GOVERNMENT OF THE DISTRICT OF COLUMBIA District Department of Transportation

Public Space Regulation Division PSRD



GENERAL TRAFFIC CONTROL PLAN (TCP) SUBMITTAL GUIDELINES

19TH Edition, February 14, 2018

The primary function of Temporary Traffic Control Plan is to provide for the safe and efficient movement of vehicles, bicyclists, and pedestrians through and /or around Work Zone, while reasonably protecting workers, properties, and equipment. The movement of traffic and traveling public should be inhibited as little as possible. The goal should be to route all roadway users through the work Zone in a safe and efficient manner comparable to normal street situations.

This document is prepared to provide guidance for Traffic Control Plan submissions so they may be approved in a timely manner. Missing or insufficient information will delay approval.

APPROVAL If a Traffic Control Plan (TCP) or Maintenance of Traffic (MOT) Plan is submitted as part of a Roadway or Bridge Reconstruction, Rehabilitation or Resurfacing Project to TOA, it will be reviewed by the Traffic/Civil Engineering Group of TOA Safety Team.

If a Traffic Control Plan (TCP) or Maintenance of Traffic (MOT) Plan is submitted as part of a public space application to PSRA /Public Space Regulation Administration, it will be reviewed by the Traffic/Civil Engineering Group of PSRA Technical Plan Review Team.

COORDINATION: DDOT expects that the submitter has coordinated with Public Space Regulation Administration and the TOA, IPMA on the amount of public space needed for a project to ensure coordination with adjacent projects, and special events appropriate detour routing, and adequate level of service for street operations.

REVIEW: TCPs shall be subject to review and verification by DDOT staff for conformance to submission requirements. The MOT/TCP drawing must be checked against the "Detailed City Map", Geographic Information System (GIS).

Review MOT/TCP for construction and occupancy permit including: Online Application, MOT/TCP drawing(s), Sequence of Construction, Phases and Sub-phases of construction, and Detour Plan(s).

The Plan Review Division (PRD) engineer must go to the field for an on-site inspection of the existing conditions of the site verses the MOT/TCP that was submitted with the application.

The MOT/TCP drawing and field observations / notes are brought back to the office where the content of the MOT/TCP is checked against current District of Columbia standards pertaining to

the traffic safety, pedestrian safety, mobility, and ADA /Section 540 of the Rehabilitation Act that related accessibility standards, regulations and policies for Work Zone projects.

Notes on the drawings shall be made in red ink to indicate any oversights on the MOT/TCP by the applicant. Additionally, reviewer may use online Reviewing Agencies Notes Text box for adding comments and recommendations addressed to the applicant.

Once the standards are verified, met and are satisfactory, the plan is stamped "Approved". Minor modifications can be made to the drawing as the reviewer sees fit, however, modifications made should be short of redesigning the original MOT/TCP. All changes are to be made in red ink to distinguish them from the original markings.

If standards are not verified and the drawing is incomplete, inaccurate to the point the reviewer would consider the changes to be too extensive compared to the original submission, or the area is too congested for any further projects at that time, or no plan is uploaded with the application, then the application should be stamped "Revision Needed".

Once the MOT/TCP has been designated as "Approved", a copy should be made of the approved MOT/TCP's drawing by the reviewer.

The uploading process of the reviewed MOT/TCP drawing to TOPS should be done by an engineering technician of Permitting Division.

Once an application has been designated as "Revision Needed", the TOPS automatically will inform the applicant about the problems with their application.

The applicant can upload revised MOT/TCP drawing electronically to the reviewer for further processing.

The applicant is given an opportunity to come in to discuss the problem with the reviewer and receive instructions on how to correct the problem if it cannot be done electronically through TOPS.

The time for MOT/TCP review process starts immediately upon receiving technician E-mails on TOPS by the traffic engineer. The estimated time for review MOT/TCP drawing should be - 10 working days (two weeks).

SUBMISSION REQUIREMENTS: The requirements for submission are based on the 2009 Manual on Uniform Traffic Control Devices (MUTCD), DC Temporary Traffic Control Manual Guidelines and Standards -2006 Edition DDOT, Traffic Services Administration, and the Design & Engineering Manual - DC Department of Transportation IPMA; Pedestrian Safety and Work Zone Standards, Pedestrian Safety and Work Zone Standards: Covered and Open Walkways; Preliminary Design Review Meeting Submittal Requirements Checklist. All items are commonly available to contractors and their engineers.

MOT – Maintenance of Traffic drawings shall include sequence of construction, phases and sub phases of work zone, traffic control plans – designated work zone, traffic control signs, channelizing devices, barricades, existing pavement markings, peak hour's restrictions, as well as detour plan(s) if they are required by work zone traffic conditions.

Applicant must schedule his construction work in the public space properly, and submit MOT/TCP drawings per following submittal criteria:

- Each submitted application through Transportation Online Permitting System (TOPS) must not exceed 20 TCPs, including all phases, sub-phases, and detour plans;
- All above mentioned 20 TCPs must describe all work zones directly related to the application and located within 3 blocks (in any direction) of the application's address;
- In the event an application has work zones located beyond three-block radius, the applicant
 must submit a new application to include all these work zones. The new application must not
 exceed 20 MOT/TCP. TOPS will generate a new application trucking number. If an
 application doesn't meet any of these above mentioned criteria,
 it will be returned to the applicant for resubmission;
- The traffic and parking conditions should be maintained as normal as possible. Avoid frequent and abrupt changes in road geometry and traffic pattern. Inhibit traffic movement as little as possible.

Standards

- Traffic Control Plan (TCP) must be tailored to fit contractor's specific situation.
- All traffic control shall conform to the standards set forth in 2009 Edition Manual on Uniform Traffic Control Devices (MUTCD) and DC Temporary Traffic Control Manual. Guidelines and Standards -2006 Edition DDOT.
- All traffic control shall adhere to DDOT Standards Specifications for Highways and Structures [the "Gold Book"] 2013 Edition. Reference section 104.02 Maintenance of Traffic, 603. Guardrails and guardrail Terminals (603.01 603.09), 610 Traffic Barriers (610.01 610.03), 612. Traffic Control (612.01 612.21), 616.Traffic Signing (616.01 616.08), 617. Impact Attenuators (617.01 617.03), 207.Trench Excavation and Backfill (207.01 207.07), and 215. Excavations and Restorations /Utility Lines/ (215.01 215.09)
- Review MOT plans including: TCP drawings, Traffic Detour Plans, Sequence of Construction.
 Ensure that the submitted staging plan on the construction site provide maximum protection to motorists and pedestrians for ingress and egress.

Property Information

- Provide detail information about property location
- Provide Name, Address, Main Telephone Number, Emergency Telephone Number, /Cell Phone/, E-Mail Address of the person(s), the person responsible for the submission of the application and the attached MOT\TCP drawings.

Project Information

- Provide TOPS tracking number.
- Provide Project Name.
- Provide Address of Premise for which Public Space Work is proposed.

Provide Lot(s) and Square(s) number.

MOT/TCP Requirements

- According to D.DOT requirements all Traffic Control Plan drawings shall be presented in engineering scale 1": 20'. (When the scale is smaller than required, we are unable to correctly analyze the Traffic Control Plan).
- MOT/TCP must use legible lettering and clear, contrasting, symbols for viewing or printing.
- Specify the MUTCD number, and size of all temporary signs utilized on the MOT/TCP drawings.
- Specify construction start day and time.
- Indicate on the plan the duration of the construction work, type of work and subsequent traffic control.
- Show planned method of handling traffic by phase, including dates and time of traffic lane / street closure.
- Specify North.
- Specify Street Names for all streets adjacent to Work Zone.
- Specify scope and sequence of work in narrative.
- Specify location and length of work (Advanced Warning Area, Transition Area, Buffer Area, Active Work Zone, and Termination Area).
- Show location and dimensions of the construction Work Zone.
- Specify location of Work Zone. Show the distance from the start or from the end of the actual work area to the nearest point of intersection (PI).
- Show staging area, materials storage area and construction entrances, as appropriate.
- Specify duration of work.
- Specify schedule of work hours.
- Specify limits of work.
- Specify limits of project.
- Show advance warning area, where the advance warning signs shall be located at proper intervals to inform motorists of what to expect.
- Specify direction of travel, number of lanes, lane widths and posted speed limit.
- Provide all adjacent intersections of the street under construction or under utility work (independent of the area of the street under construction).
- Specify street geometry, median, curb and gutter lines, existing street dimensions, and orientations; existing location and width of Right-Of -Way for the street under construction or utility work and its intersecting streets.
- Show existing curbs, gutters, sidewalks, driveways, alleys (any curb cuts within the street block), and intersections in the vicinity of construction work zone including areas affected by taper transition.

- Specify if parking is to be restricted and if bus zone will need to be relocated.
- Specify bike lane(s), bicycle cycle track, truck and bus restrictions.
- Specify capital bike sharing (bikes station).
- Specify car sharing location.
- Specify embassies, and embassies parking zone. Specify valet parking zone.
- Show construction trucks /dump trucks / routes in to the construction site, and out from the construction site.
- Specify quantity of construction trucks /dump trucks / for daily operation by phases of construction.
- Specify existing traffic control at the Intersections: stop control intersections or signal control intersections (for heavy urbanized area)
- Specify existing infrastructure (catch basin, bus shelter, bus pad, fire hydrant, traffic control cabinet, curb cut, etc.)
- Specify placement of all devices. [Arrow board panels, signs, cones, drums, attenuators, barricades, etc.]
- Specify spacing of devices. [Arrow board panels, signs, cones, drums, barricades, etc.]
- Specify taper and tangent lengths.
- Specify if turning radius will impact bus and trash truck turns.
- Orient traffic sign and device symbols with directions of traffic.
- Show work vehicle locations.
- Notes are encouraged.
- Show Key and /or Legend. Use a legend to define all signs, and symbols and designate them
 with recent edition of MUTCD nomenclature.
- Show existing pavement markings, painted crosswalks and bike lanes; include total roadway widths, individual lane widths, parking lane widths, median dimensions and proposed temporary pavement markings. Make distinction between them.
- Show all existing traffic signals and street lights in the work zone location.
- Show existing traffic and parking operation signs including RPP signs, parking meters, and proposed temporary WZ signs. Make distinction between them.
- Show ongoing construction projects within vicinity of a proposed MOT/TCP. Coordinate the final MOT/TCP with ongoing construction projects stage by stage of a TCP design.
- If sidewalk space is to be obstructed, signs and barricades will be required to direct pedestrians through or round the work zone and shall be shown on the MOT/TCP.
- A detour plan is required when the closing of traffic on main or intersecting roadway, for
 reconstruction or construction purposes. Ensure that detour plan are clearly identified with
 temporary guide detour signage which shall be accompanied with appropriate message sign
 indicating street name to eliminate confusion for motorists (Do not use abbreviation on the
 message sign).

- All temporary traffic control plan shall be designed in accordance with the most recent ADA regulations and the requirements of actual Work Zone Standards.
- Provide safe access for pedestrians. All temporary pathways shall be clearly identified, wheelchair – usable, protected from motor vehicle traffic, and free of pedestrian hazards (holes, debris, dust, mud etc.). The pedestrians have to have a safe access for crossing the intersections as well as passing sidewalks, during all phases and sub phases of construction.
- Incorporate sidewalks, and crosswalks. Show detour for pedestrian traffic and provide appropriate pedestrians signage such as "Sidewalk Closed, Arrow, Use Other Side", "Sidewalk Closed", "Sidewalk Closed, Cross Here" etc.

Safe Accommodation for Pedestrians and Bicyclists

A public R.O.W. occupancy permit that authorized blockage of a sidewalk, bicycle lane, or other public bicycle path shall require the permittee to provide a safe accommodation for pedestrians and bicyclists. The blockage of a sidewalk, bicycle lane, or other bicycle path shall be treated in the same manner as the closure of a lane of motor vehicle traffic by applying similar temporary traffic control practices as would be applied to the closure of a lane of motor vehicle traffic for each permit issued. The term "safe accommodation" means a safe and convenient route for pedestrians, bicyclists, and motorists that ensures an accommodation through or around a work zone that is equal to the accommodation that was provided to pedestrians and bicyclists before the blockage of the sidewalk, bicycle lane, protected bicycle lane, or other public bicycle path such as cycle track, contraflow bike lane and shared travel lane.

MOT/TCP DESIGNER SHALL CONSIDER PEDESTRIANS AND BICYCLISTS SAFETY ACCOMODATION VERY SERIOUSLY INCLUDING THE FOLLOWING:

- a) Routing priority; provided that closing a sidewalk and routing pedestrians to the sidewalk on the opposite side of the street shall only be approved as a last resort for the duration of time needed to assure pedestrian safety in the absence of other practicable routing options; Here contractor's decision must be based also on multifunctional analysis of different variables such as: functional classification of road under construction, functional classification of side streets, and adjacent streets to the construction, street geometry and R.O.W, traffic and parking operations, bike lane presents, bus routes, duration of construction, work zone actual location and coordination with other ongoing construction projects within vicinity of actual WZ, the length of block, far-side and near-side signalized intersections presents, etc.
- b) MOT/TCP designer must consider sidewalk closure as a reasonable option only for some specific phases of construction including the following:
 - 1. Demolition / Raze of Building / Structure Phase of Construction;
 - 2. Facade Demolition;
 - 3. Reconstruction or rehabilitation of sidewalk;
 - 4. Mobile Crane Operation within R.O.W.;
 - 5. Utility Work, or other active work within sidewalk zone including

Table 1.

The Matrix for Safe Accommodations of Pedestrians

MOT/TCP For Sidewalk Closure	FUNCTIONAL CLASSIFICATION OF STREETS IN THE DISTRICT OF COLUMBIA & DURATION OF SIDEWALK CLOSURE			
	Local Street	Collector	Minor Arterial	Principal
Detour Pedestrians to the other side of street. Incorporate sidewalks, and crosswalks. Show detour for pedestrian traffic and provide appropriate pedestrians signage such as "Sidewalk Closed, Arrow, Use Other Side", "Sidewalk Closed, Cross Here" etc.	≤ 7 Days	≤ 5 Days	≤1 Day	≤ 6 hours
	Full Closure of the Sidewalk for no longer a week (7 days), including after hours and on Sundays	Full Closure of the Sidewalk for no longer 5 days, including after hours and on Sundays	Full Closure of the Sidewalk for no longer 1 day, including after hours and on Sundays	Full Closure of the Sidewalk between 9:30AM - 3:30PM Monday - Friday
Provide a pedestrian walkway on the same side of the Street. Next to work side. Contractor must reconfigure roadway to include removing parking on opposite side of work to accommodate pedestrians. The pedestrian access road must be surrounded by water filled plastic barriers (Jersey Barrier)	> 7 Days	> 5 Days	>1 Day	> 6 hours
	Full Closure of the Sidewalk for longer a week (7 days) where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk for longer 5 days where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk for longer 1 day where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk between 9:30AM - 3:30PM Monday - Friday
All Others	The "Last Resort" analysis must be based on multifunctional analysis of different variables which will help determinate a safe and efficient MOT/TCP. The "Last Resort" analysis must be provided individually for each MOT/TCP project			

- c) According to safe accommodation for pedestrians and bicyclists (**24 DCMR § 3315**) the MOT/TCP designer-developer is required to prioritize the safe accommodation for bicyclists including the following:
 - 1. Closing a parking lane and keeping the adjacent bicycle lane open;
 - 2. Shifting the bicycle lane to a location on the same roadway to bypass the work zone, and if necessary, shifting and narrowing the adjacent motor vehicle traffic lanes; provided the adjacent motor vehicle travel lanes shall be maintained at no less than ten feet (10ft.) wide;
 - 3. Closing the adjacent motor vehicle travel lane to provide space for bicycle lane; provided that a minimum of one (1) motor vehicle travel lane shall remain in the same direction of travel;
 - 4. Merging the bicycle lane and the adjacent travel lane into a shared travel lane adjacent to the work zone, installing sharrow lane pavement markings in the shared travel lane and installing work zone signage directing bicyclists to merge into the shared travel lane; provided the shared travel lane shall be maintained at no less than 13(ft.) wide; and
 - 5. As a last resort, detouring bicyclists onto an adjacent roadway, in which case the detour route shall replicate, as closely as practicable, the level of safety found on the bicycle route being blocked.
 - 6. Signage shall adequately warn bicyclists and motorists alike of any lane shift or shared lane conditions. Signage intended only for bicyclists shall display the word "BICYCLES", or the bicycle symbol and clearly mark the alternate temporary route.

Other Information

- Waiver for cutting on suspended streets must be approved by PSRA Permitting Office prior to MOT \ TCP review by PSRD Traffic / Civil Engineering Group, and Engineer Tech. of PSRD Technical Review Team.
- Provide temporary handicap ramps, and crosswalks, and signs to meet Americans with
 Disabilities Act (ADA) for all pedestrians within construction work zone area. (NOTE: The
 entire handicap ramp including side flares must be located within a crosswalk. The minimum
 crosswalk has a 15-foot width, unless other wise noted. The top and bottom of a ramp must
 have a five-foot clearance. Stop lines are twelve inches wide, located 5 foot before crosswalk.
 If using a striped crosswalk, the stripes are two-foot wide, with two-foot spacing and make
 stripes parallel to curb line of street. Edge lines are required on all crosswalks.)
- Restricted parking whether meters, or residential permit parking (RPP), and/or unrestricted.

Conditions

- Cannot place equipment of any type: in a "NO PARKING ANYTIME ZONE", "NO STANDING OR PARKING ANYTIME", and "NO STANDING OR PARKING METRO BUS ZONE".
- All required dimensions shall be shown on crane and dumpster applications
- If any prohibiting signs (Regulatory) are proposed ("NO Left Turn", "No Right Turn"; whether symbolic or text message), advance coordinate with the TOA Traffic and Parking Operation engineers, must occur to ensure the adequate traffic movements are provided in the vicinity of the project site.
- When traffic signals are specified in the contract, the contractor will provide the timing plan for approval and will also provide whatever detection they feel will best fit the situation. District traffic is to be consulted to help review timing plans and detection zones. Overhead lighting must be provided at each signal location.
- Each plan page of all submissions must include the following statement, "I certify that this plan conforms to the requirements set forth in the 2009 Edition Manual on Uniform Traffic Control Devices (MUTCD), the 2006 DDOT DC Temporary Traffic Control Manual. Guidelines and Standards and adheres to DDOT Standards Specifications for Highways and Structures," followed by an original signature. This requirement is exempted for submission with Professional Engineer stamp.
- MOT/TCP is only valid <u>6 months</u> after initial approval seal has been placed on by DDOT/PSRA/PLAN REVIEW DIVISION REVIEWER. MOT/TCP must be renewed thereafter

TYPICAL TCPs FOR UTILITY WORK: Twenty-one typical TCPs for <u>utility work only</u> are available through the DDOT website in PDF format for use. Please visit the website for further information: http://ddot.dev.dc.gov/ddot/cwp/view,a,1250,q,640384.asp

The above mentioned is the link to the Temporary Traffic Control Manual Guidelines and Standards, Work Zone Pocket Guide, and Utility Work Zone Typical.

- When submitting DDOT typicals, make sure to specify street geometry, existing street dimensions, street names, etc. Each typical Traffic Control Plan drawing should contain the list of locations for which the TCP is applicable.
- According to DDOT Road Functional Classification map the typical TCPs are applicable only for local streets. Submit only those typicals that apply. The submitted typical TCPs should fit to the real street conditions. Otherwise, submit MOT/ TCP individually by actual real street conditions and work zone location.

SPECIAL EVENTS: Scheduled Special event such as sporting activities, parades, major concerts, or major conventions can have significant impacts on traffic operations within District of Columbia. Special events usually generate large volumes of pedestrian and vehicular traffic, and congestion generally occurs on the city large streets segment at or near the generator. Managing traffic during special events can result in reduced congestion and delay and improved safety.

A traffic control plan must be submitted by the event sponsor at least four weeks 20 working days in advance of the event for approval by the DDOT.

INSPECTION: DDOT reserves the right to periodically inspect work zones to ensure compliance, that safety measures are in place, and that the measures conform to the approved TCP and criteria listed on the Traffic Control Plan Inspection Criteria document.

The whole package of documentations which should include: PSRD Approved permit(s), together with Approved Maintenance of Traffic or Approved Traffic Control Plan, Traffic Control Plan Submittal Guidelines, Traffic Control Plan Inspection Criteria must be at the construction site during all phases and sub phases of construction until its 100% completion for mandatory inspection. PSI inspector must request to see the permit for Work Zone projects within public space, and check the expiration date.

Our goal is a safe work zone, thank you for your cooperation!

DDOT / PSRD / PLAN REVIEW BRANCH

Levon Petrosian

d. Serving with Integrity and Excellence