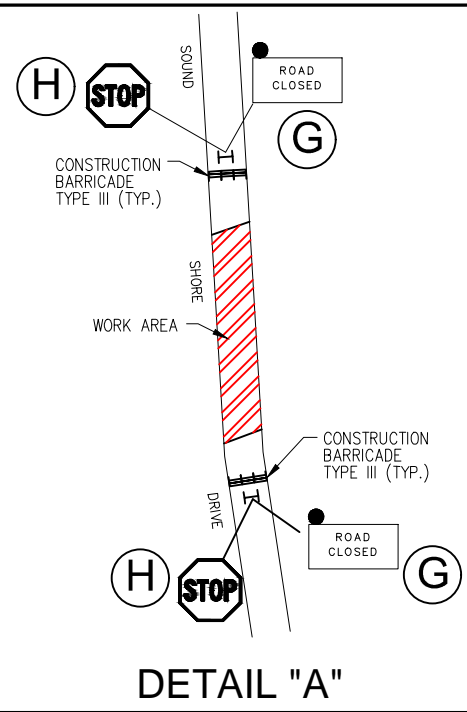
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b> SOUND SHORE DRIVE CLOSED AHEAD NO THRU TRAFFIC	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>F</b> END DETOUR	80-9708 24"x18"
<b>B</b> ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	80-9077 60"x30"	<b>G</b> ROAD CLOSED	80-9080 48"x30"
<b>C</b> SOUND SHORE DRIVE DETOUR ↑	80-9916 48"x10" 80-9710 24"x30"	<b>H</b> STOP	31-0557 48"
<b>D</b> SOUND SHORE DRIVE DETOUR →	80-9916 48"x10" 80-9710 24"x30"		
<b>E</b> SOUND SHORE DRIVE DETOUR ←	80-9916 48"x10" 80-9710 24"x30"		

### NOTE

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
- DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
- "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- ⊥ PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- ▬ TYPE III BARRICADE



### NOTE:

- DAILY CONSTRUCTION HOURS:  
7 AM - 6 PM MONDAY TO FRIDAY  
9AM - 5 PM SATURDAY
- PROVIDE MINIMUM 4' WIDE PEDESTRIAN PATH ON EXISTING OR TEMPORARY PAVED SURFACE DELINEATED BY CONSTRUCTION FENCING.



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1" = 500'

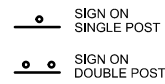
## DETOUR PLAN 1A SOUND SHORE DRIVE DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

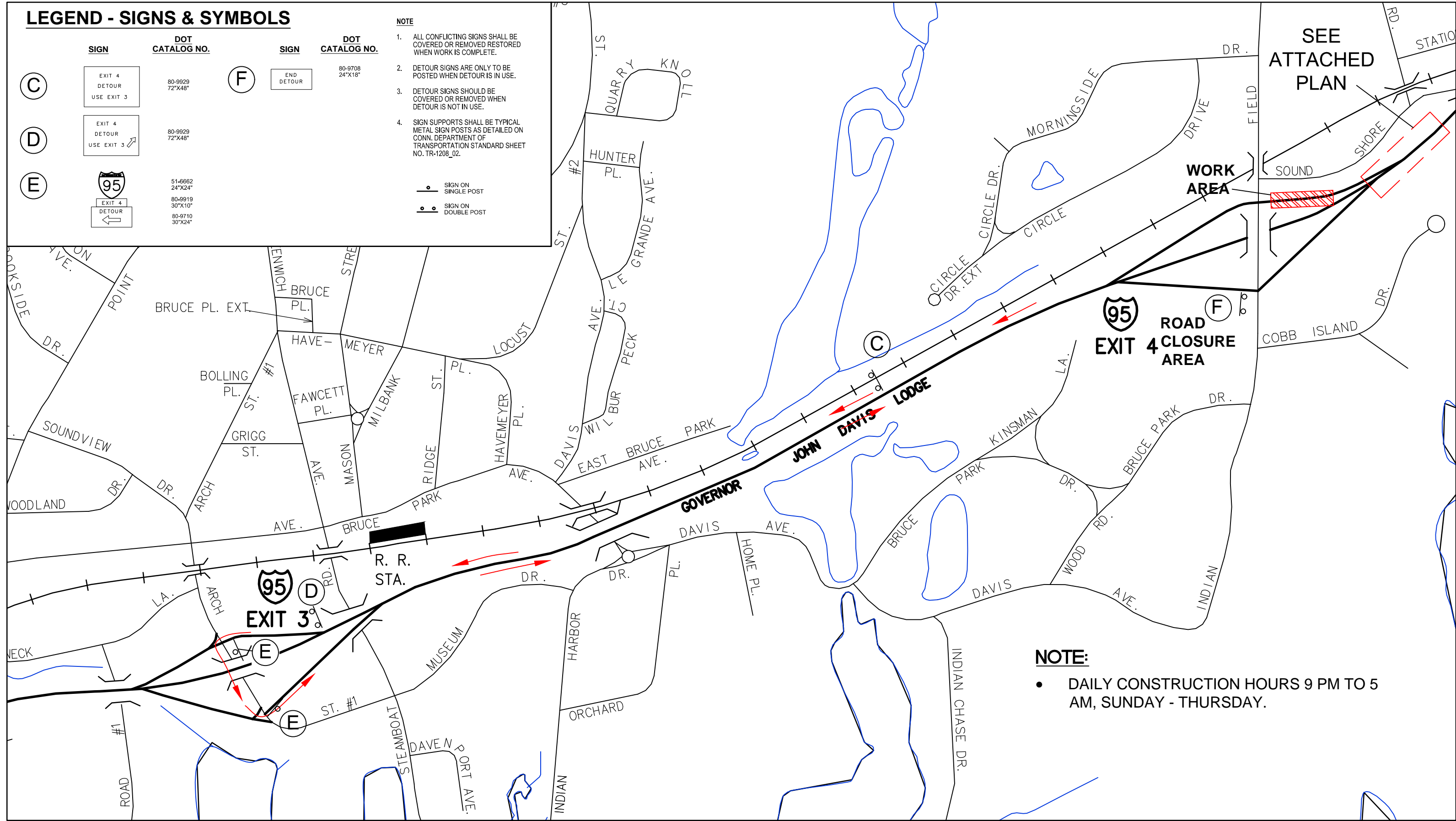
# LEGEND - SIGNS & SYMBOLS

## NOTE

1. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED RESTORED WHEN WORK IS COMPLETE.
2. DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
3. DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
4. SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.



SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
	80-9929 72"x48"		80-9708 24"x18"
	80-9929 72"x48"		
	51-6662 24"x24" 80-9919 30"x10" 80-9710 30"x24"		



SEE ATTACHED PLAN

**95 ROAD CLOSURE AREA**

### NOTE:

- DAILY CONSTRUCTION HOURS 9 PM TO 5 AM, SUNDAY - THURSDAY.



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1" = 500'

## DETOUR PLAN 2 EXIT 4 I-95 SOUTH BOUND DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# CHANGEABLE MESSAGE SIGN

PRE DETOUR  
MESSAGE

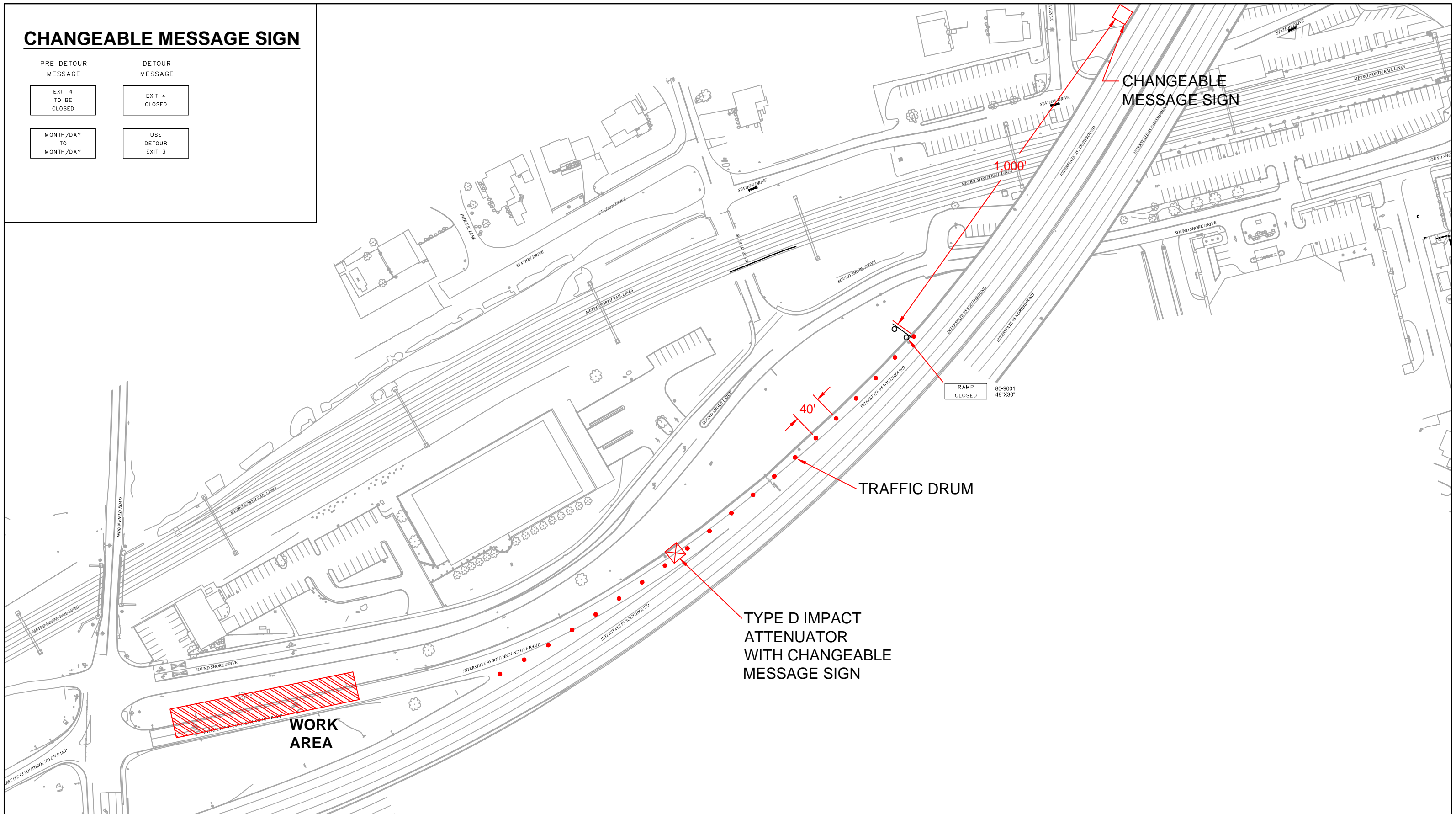
EXIT 4  
TO BE  
CLOSED

MONTH/DAY  
TO  
MONTH/DAY

DETOUR  
MESSAGE

EXIT 4  
CLOSED

USE  
DETOUR  
EXIT 3



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1" = 120'

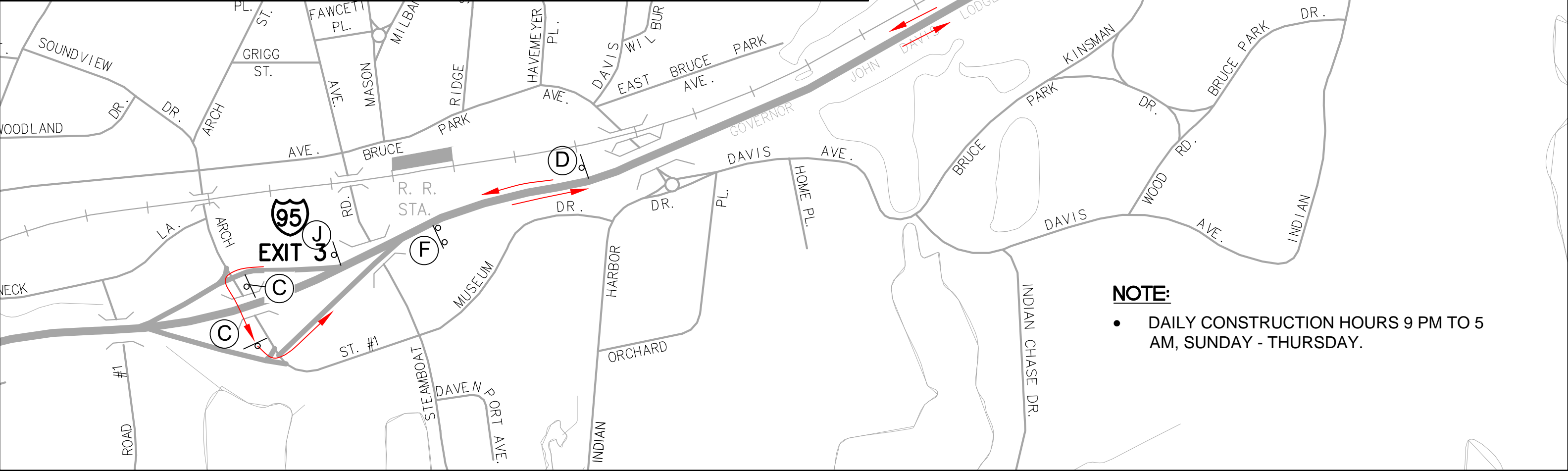
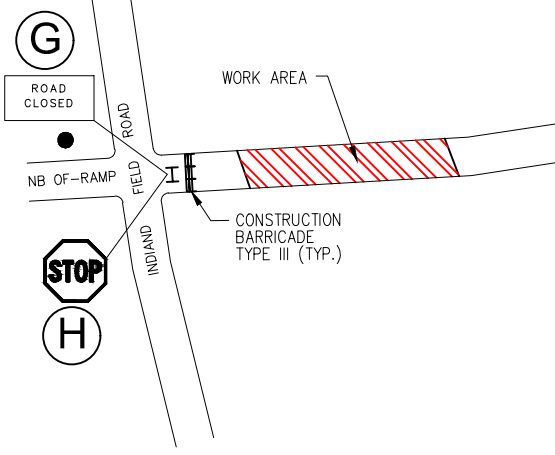
## DETOUR PLAN 2 - ATTACHMENT PLAN EXIT 4 I-95 SOUTH BOUND DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# LEGEND - SIGNS & SYMBOLS

PRE - DETOUR MESSAGE		DETOUR MESSAGE		SIGN		CATALOG NO.	
A	95 NB RAMP CLOSED 9PM - 5AM	F	1-95 NB RAMP CLOSED	F	END DETOUR	G	80-9708 24"x18"
	MONTH/DAY TO MONTH/DAY		USE DETOUR		ROAD CLOSED		80-9080 48"x30"
B	DETOUR NORTH 95	H	STOP	H	STOP	I	31-0557 48"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		80-9707 24"x12"
C	DETOUR NORTH 95	I	DETOUR NORTH 95	I	DETOUR NORTH 95	J	51-6651 24"x12"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-6662 24"x24"
D	DETOUR NORTH 95	J	DETOUR NORTH 95	J	DETOUR NORTH 95	A	51-2686 21"x15"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		80-9707 24"x12"
E	DETOUR NORTH 95	A	DETOUR NORTH 95	A	DETOUR NORTH 95	A	51-6651 24"x12"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-6662 24"x24"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-2693 21"x15"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		80-9707 24"x12"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-6651 24"x12"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-6662 24"x24"
	DETOUR NORTH 95		DETOUR NORTH 95		DETOUR NORTH 95		51-2686 21"x15"

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
  - DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
  - DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- CHANGEABLE MESSAGE SIGN
  - SIGN ON SINGLE POST
  - SIGN ON DOUBLE POST
  - PORTABLE SIGN SUPPORT
  - BARRICADE WARNING LIGHT - HIGH INTENSITY
  - TYPE III BARRICADE



**NOTE:**

- DAILY CONSTRUCTION HOURS 9 PM TO 5 AM, SUNDAY - THURSDAY.



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1" = 500'

**DETOUR PLAN 3**  
**EXIT 4 I-95 NORTH BOUND ON RAMP DETOUR**  
 EVERSOURCE 115 KV Underground Transmissions Facility  
 From CosCob Substation To New Greenwich Substation

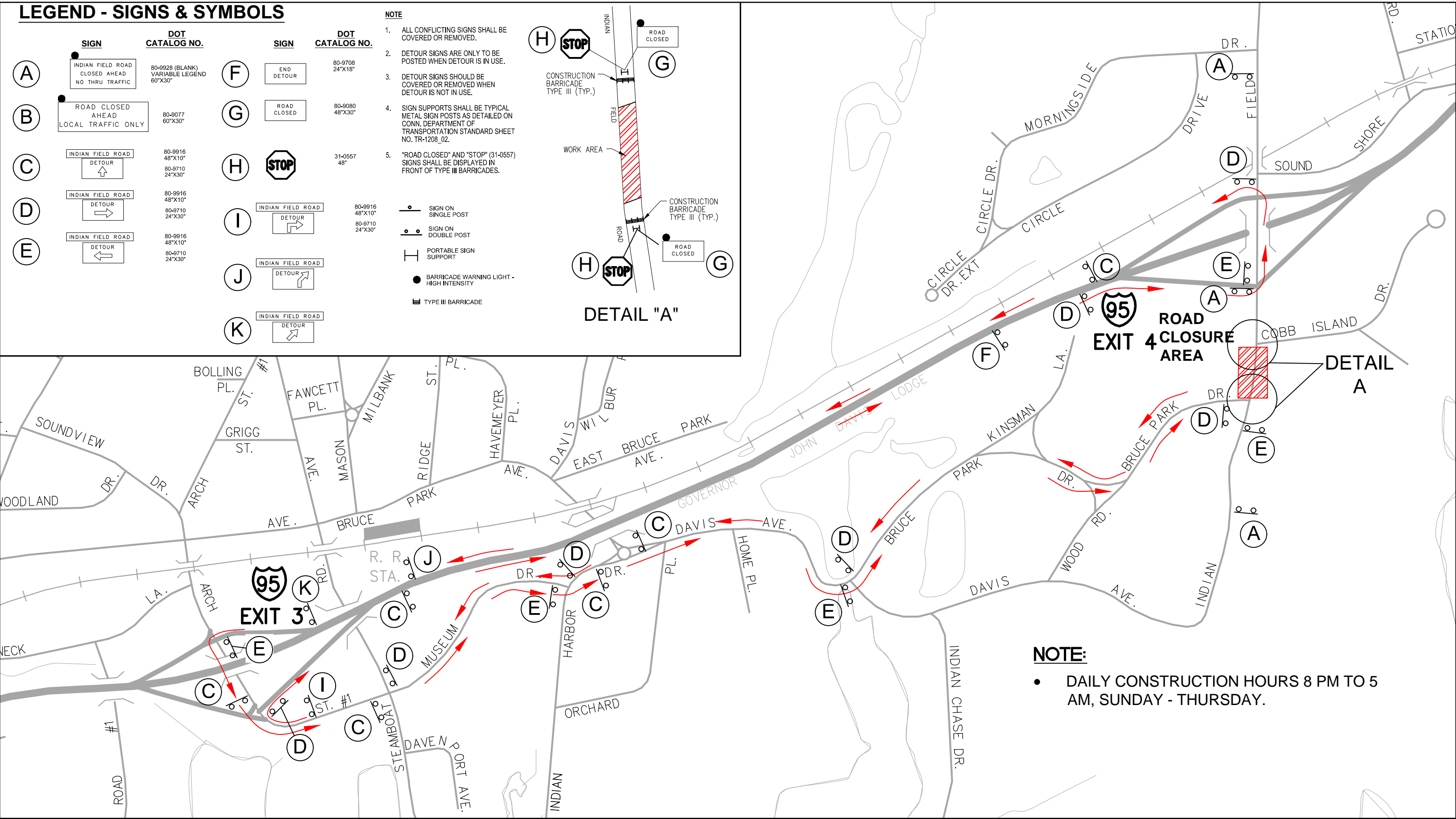
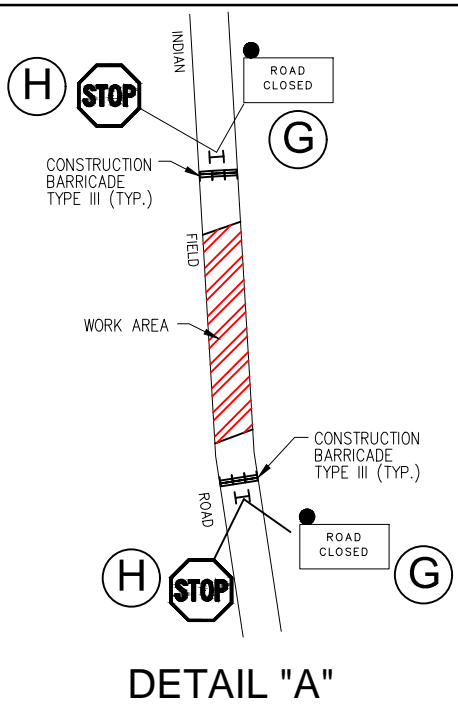
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
(A) INDIAN FIELD ROAD CLOSED AHEAD NO THRU TRAFFIC	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	(F) END DETOUR	80-9708 24"x18"
(B) ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	80-9077 60"x30"	(G) ROAD CLOSED	80-9080 48"x30"
(C) INDIAN FIELD ROAD DETOUR (up arrow)	80-9916 48"x10" 80-9710 24"x30"	(H) STOP	31-0557 48"
(D) INDIAN FIELD ROAD DETOUR (right arrow)	80-9916 48"x10" 80-9710 24"x30"	(I) INDIAN FIELD ROAD DETOUR (right arrow)	80-9916 48"x10" 80-9710 24"x30"
(E) INDIAN FIELD ROAD DETOUR (left arrow)	80-9916 48"x10" 80-9710 24"x30"	(J) INDIAN FIELD ROAD DETOUR (up arrow)	80-9916 48"x10" 80-9710 24"x30"
		(K) INDIAN FIELD ROAD DETOUR (up arrow)	80-9916 48"x10" 80-9710 24"x30"

## NOTE

1. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
2. DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
3. DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
4. SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
5. "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- ▬ TYPE III BARRICADE



## NOTE:

- DAILY CONSTRUCTION HOURS 8 PM TO 5 AM, SUNDAY - THURSDAY.



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1" = 500'

## DETOUR PLAN 4 INDIAN FIELD ROAD DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation



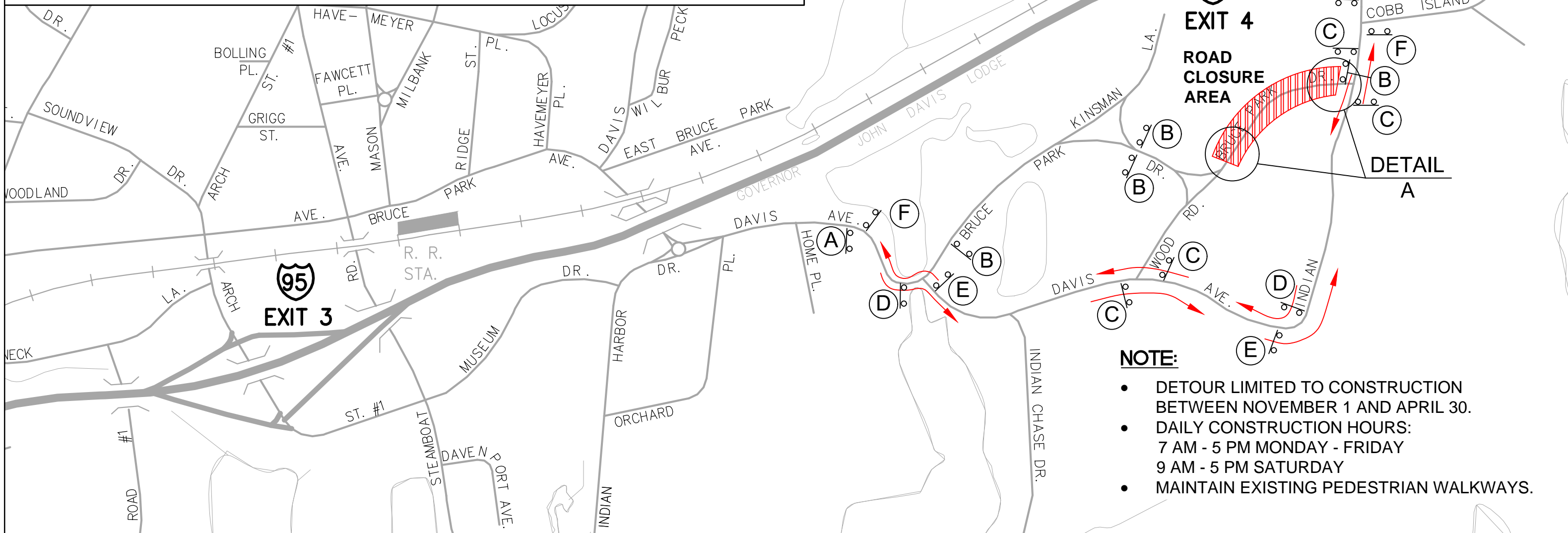
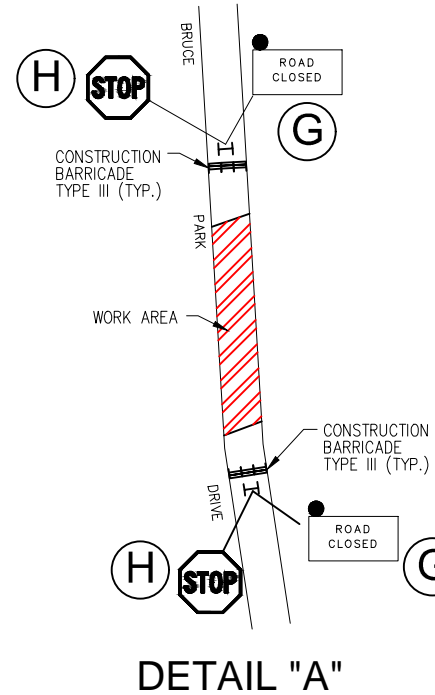
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
(A)	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	(F)	80-9708 24"x18"
(B)	80-9077 60"x30"	(G)	80-9080 48"x30"
(C)	80-9916 48"x10" 80-9710 24"x30"	(H)	31-0557 48"
(D)	80-9916 48"x10" 80-9710 24"x30"		
(E)	80-9916 48"x10" 80-9710 24"x30"		

## NOTE

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
- DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
- "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- TYPE III BARRICADE



## NOTE:

- DETOUR LIMITED TO CONSTRUCTION BETWEEN NOVEMBER 1 AND APRIL 30.
- DAILY CONSTRUCTION HOURS:  
7 AM - 5 PM MONDAY - FRIDAY  
9 AM - 5 PM SATURDAY
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

## DETOUR PLAN 5 BRUCE PARK DRIVE DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

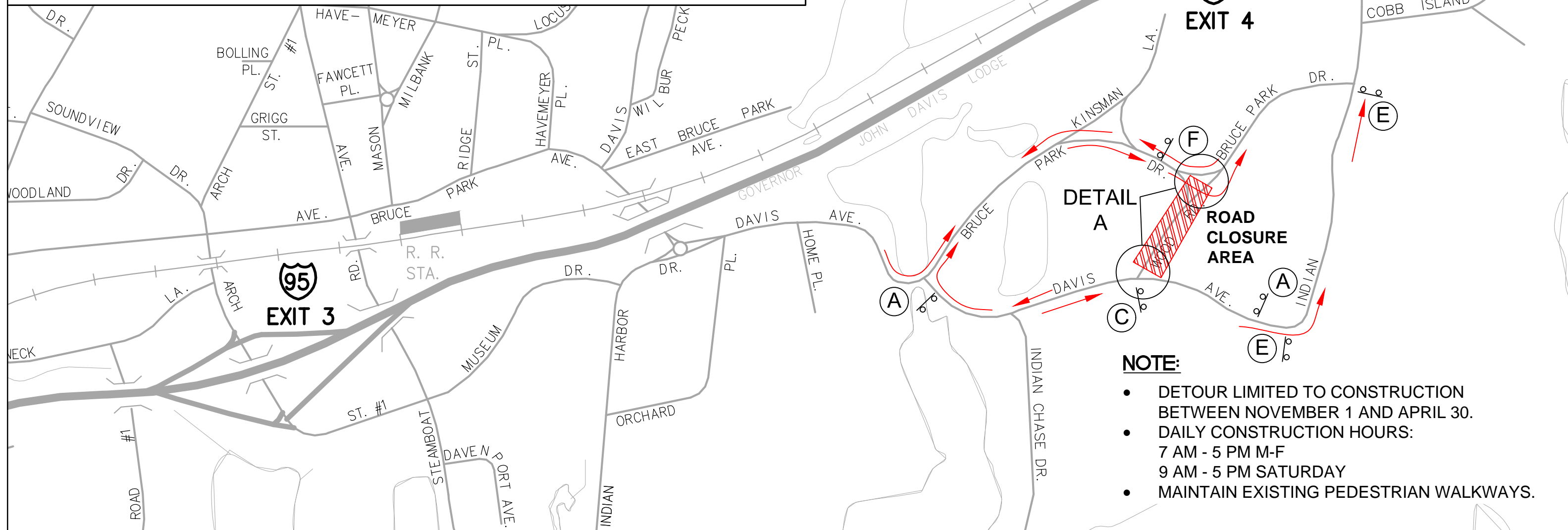
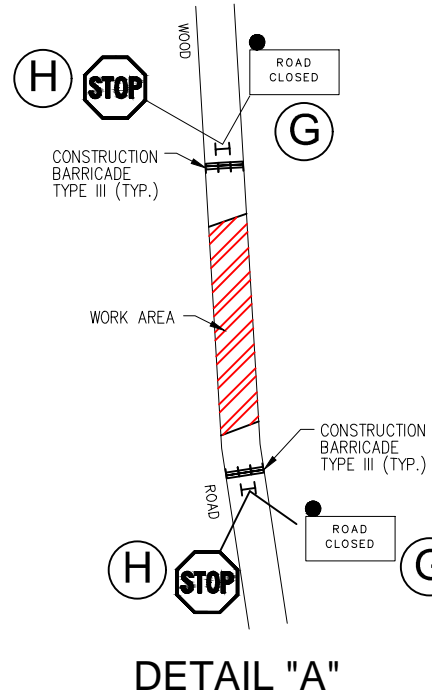
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
(A)	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	(F)	80-9708 24"x18"
(B)	80-9077 60"x30"	(G)	80-9080 48"x30"
(C)	80-9916 48"x10" 80-9710 24"x30"	(H)	31-0557 48"
(D)	80-9916 48"x10" 80-9710 24"x30"		
(E)	80-9916 48"x10" 80-9710 24"x30"		

## NOTE

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
- DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
- "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- TYPE III BARRICADE



## NOTE:

- DETOUR LIMITED TO CONSTRUCTION BETWEEN NOVEMBER 1 AND APRIL 30.
- DAILY CONSTRUCTION HOURS:  
7 AM - 5 PM M-F  
9 AM - 5 PM SATURDAY
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

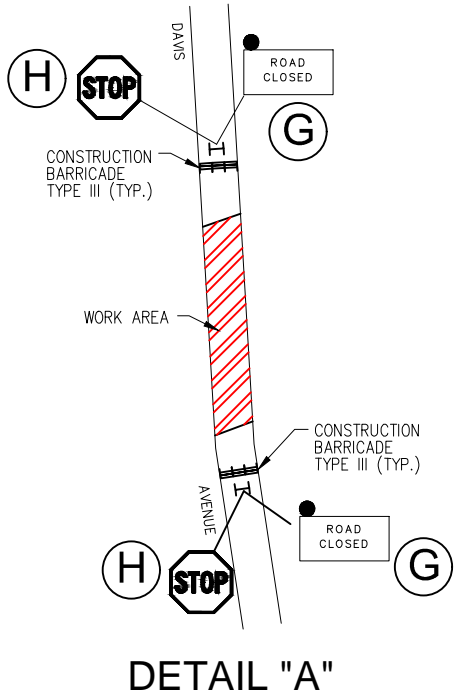
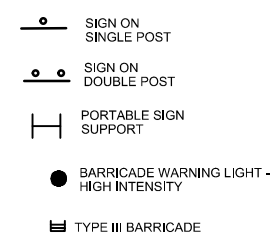
## DETOUR PLAN 6 WOOD ROAD DETOUR

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# LEGEND - SIGNS & SYMBOLS

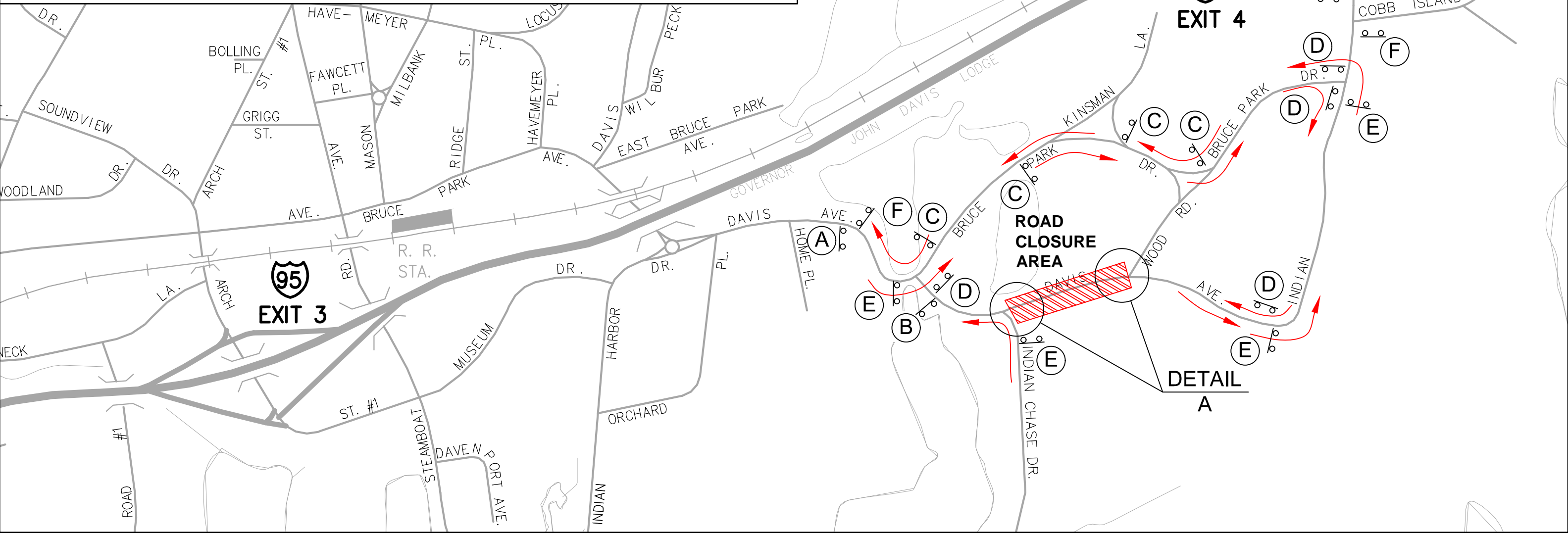
SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>(A)</b> DAVIS AVENUE CLOSED AHEAD NO THRU TRAFFIC	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>(F)</b> END DETOUR	80-9708 24"x18"
<b>(B)</b> ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	80-9077 60"x30"	<b>(G)</b> ROAD CLOSED	80-9080 48"x30"
<b>(C)</b> DAVIS AVENUE DETOUR (Up Arrow)	80-9916 48"x10" 80-9710 24"x30"	<b>(H)</b> STOP	31-0557 48"
<b>(D)</b> DAVIS AVENUE DETOUR (Right Arrow)	80-9916 48"x10" 80-9710 24"x30"		
<b>(E)</b> DAVIS AVENUE DETOUR (Left Arrow)	80-9916 48"x10" 80-9710 24"x30"		

- NOTE**
- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
  - DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
  - DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
  - SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
  - "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.



## NOTE:

- DETOUR LIMITED TO CONSTRUCTION BETWEEN DECEMBER 1 TO MARCH 31.
- DAILY CONSTRUCTION HOURS:  
7 AM - 6 PM M-F  
9 AM - 5 PM SATURDAY
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

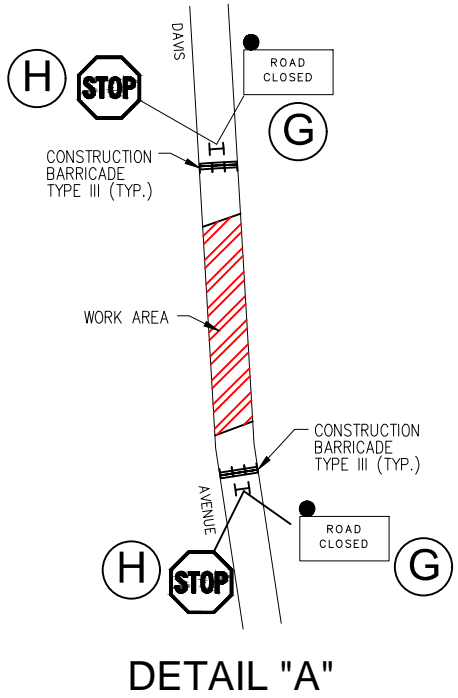
## DETOUR PLAN 7 DAVIS AVENUE DETOUR #1

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# LEGEND - SIGNS & SYMBOLS

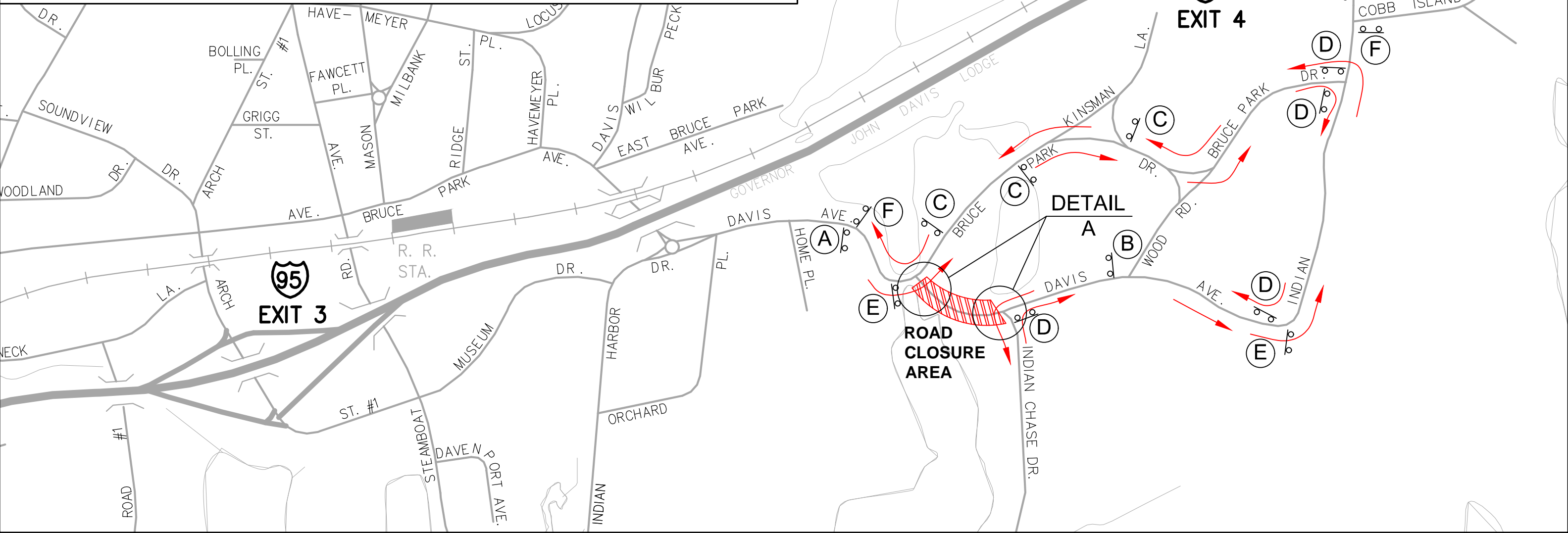
SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
(A) DAVIS AVENUE CLOSED AHEAD NO THRU TRAFFIC	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	(F) END DETOUR	80-9708 24"x18"
(B) ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	80-9077 60"x30"	(G) ROAD CLOSED	80-9080 48"x30"
(C) DAVIS AVENUE DETOUR (Up Arrow)	80-9916 48"x10" 80-9710 24"x30"	(H) STOP	31-0557 48"
(D) DAVIS AVENUE DETOUR (Right Arrow)	80-9916 48"x10" 80-9710 24"x30"		
(E) DAVIS AVENUE DETOUR (Left Arrow)	80-9916 48"x10" 80-9710 24"x30"		

- NOTE:**
- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
  - DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
  - DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
  - SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
  - "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.
- SIGN ON SINGLE POST
  - SIGN ON DOUBLE POST
  - PORTABLE SIGN SUPPORT
  - BARRICADE WARNING LIGHT - HIGH INTENSITY
  - TYPE III BARRICADE



## NOTE:

- DETOUR LIMITED TO CONSTRUCTION BETWEEN NOVEMBER 1 TO APRIL 30.
- DAILY CONSTRUCTION HOURS:  
7 AM - 6 PM M-F  
9 AM - 5 PM SATURDAY
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

## DETOUR PLAN 8 DAVIS AVENUE DETOUR #2

EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

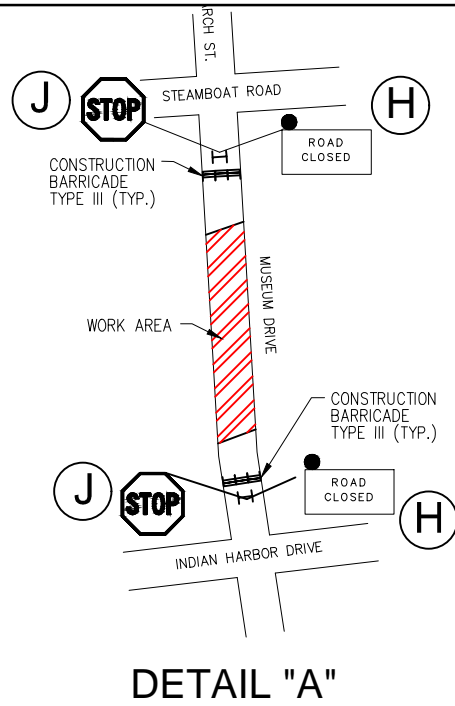
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b>	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>G</b>	80-9708 24"x18"
<b>B</b>	80-9077 60"x30"	<b>H</b>	80-9080 48"x30"
<b>C</b>	80-9916 48"x10" 80-9710 24"x30"	<b>J</b>	31-0557 48"
<b>D</b>	80-9916 48"x10" 80-9710 24"x30"	<b>K</b>	
<b>E</b>	80-9916 48"x10" 80-9710 24"x30"		
<b>F</b>	80-9916 48"x10" 80-9710 24"x30"		

## NOTE

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
- DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
- "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- TYPE III BARRICADE

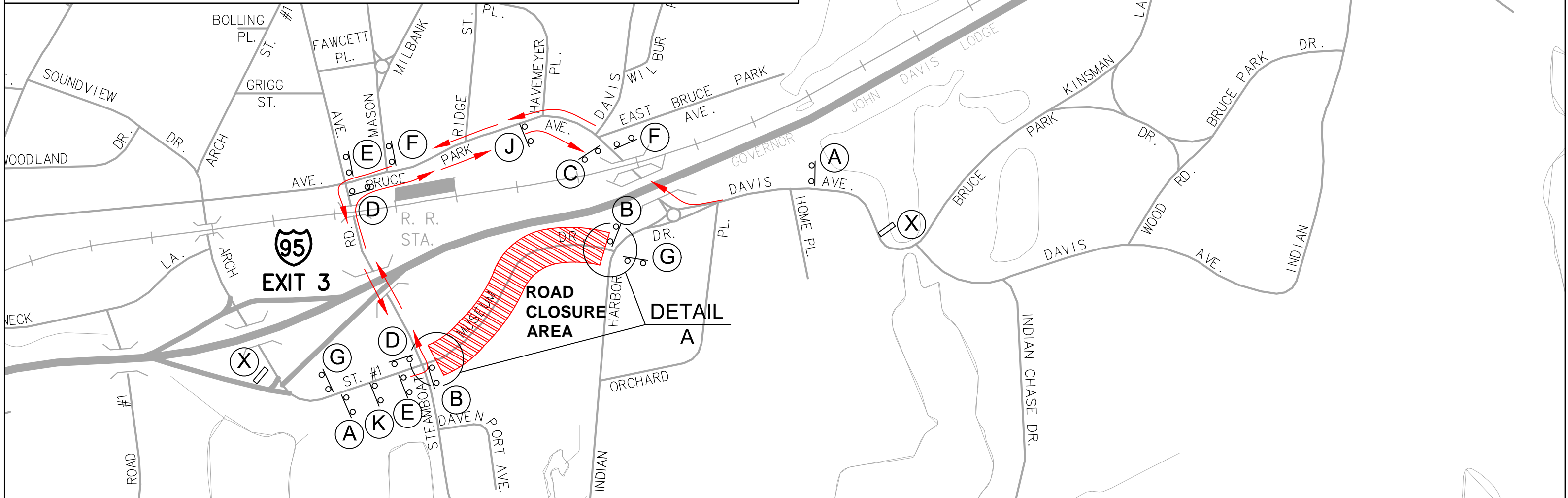


## PRE DETOUR

CHANGEABLE MESSAGE SIGN	

## NOTE:

- DAILY CONSTRUCTION HOURS: 8 PM - 5 AM SUNDAY TO SATURDAY.
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

**DETOUR PLAN 9A**  
**MUSEUM DRIVE DETOUR**  
EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

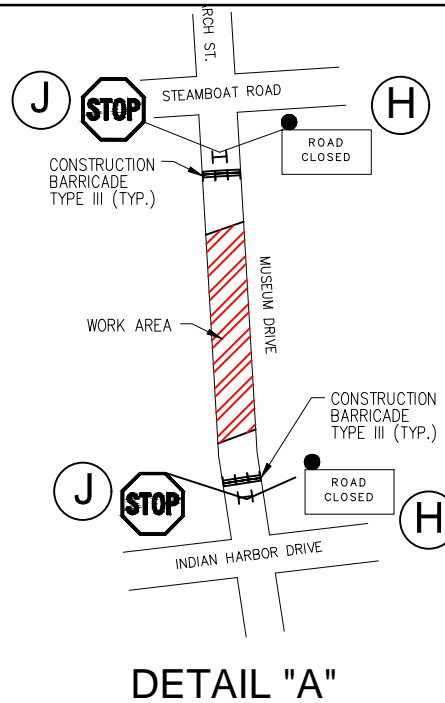
# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b>	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>J</b>	31-0557 48"
<b>B</b>	80-9077 60"x30"	<b>K</b>	
<b>G</b>	80-9708 24"x18"	<b>L</b>	80-9916 48"x10" 80-9710 24"x30"
<b>H</b>	80-9080 48"x30"	<b>M</b>	80-9916 48"x10" 80-9710 24"x30"
		<b>N</b>	80-9916 48"x10" 80-9710 24"x30"
		<b>O</b>	80-9916 48"x10" 80-9710 24"x30"

### NOTE

- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
- DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
- SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
- "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- TYPE III BARRICADE

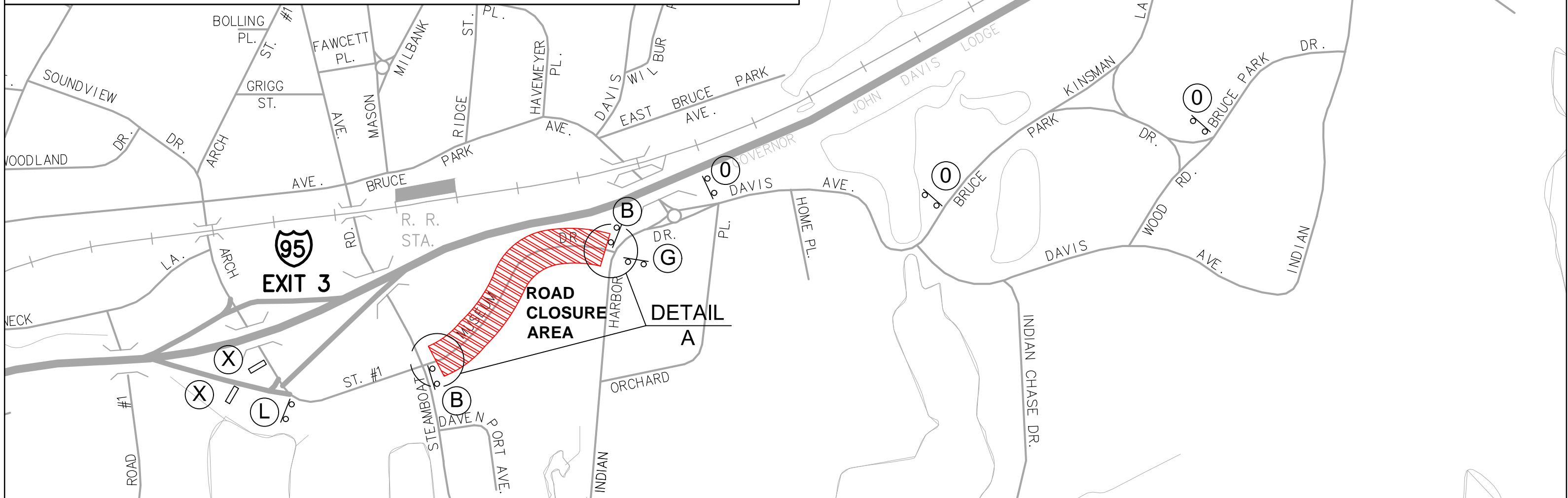


### PRE DETOUR

	CHANGEABLE MESSAGE SIGN
	MUSEUM DRIVE TO BE CLOSED
	MUSEUM DRIVE CLOSED
	MONTH/DAY TO MONTH/DAY
	TRUCKS USE I-95 DETOUR
	8 PM TO 5 AM
	MUSEUM D/TRUCK USE I-95

### NOTE:

- DAILY CONSTRUCTION HOURS: 8 PM - 5 AM SUNDAY TO SATURDAY.
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



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1" = 500'

## DETOUR PLAN 9B (TRUCKS) MUSEUM DRIVE DETOUR

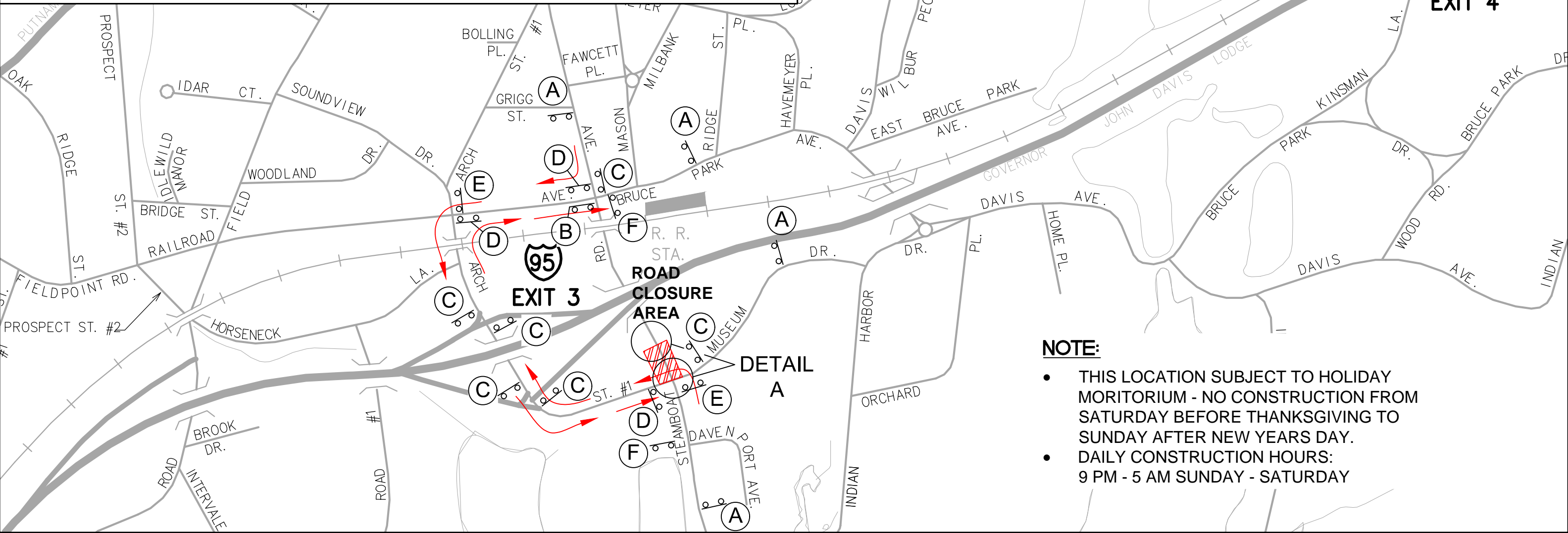
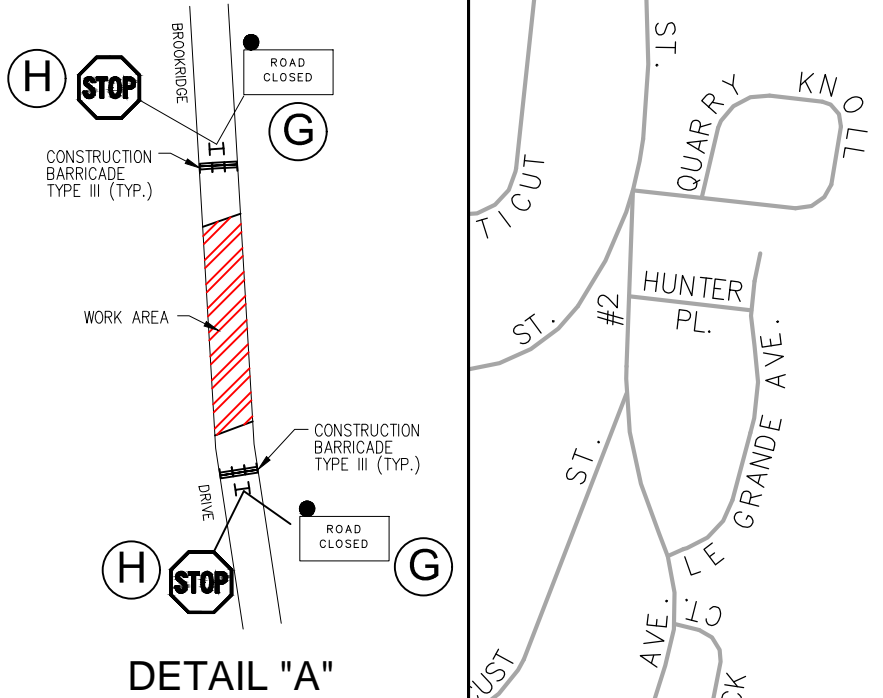
EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b> 	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>F</b> 	80-9708 24"x18"
<b>B</b> 	80-9077 60"x30"	<b>G</b> 	80-9080 48"x30"
<b>C</b> 	80-9916 48"x10" 80-9710 24"x30"	<b>H</b> 	31-0557 48"
<b>D</b> 	80-9916 48"x10" 80-9710 24"x30"		
<b>E</b> 	80-9916 48"x10" 80-9710 24"x30"		

- NOTE**
- ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
  - DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
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- SIGN ON SINGLE POST
- SIGN ON DOUBLE POST
- PORTABLE SIGN SUPPORT
- BARRICADE WARNING LIGHT - HIGH INTENSITY
- TYPE III BARRICADE



- NOTE:**
- THIS LOCATION SUBJECT TO HOLIDAY MORITORIUM - NO CONSTRUCTION FROM SATURDAY BEFORE THANKSGIVING TO SUNDAY AFTER NEW YEARS DAY.
  - DAILY CONSTRUCTION HOURS:  
9 PM - 5 AM SUNDAY - SATURDAY



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1" = 500'

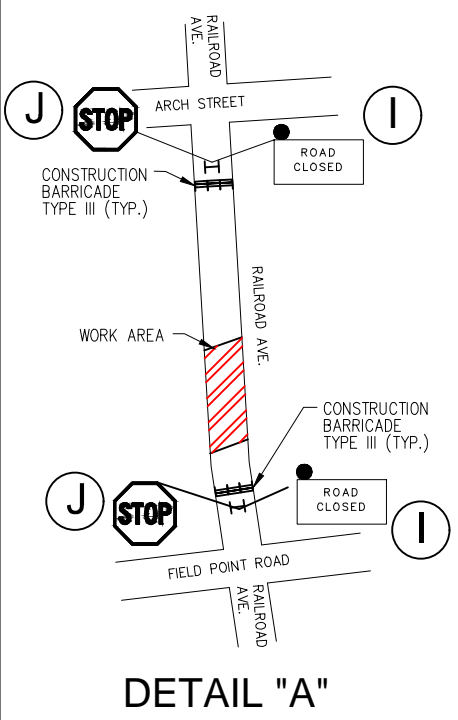
**DETOUR PLAN 10**  
**STEAMBOAT ROAD DETOUR**  
EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation

# LEGEND - SIGNS & SYMBOLS

SIGN	DOT CATALOG NO.	SIGN	DOT CATALOG NO.
<b>A</b>	80-9928 (BLANK) VARIABLE LEGEND 60"x30"	<b>H</b>	80-9708 24"x18"
<b>B</b>	80-9077 60"x30"	<b>I</b>	80-9080 48"x30"
<b>C</b>	80-9916 48"x10" 80-9710 24"x30"	<b>J</b>	31-0557 48"
<b>D</b>	80-9916 48"x10" 80-9710 24"x30"		SIGN ON SINGLE POST
<b>E</b>	80-9916 48"x10" 80-9710 24"x30"		SIGN ON DOUBLE POST
<b>F</b>	80-9916 48"x10" 80-9710 24"x30"		PORTABLE SIGN SUPPORT
<b>G</b>	80-9916 48"x10" 80-9710 24"x30"		BARRICADE WARNING LIGHT - HIGH INTENSITY
			TYPE III BARRICADE

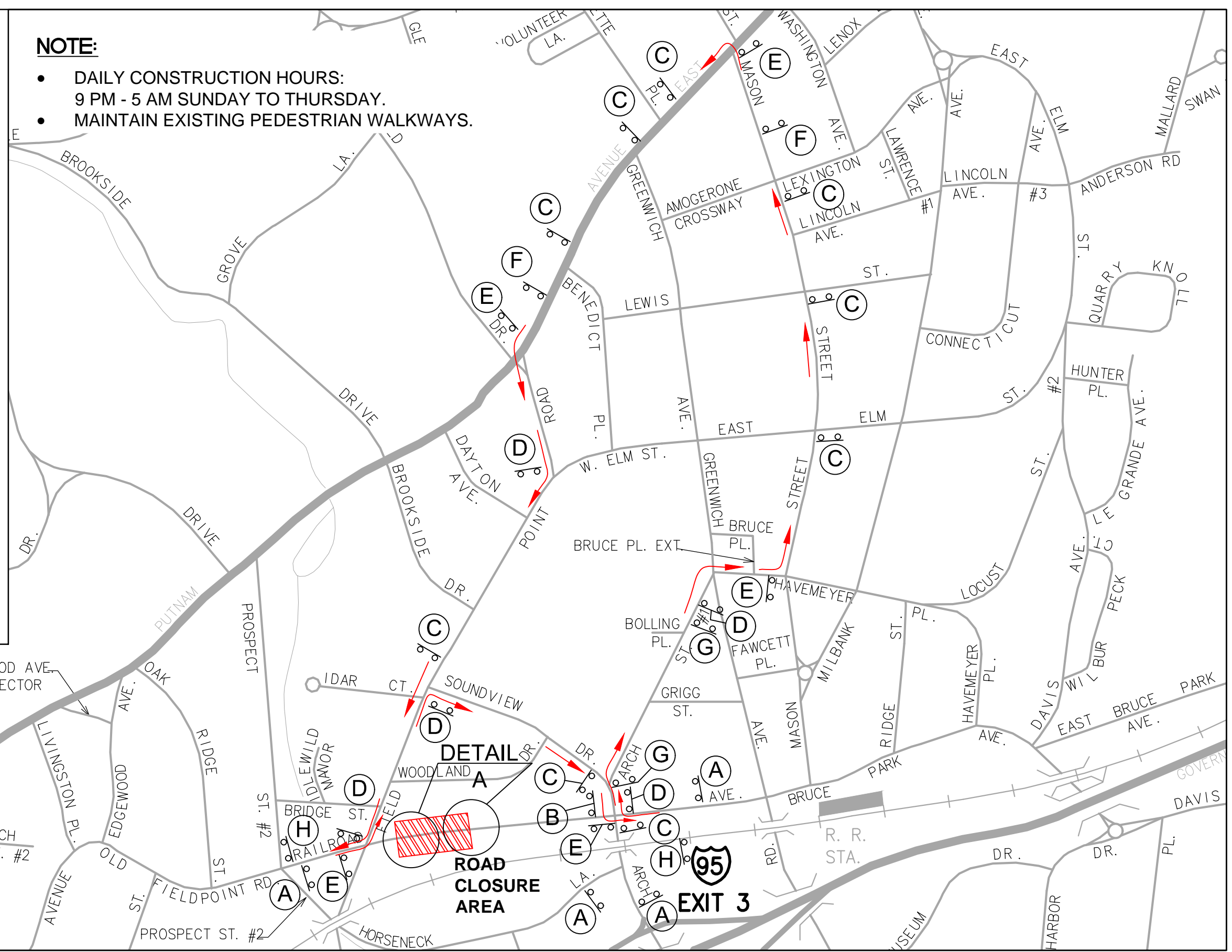
**NOTE**

1. ALL CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
2. DETOUR SIGNS ARE ONLY TO BE POSTED WHEN DETOUR IS IN USE.
3. DETOUR SIGNS SHOULD BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE.
4. SIGN SUPPORTS SHALL BE TYPICAL METAL SIGN POSTS AS DETAILED ON CONN. DEPARTMENT OF TRANSPORTATION STANDARD SHEET NO. TR-1208\_02.
5. "ROAD CLOSED" AND "STOP" (31-0557) SIGNS SHALL BE DISPLAYED IN FRONT OF TYPE III BARRICADES.

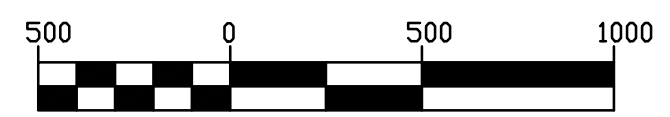
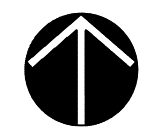


**NOTE:**

- DAILY CONSTRUCTION HOURS: 9 PM - 5 AM SUNDAY TO THURSDAY.
- MAINTAIN EXISTING PEDESTRIAN WALKWAYS.



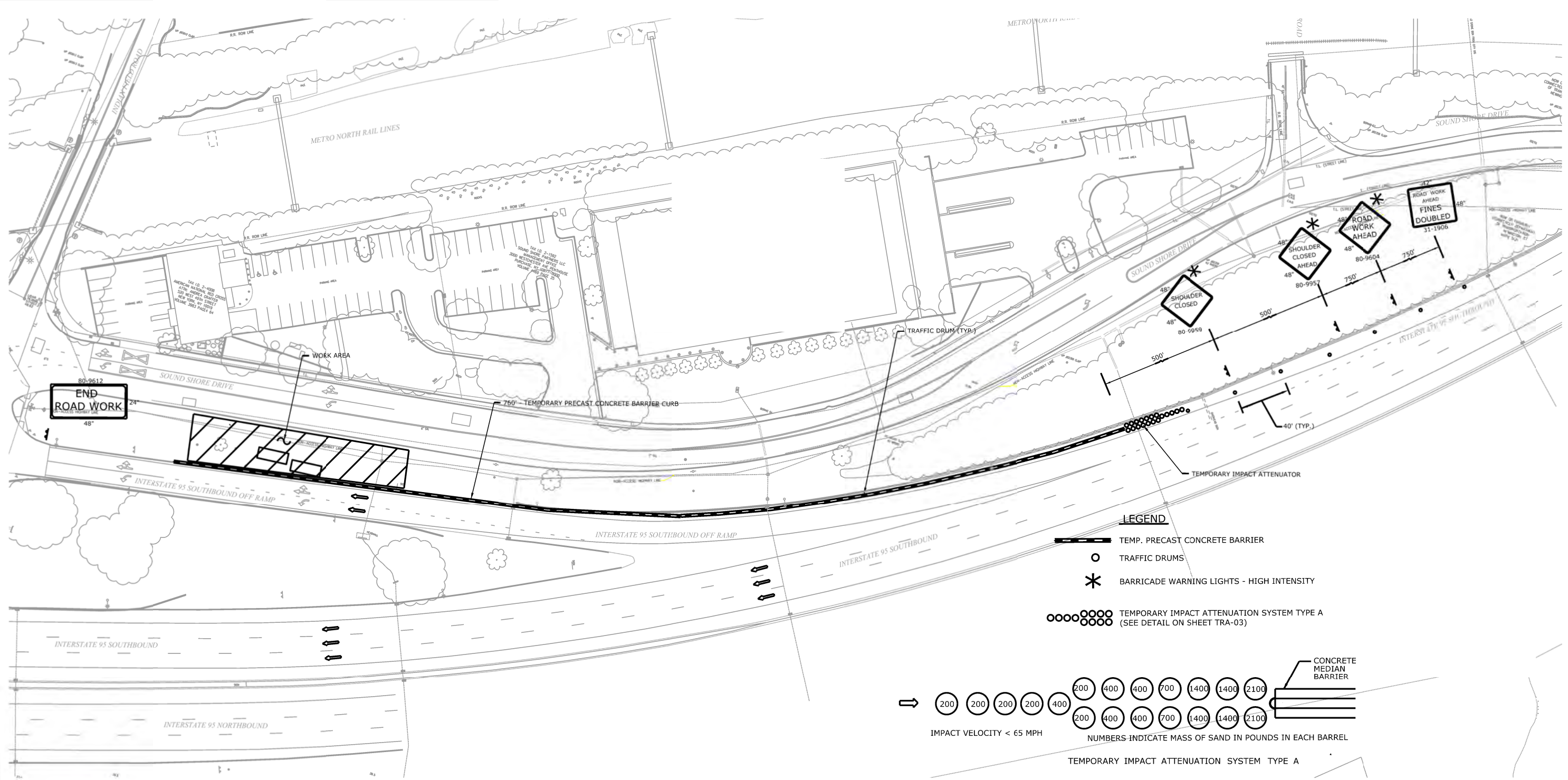
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1" = 500'

**DETOUR PLAN 11**  
**RAILROAD AVENUE DETOUR**  
EVERSOURCE 115 KV Underground Transmissions Facility  
From CosCob Substation To New Greenwich Substation



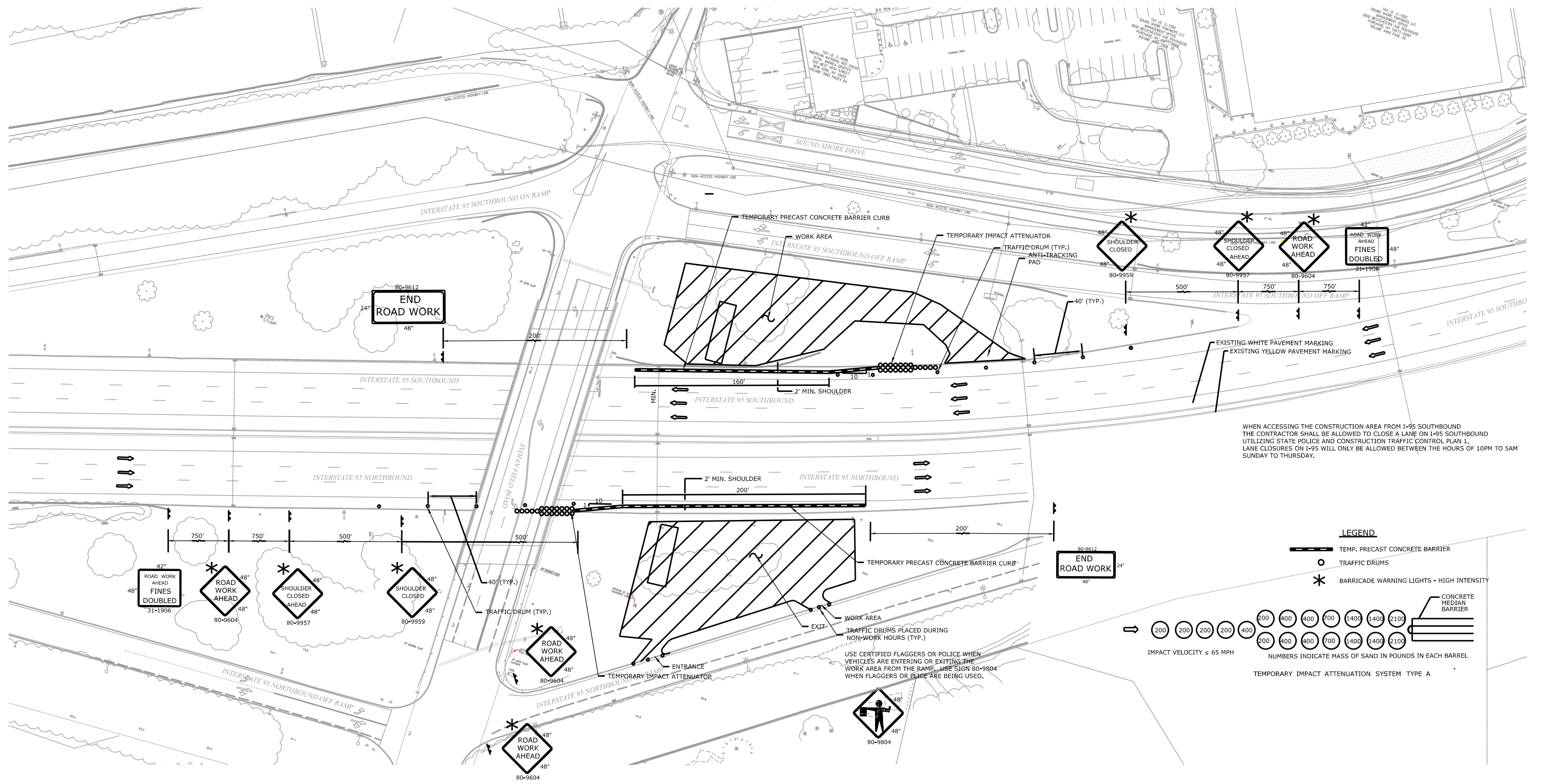


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SCALE 1" = 80'  
 160 80 0 160

**I-95 EXIT 4 - SOUTHBOUND OFF RAMP  
 SHOULDER CLOSURE**  
 EVERSOURCE 115 KV Underground Transmissions Facility  
 From CosCob Substation To New Greenwich Substation



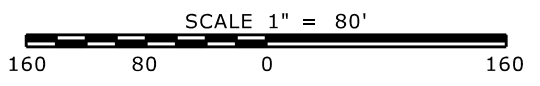
WHEN ACCESSING THE CONSTRUCTION AREA FROM I-95 SOUTHBOUND THE CONTRACTOR SHALL BE ALLOWED TO CLOSE A LANE ON I-95 SOUTHBOUND UTILIZING STATE POLICE AND CONSTRUCTION TRAFFIC CONTROL PLAN 1. LANE CLOSURES ON I-95 WILL ONLY BE ALLOWED BETWEEN THE HOURS OF 10PM TO 5AM SUNDAY TO THURSDAY.

**LEGEND**

- TEMP. PRECAST CONCRETE BARRIER
  - TRAFFIC DRUMS
  - BARRICADE WARNING LIGHTS - HIGH INTENSITY
  - CONCRETE MEDIAN BARRIER
- 200 200 200 200 400 200 400 400 700 1400 1400 2100 2100  
 IMPACT VELOCITY ≤ 65 MPH  
 NUMBERS INDICATE MASS OF SAND IN POUNDS IN EACH BARREL  
 TEMPORARY IMPACT ATTENUATION SYSTEM TYPE A



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**I-95 WORK AREA - SHOULDER CLOSURES  
 NORTHBOUND AND SOUTHBOUND**

EVERSOURCE 115 KV Underground Transmissions Facility  
 From CosCob Substation To New Greenwich Substation

**Appendix C**  
**COS COB TRAIN STATION PARKING**  
**IMPACT PLAN**

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### Segment #3: Cos Cob Train Station Parking Lot Supplemental Parking Guideline

The contractor shall be responsible for managing compensatory parking while working within the Cos Cob Train Station Parking Lot. Compensatory parking will be required for duct bank construction and pavement restoration.

Map sheet 02A of 17 in the 115kV Double-Circuit Underground Transmission Line Development and Management Plan Mapping and found in Appendix C of this document shows the parking lot to be used for compensatory parking.

Contractor shall provide shuttle service for commuters from the parking lot on Station Drive to the Cos Cob Train Station platform. Valet parking service will also be provided at the Station Drive parking lot so that cars may be double parked within the parking lot.

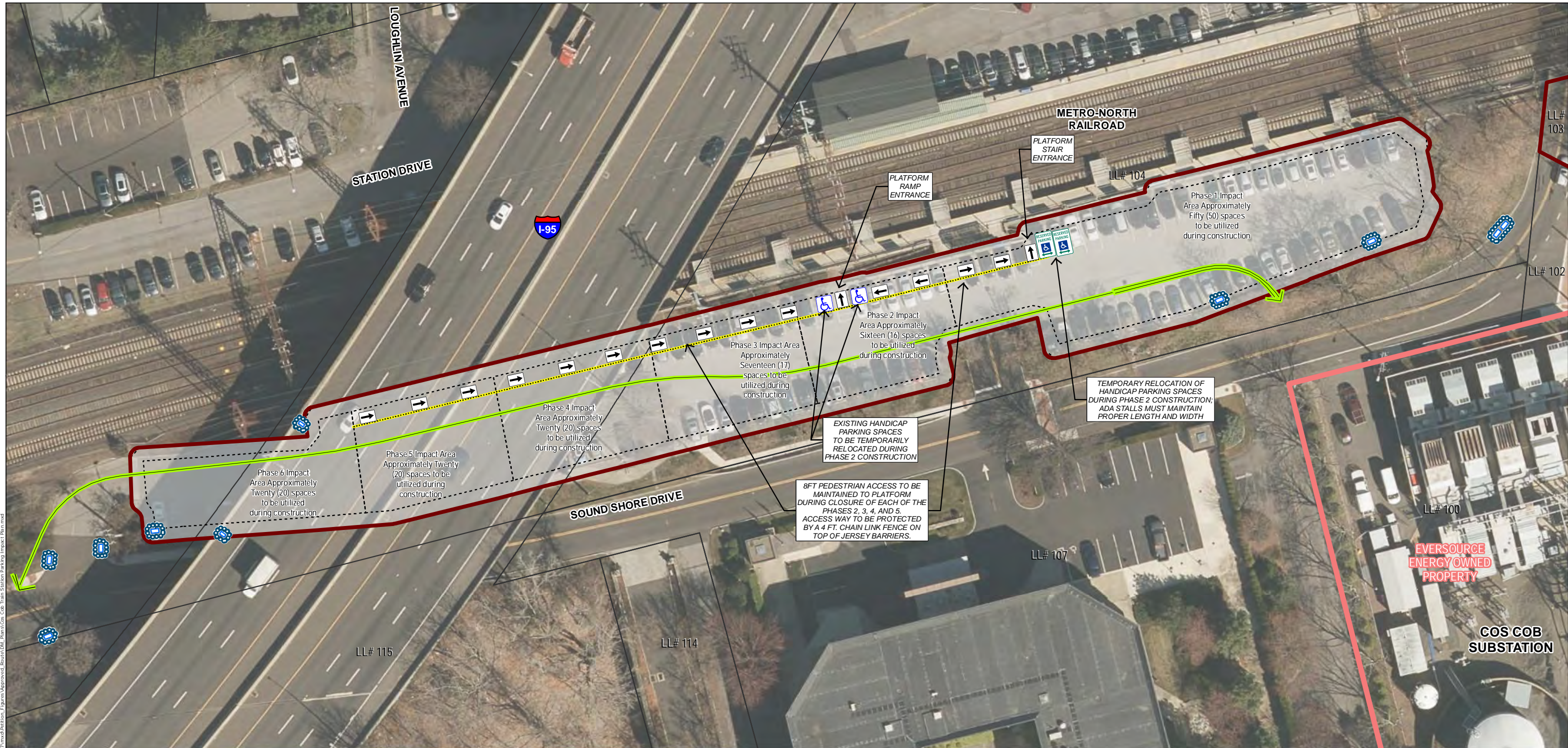
If duct bank construction occurs during the week between Christmas and New Year's (2018) then the contractor is exempt from compensatory parking requirements for duct bank construction. However, compensatory parking will still be required for pavement restoration.

Contractor shall only be able to occupy one segment of the parking lot at a time.

Contractor shall provide a 4 week notice to Eversource before beginning work in the parking lot.

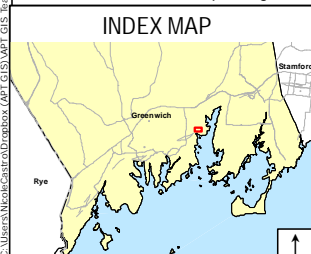
Contractor shall be required to attend coordination meetings with Eversource, Greenwich Department of Public Works, and Greenwich Department of Parking Services before beginning work in the parking lot.

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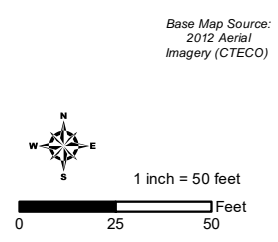


Greenwich Substation and Line Project Parking Plan: Cos Cob Train Station:  
 Greenwich Substation and Line Project Parking Plan: Cos Cob Train Station:

1. Eversource to post signs at the two train station parking lot entrances at least 48 hours in advance of construction to mitigate possible overnight stays
2. The Town of Greenwich and ConnDOT Rails agreed to utilize a combination of the following notification methods to commuters:
  - a. Message board near entrance of parking lot; signs posted on stakes or abutments within the parking lot; signs posted on the train station platform railings; email to parking permit holders
3. There are six phases of construction within the Cos Cob Train Station parking lot. Per coordination with the Town of Greenwich, parking spaces contained within each phase of construction will be closed until construction of the duct bank is complete in a particular phase and the travel surface is restored to driving conditions. Construction will be completed between 7AM and 6PM Monday thru Friday and 9AM and 5PM on Saturday. At least one entrance into the train station parking lot will be maintained at all times. Construction within each phase will cause a closure of approximately 3-5 days, with the total time spent in the Cos Cob train station parking lot totaling approximately 3 weeks.
4. Compensatory parking for those spaces unavailable during construction will be available at the Town of Greenwich parking lot outlined on map sheet 02A. A shuttle service will be provided between the train station and this parking lot during construction hours.



- Legend**
- Underground Transmission-Line Duct (4' wide)
  - Parking Impact Area
  - Jersey Barrier
  - Drainage Structure
  - Inlet Protection
  - Eversource Owned Property
  - State-Owned Property
  - Approximate Parcel Boundary

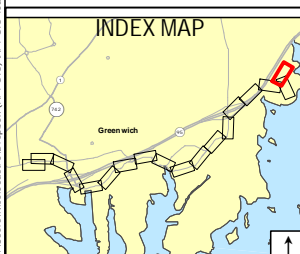


<b>EVERSOURCE ENERGY</b>					
<b>Greenwich Substation &amp; Line Project Cos Cob Train Station Parking Impact Plan</b>					
Date: September, 2018					
Map Author: N. Castro					
NO.	DATE	REVISIONS	BY	CHK	APP





**GENERAL NOTES:**  
 1. PLEASE REFER TO THE TRAFFIC MANAGEMENT PLAN PREPARED BY BENESCH DATED JULY 27, 2018 FOR TRAFFIC MANAGEMENT PROTECTION MEASURES.  
 2. COMPENSATORY PARKING SHUTTLE SERVICE WILL BE PROVIDED DURING CONSTRUCTION IN COS COB COMMUTER LOT.  
 3. THE LIMITS OF DISTURBANCE AS SHOWN DEFINE AREAS WHERE VEGETATION REMOVAL AND GRUBBING, GRADING, AND EXCAVATION MAY OCCUR.  
 4. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT PORTIONS OF EVERSOURCE'S BMP MANUAL: CONNECTICUT CONSTRUCTION AND MAINTENANCE ENVIRONMENTAL REQUIREMENTS (BMP MANUAL), UNLESS MORE STRINGENT PROJECT-SPECIFIC MEASURES APPLY.  
 5. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF REGULATORY APPROVALS FROM THE CONNECTICUT SITING COUNCIL, U.S. ARMY CORPS OF ENGINEERS, THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, AND THE CONNECTICUT DEPARTMENT OF TRANSPORTATION, AND WITH ALL PROJECT PROTOCOLS.  
 6. EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED AND MAINTAINED (IN REFERENCE TO E&S CONTROLS) DURING CONSTRUCTION, AS REQUIRED, TO COMPLY WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, AND EVERSOURCE'S BMP MANUAL, AND APPLICABLE REGULATORY APPROVALS.



**Legend**

- Substation Termination
- Limits of Work for Indian Harbor Crossing Discussed in Development and Management Plan Volume 2 - Part 2
- Temporary Construction Matting
- Project Material Staging Area Location
- Splice Vault
- Drainage Structure
- Construction Entrance
- Approximate Parcel Boundary
- Hand Hole
- Inlet Protection
- Stormwater Dewatering Pit
- State-Owned Property
- Underground Transmission-Line Duct (4' wide)
- Filter Sock
- Existing Tree to be removed
- Underground Transmission-Line Duct Underneath Bridge
- Silt Fence
- Eversource Owned Property
- Trenchless Crossing Sending/Receiving Pit
- Stockpile
- Trenchless Crossing Underneath Interstate-95
- Work Pad
- - - - - Map Sheet Matchline
- - - - - Compensatory Parking Area

Base Map Source:  
2012 Aerial Imagery (CTECO)

1 inch = 50 feet

NO.	DATE	REVISIONS	BY	CHK	APP	APP

**EVSOURCE ENERGY**

GREENWICH SUBSTATION AND LINE PROJECT  
 115-KV DOUBLE CIRCUIT UNDERGROUND TRANSMISSION LINES  
 GREENWICH, CONNECTICUT  
 TRANSMISSION LINE DEVELOPMENT & MANAGEMENT PLAN  
 VOLUME 2 - PART 1

Map Sheet 02A of 17

Date: August 07, 2018