Traffic Plan Sheets QC Checklist

Initial (30%)	PBLR	Detailed (60%)	Final (90/95%)	Sealed (100%)	RTL	N/A	QC Item	Comments
Traffic Plan Sheets								
☐	☐	☐	☐	☐	☐	☐	Title Block information is complete	
☐	☐	☐	☐	☐	☐	☐	Sheet numbering is correct and matches Index of Sheets	
☐	☐	☐	☐			☐	Engineer's Preliminary Stamp on all applicable pdfs	
				☐	☐	☐	Engineer's Seal, Signature and Date on all applicable pdfs	
Signal Layouts:								
		☐	☐	☐	☐	☐	Horizontal data (i.e., stationing, bearings, etc.)	
		☐	☐	☐	☐	☐	Intersection geometry shown correctly including roadway, sidewalks, driveways, etc.	
		☐	☐	☐	☐	☐	Legend is clearly shown	
		☐	☐	☐	☐	☐	Street names labeled correctly	
		☐	☐	☐	☐	☐	ROW and/or easement lines shown and labeled	
		☐	☐	☐	☐	☐	All signal improvements are within the ROW	
		☐	☐	☐	☐	☐	Existing/proposed drainage and utility features shown	
		☐	☐	☐	☐	☐	Required minimums met for spacing drilled shafts from utilities	
		☐	☐	☐	☐	☐	Traffic signal poles located, sized, and labeled in plans and details	
		☐	☐	☐	☐	☐	Vehicle detectors and detection zones located and labeled in plans and details	
		☐	☐	☐	☐	☐	Advanced, overhead, and/or mast arm mounted lane assignment signs located and labeled in plans and details	
		☐	☐	☐	☐	☐	Traffic signal pole foundation located and dimensioned in the plans and detail drawing; and have the foundation design calculations been checked	
		☐	☐	☐	☐	☐	Traffic signal poles are located a minimum of 3' from face of curb	
		☐	☐	☐	☐	☐	Removals being shown properly and associated bid items provided	
		☐	☐	☐	☐	☐	Minimum vertical and horizontal clearance from OH electrical for all signal poles is maintained. Use 19' poles where OH conflicts exist, otherwise 30' poles should be used with luminaires for safety lighting	
		☐	☐	☐	☐	☐	Phasing assignments and phase sequence diagram shown and labeled in the plans	
		☐	☐	☐	☐	☐	Electrical service location, type, and size shown in plans and summary table; do voltage drop calculations need to be performed and checked	
		☐	☐	☐	☐	☐	Minimum clearances for electrical service drops and electrical lines per NEC met	
		☐	☐	☐	☐	☐	Minimum conductor sizes for service drops met per NEC	
		☐	☐	☐	☐	☐	Existing hardware to be abandoned, reused, replaced, removed, relocated, and/or salvaged labeled and summarized in plans and details	
		☐	☐	☐	☐	☐	Proposed pavement markings and symbols labeled and summarized in plans and details	
		☐	☐	☐	☐	☐	Wiring layout summarized by location, wire size, wire type, and length (run plus spare cable) as well as labeled in the plans and details	
		☐	☐	☐	☐	☐	Groundboxes located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	For a signal rebuild, ensure the existing signal conduit and poles can remain while new signal is being constructed (unless installing a temp signal)	
		☐	☐	☐	☐	☐	Proposed or existing conduits located, sized (via fill ratios), and labeled	
		☐	☐	☐	☐	☐	Confirm signal power conductors are in 2" dedicated conduit from service meter to signal cabinet.	
		☐	☐	☐	☐	☐	Coordination with power provider and ensure point of power delivery has been worked out and which corner.	

Traffic Plan Sheets QC Checklist								
Initial (30%)	PBLR	Detailed (60%)	Final (90/95%)	Sealed (100%)	RTL	N/A	QC Item	Comments
		☐	☐	☐	☐	☐	Proposed signal head numbering, layout and dimensions clearly labeled	
		☐	☐	☐	☐	☐	Small signs located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	If safety illumination is required, are cables separated from signalization and communications cable	
		☐	☐	☐	☐	☐	ADA components including pedestrian ramps, signal heads, push buttons, signing, separate pole (if needed), and crosswalk pavement markings shown correctly? Is the ADA and TDLR requirements met?	
		☐	☐	☐	☐	☐	If ADA ramps are required, ensure ramp type is shown on the plans. If modified ramps are required, clearly delineate slope requirements that satisfy ADA guidelines.	
		☐	☐	☐	☐	☐	Is traffic signal head placement within 180' of stop bar for 12" signal lenses? If not, is advance signal head shown?	
		☐	☐	☐	☐	☐	Are all signal heads in the cone of vision and visible? Are nearside or supplemental heads necessary due to vertical or horizontal curves?	
		☐	☐	☐	☐	☐	Is it clear who is procuring and installing what? Contractor responsibility vs. city vs. TxDOT, etc.	
		☐	☐	☐	☐	☐	Traffic signal cabinet placed in optimal location to the intersection. Is the cabinet placed in a location away from traffic?	
		☐	☐	☐	☐	☐	Conduit capacity is below 40% fill.	
		☐	☐	☐	☐	☐	Verify the alignment of new mast arms is acceptable by owning agency.	
		☐	☐	☐	☐	☐	Verify construction notes on layout sheets are applicable.	
		☐	☐	☐	☐	☐	Are recommended standards all applicable?	
		☐	☐	☐	☐	☐	Are temporary traffic signal installations required? If yes, then:	
		☐	☐	☐	☐	☐	Is spanwire installation shown?	
		☐	☐	☐	☐	☐	Do signal head locations correspond with lane approach locations during various stages of construction?	
		☐	☐	☐	☐	☐	Are applicable standard detail drawings and specifications included in the construction documents?	
		☐	☐	☐	☐	☐	Are the appropriate standard and special detail drawings and specifications included in construction documents?	
		☐	☐	☐	☐	☐	If no signal is existing, has a traffic signal warrant analysis been approved?	
		☐	☐	☐	☐	☐	North Arrow	
		☐	☐	☐	☐	☐	Scale	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	
Illumination Layouts:								
		☐	☐	☐	☐	☐	Horizontal **alignment and stationing**	
		☐	☐	☐	☐	☐	Roadway geometry shown correctly including edge of pavement, bridge decks, driveways, intersections, etc.	
		☐	☐	☐	☐	☐	Legend is clearly shown	
		☐	☐	☐	☐	☐	ROW and/or easement lines shown and labeled	
		☐	☐	☐	☐	☐	Existing/proposed **culverts requiring delineation are shown**	
		☐	☐	☐	☐	☐	Has an AGI32 photometric analysis model been completed and illuminance results checked?	
		☐	☐	☐	☐	☐	Has the minimum illuminance value of 0.2 foot candles and the average illuminance value of 0.8 foot candles been adhered to in the design?	

Traffic Plan Sheets QC Checklist								
Initial (30%)	PBLR	Detailed (60%)	Final (90/95%)	Sealed (100%)	RTL	N/A	QC Item	Comments
		☐	☐	☐	☐	☐	Has the luminaire pole spacing identified in the photometric analysis been incorporated into the design?	
		☐	☐	☐	☐	☐	Luminaire pole and base (T or Shoe) types located, sized, and labeled	
		☐	☐	☐	☐	☐	Boring logs for high mast installations have been reviewed and data incorporated into the foundation design	
		☐	☐	☐	☐	☐	Luminaire pole foundations drill shaft and depths have been dimensioned, labeled, and summarized; foundation design calculations have been checked	
		☐	☐	☐	☐	☐	Electrical service location and type shown in plans and summary table; and have voltage drop calculations been completed and checked	
		☐	☐	☐	☐	☐	Circuit design and corresponding voltage drop calculations have been completed and checked	
		☐	☐	☐	☐	☐	Existing illumination hardware to be abandoned, reused, replaced, removed, relocated, and/or salvaged are labeled and summarized	
		☐	☐	☐	☐	☐	Vertical clearances for airspace requirements have been checked and incorporated into the plans	
		☐	☐	☐	☐	☐	Wiring layout summarized by location, wire size, wire type, and length (run plus spare cable) as well as labeled	
		☐	☐	☐	☐	☐	Groundboxes located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	Proposed or existing conduits located, sized (via fill ratios), and labeled	
		☐	☐	☐	☐	☐	Clear zone requirements (i.e., breakaway poles, MBGF, etc....)have been addressed, located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	Illumination cables have been kept separated from traffic signal and ITS communications cable? Have illumination system conflicts with overhead and underground utilities, ITS devices, structures etc. been checked?	
		☐	☐	☐	☐	☐	Construction notes on layout sheets are applicable.	
		☐	☐	☐	☐	☐	Temporary illumination installations required? If yes, then:	
		☐	☐	☐	☐	☐	Are temporary installations shown?	
		☐	☐	☐	☐	☐	Do temporary installations correspond with the roadway configuration during various stages of construction?	
		☐	☐	☐	☐	☐	Are the appropriate standard and special detail drawings and specifications included in construction documents?	
		☐	☐	☐	☐	☐	North Arrow	
		☐	☐	☐	☐	☐	Scale	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	
ITS Layouts:								
		☐	☐	☐	☐	☐	Horizontal data (i.e., stationing, bearings, etc.)	
		☐	☐	☐	☐	☐	Roadway geometry shown correctly, including edge of pavement, bridge decks, driveways, intersections, etc.	
		☐	☐	☐	☐	☐	ROW and/or easement lines shown and labeled	
		☐	☐	☐	☐	☐	Existing/proposed drainage and utility features shown	
		☐	☐	☐	☐	☐	IP communications have been provided to each ITS element identified in Technical Provisions – Book 2	
		☐	☐	☐	☐	☐	The ITS conceptual design layout sheets have been incorporated into the plans	
		☐	☐	☐	☐	☐	Elevation cross-sections for CCTV and DMS in plans	

Traffic Plan Sheets QC Checklist								
Initial (30%)	PBLR	Detailed (60%)	Final (90/95%)	Sealed (100%)	RTL	N/A	QC Item	Comments
		☐	☐	☐	☐	☐	DMS and SDMS placements have been checked for spacing consistency in conjunction with project guide signs	
		☐	☐	☐	☐	☐	CCTV coverage area map included in the plans	
		☐	☐	☐	☐	☐	CCTV, DMS, and RVSD detector pole and base (T or Shoe) types located, sized, and labeled	
		☐	☐	☐	☐	☐	Satellite buildings, HUB cabinets, ITS devices, and communications system detailed in the general surveillance layouts and surveillance layouts? Check both for consistency between the layouts.	
		☐	☐	☐	☐	☐	Boring logs for DMS installations reviewed and data incorporated into the foundation design	
		☐	☐	☐	☐	☐	ITS pole foundations drill shaft and depths dimensioned, labeled, and summarized; and have the foundation design calculations been checked?	
		☐	☐	☐	☐	☐	Electrical service location, type, and size shown in plans and summary table; and have voltage drop calculations been completed and checked?	
		☐	☐	☐	☐	☐	Individual circuit design and corresponding voltage drop calculations completed and checked?	
		☐	☐	☐	☐	☐	Existing ITS hardware to be abandoned, reused, replaced, removed, relocated, and/or salvaged labeled and summarized	
		☐	☐	☐	☐	☐	Fiber optic communications schematic and assignment tables completed and checked	
		☐	☐	☐	☐	☐	Wiring layout summarized by location, wire size, wire type, and length (run plus spare cable) as well as labeled	
		☐	☐	☐	☐	☐	Ground boxes located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	Proposed or existing conduits located, sized (via fill ratios), and labeled	
		☐	☐	☐	☐	☐	Clear zone requirements (i.e., breakaway poles, MBGF, etc....) addressed, located, labeled, and dimensioned	
		☐	☐	☐	☐	☐	ITS power and communications cables kept separated from each other	
		☐	☐	☐	☐	☐	Verify construction notes on layout sheets are applicable.	
		☐	☐	☐	☐	☐	Appropriate standard and special detail drawings and specifications included in construction documents	
		☐	☐	☐	☐	☐	North Arrow	
		☐	☐	☐	☐	☐	Scale	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	
Signing and Delineation Layouts:								
		☐	☐	☐	☐	☐	**Layouts:**	
		☐	☐	☐	☐	☐	Horizontal data (i.e., stationing, bearings, etc.)	
		☐	☐	☐	☐	☐	Begin/end project shown	
		☐	☐	☐	☐	☐	Roadway geometry shown correctly, including edge of pavement, bridge decks, driveways, intersections, etc.	
		☐	☐	☐	☐	☐	Legend is clearly shown	
		☐	☐	☐	☐	☐	ROW and/or easement lines shown and labeled	
		☐	☐	☐	☐	☐	Existing/proposed drainage and utility features shown	
		☐	☐	☐	☐	☐	Signs adequately spaced	
		☐	☐	☐	☐	☐	Signs to remain are noted	
		☐	☐	☐	☐	☐	Signs to be removed/relocated are noted	

Traffic Plan Sheets QC Checklist								
Initial (30%)	PBLR	Detailed (60%)	Final (90/95%)	Sealed (100%)	RTL	N/A	QC Item	Comments
		☐	☐	☐	☐	☐	Number signs to be installed	
		☐	☐	☐	☐	☐	Delineators shown accurately according to standards	
		☐	☐	☐	☐	☐	Delineation on MBGF is shown correctly	
		☐	☐	☐	☐	☐	North Arrow	
		☐	☐	☐	☐	☐	Scale	
		☐	☐	☐	☐	☐	**Sign Details:**	
		☐	☐	☐	☐	☐	Include detail for each sign with variable length	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	
Summary of Small Signs: *(this is not a quantity summary sheet)*:								
		☐	☐	☐	☐	☐	All signs from layouts included	
		☐	☐	☐	☐	☐	Correct sizes based on roadway type	
		☐	☐	☐	☐	☐	1-10BWG post for signs ≤ 16 sf	
		☐	☐	☐	☐	☐	2-10BWG or 1-S80 post for signs >16 sf and ≤ 32 sf	
		☐	☐	☐	☐	☐	P mount for signs ≤ 36” width	
		☐	☐	☐	☐	☐	T or U mount or 2 posts for width > 36”	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	
Pavement Marking Layouts:								
		☐	☐	☐	☐	☐	Horizontal data (i.e., stationing, bearings etc.)	
		☐	☐	☐	☐	☐	Begin/end project shown	
		☐	☐	☐	☐	☐	Roadway geometry shown correctly, including edge of pavement, bridge decks, driveways, intersections, etc.	
		☐	☐	☐	☐	☐	Legend is clearly shown	
		☐	☐	☐	☐	☐	ROW and/or easement lines shown and labeled	
		☐	☐	☐	☐	☐	Existing/proposed drainage and utility features shown	
		☐	☐	☐	☐	☐	Centerline stationing shown	
		☐	☐	☐	☐	☐	All lane lines shown	
		☐	☐	☐	☐	☐	Note to indicate removal of conflicting pavement markings	
		☐	☐	☐	☐	☐	Each type of pavement marking labeled with item description (use legend if necessary to declutter layout)	
		☐	☐	☐	☐	☐	North Arrow	
		☐	☐	☐	☐	☐	Scale	
		☐	☐	☐	☐	☐	Other:	
		☐	☐	☐	☐	☐	Other:	