

CITY OF COLUMBUS, OH
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION
CHECKLIST–CAPITAL IMPROVEMENT PROJECTS (CIP)

**[Refer to ‘Capital Improvement Project (CIP) Sample Plan Sheets’]
(Consult Columbus Design Project Manager prior to deviations)**

Project Name _____
E-Plan Number _____

TYPICAL PLAN SET

- Title Sheet
- Schematic Plan
- Typical Sections
- General Notes
- Maintenance of Traffic
- General Summary
- Calculations
- Storm Water Pollution Prevention Plan
- Plan/Profile including sub-summary
- Cross Sections
- Detail Sheets (intersections, drives, ADA ramps, roadway, walls, etc.)
- Storm Sewer Profiles & Coordinate Data
- Waterline Profiles & Coordinate Data
- Pavement Marking & Signing
- Traffic Signal/ Traffic Signal Interconnect
- Lighting
- Landscape Plan
- Structures
- Right-of-Way

TITLE SHEET

- 1) Plan sheet size= 22” x 34” (See CIP Sample Plan Sheets for Format Details)
- 2) Location Map (w/ jurisdiction boundaries) including latitude & longitude.
- 3) ADT design designation data for new roadways, road widening & re-alignment.
- 4) Consultant’s Firm Logo. Seal and Signature of Responsible Engineer(s).
- 5) Project Name (occurs on each sheet)
- 6) Index of Sheets
- 7) Columbus Standard Drawings with dates.
- 8) Columbus Supplemental Specifications with dates.
- 9) ODOT Standard Drawings (if applicable) with dates.
- 10) Project Description
- 11) Earth Disturbed Area
- 12) Specification Statement. (Construction and Materials Specification -City of Columbus Ohio (CMSC) governs, unless otherwise directed to use ODOT. There can only be one governing specification.)
- 13) Columbus Signature Block (Confirm with Design Project Manager -if any other outside agencies need to sign)
- 14) Revision Block

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- 15) OUPS Information/Logo
- 16) Plan Number (Bold print in format XXXX-E)
- 17) Sheet Number
- 18) Project Number - City 6+6 project number (XXXXXX-XXXXXX). (Add ODOT PID# only when applicable)
- 19) When submitting plan during 'Plan Review' phase, locate a BOX (center or lower RH corner) with information on the 'Submittal Type (Stage 1, 2 or 3)' and 'Date Delivered'.

SCHEMATIC PLAN

- 1) The Schematic Plan shows the geometric location of the proposed roadway segments in relation to existing roadway segments and other features.
- 2) Provide Centerline stationing, horizontal curve data, deflections without curves, bearings and reference at all centerline transition points; PCs, PTs, PIs and control points near the beginning and end of the project.
- 3) 'Centerline of Construction' & 'Centerline of R/W' shall be clearly labeled. If not the same line, show the relationship between the two.
- 4) Stationing labeled every 100LF with tick marks @ 50' intervals.
- 5) Show all intersections labeled with 'street name' and stationing. New roadway intersections shall be referenced to the nearest existing intersection or center of right-of-way monument. Private streets shall be labeled 'street name (Private)'.
- 6) Project work limits shown with Begin Project, End Project, Suspend, Resume with stationing.
- 7) Show and label all right-of-way and parcel property lines with parcel address. Right-of-way to be acquired for plan shall be in bold lines and labeled 'Proposed R/W'.
- 8) Show major features such as railroads, waterways, floodway and floodplain limit, bridges, utility transmission lines.
- 9) Jurisdictional boundaries shall be shown and labeled with governing political body.
- 10) List source benchmark(s) from which the project is tied to or sourced from including official designation of the monument, full description, Northing, Easting and Elevation. Describe method and correction factors carried to set site benchmarks and control points.
- 11) Vertical Control: North American Vertical Datum 1988 (NAVD 88).
- 12) Horizontal Control: Ohio State Plane Coordinate System, South Zone and North American Datum of 1983 (NSRS 2007).
- 13) List and describe the existing monuments found or set within project limits with station/offset. This shall include all centerline and survey monuments falling within the work limits of the project.
- 14) Reference monuments for horizontal and vertical control shall be placed in a location and fashion conducive to its long term existence throughout the project's life cycle, including construction and final grading.
- 15) Provide a table of Northing and Easting coordinates of each horizontal and vertical monument placed or utilized for centerline of survey or temporary vertical control, along with the elevation.
- 16) Basis of Bearings statement on the plan shall be referenced to an official record of deed, plat or road improvement plan that has the bearing used. If plat, deed or plan is not referenced, then provide how bearings are established with reference to monuments (give official designation) on which the bearings are sourced from, or tied to, and survey basis.
- 17) Basis of stationing: Use established stationing from previous street construction plans with reference to the previous plan number. When stationing has not been established by a previous plan, provide a statement of how stationing was established for this plan.
- 18) When the project interfaces with another project or is a phase of a multi-phase project, show the E-Plan number of the adjoining project(s) at the interface line(s).

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TYPICAL SECTIONS

- 1) Typical sections shall be shown for each street, type of pavement buildup or median section from right-of-way to right-of-way or easement beyond. Provide typical sections for street segments where a significant variation occurs (e.g. added lane, transition from curb to uncurbed section).
- 2) The pavement build-up shown on the Stage 1 submittal shall be as approved by the Department of Public Service in accordance with the Non-Residential Street Pavement Design Policy or Residential Street Pavement Design Policy, as applicable.
- 3) Station limits for each section with length shall be listed under the appropriate section.
- 4) Centerline/ Baseline shall be shown on each section.
- 5) Vertical & Horizontal dimensions shall be given.
- 6) Section slopes shall follow Standard Drawing criteria.
- 7) Existing typical section shall be shown, including dimensions and buildup.
- 8) Provide detail of curb & curb /gutter if other than Standard Drawing.
- 9) Provide legend of components, code symbols, etc. used uniformly through-out all Typical Sections.

GENERAL NOTES

- 1) Provide General Notes as applicable per the CIP Sample Plan Sheets located on Department of Public Service website. Note: Section Headings on the ‘Sample Sheet’ is for guidance on plan preparation and not to be repeated on the construction plans.
- 2) Do not comprise notes that are repetitive of or contrary to the CMSC information.
- 3) Any ‘As-Per-Plan’ item must have a note associated with it describing what differs from the standard CMSC item.
- 4) Items that are completely unique and are not contained in the CMSC shall be designated as ‘Item Special’ and a note included that fully describes the item.
- 5) Contingency items shall be listed in the notes which are to include the statement ‘as directed by the Engineer’.
- 6) Legend for standard line types, symbols, abbreviations, etc. used uniformly through-out the plan set that clearly indicate and differentiate proposed work from existing infrastructure.

MAINTENANCE OF TRAFFIC

- 1) The CIP Maintenance of Traffic (MOT) Coordinator shall be consulted for guidance & current notes for Temporary and Permanent Traffic Control incorporation into plan.
- 2) A detailed Maintenance of Traffic plan shall be required for all work within the right-of-way showing existing roadway and pedestrian geometric features and all existing traffic control including signal items.
- 3) The Maintenance of Traffic plan limits shall extend a minimum of 200’ before the first temporary traffic control device and 200’ past the last temporary traffic control device on the mainline and each side street.
- 4) A detailed MOT plan shall include phasing when required. Each phase shall include a description of the proposed work and a schedule for each major phase showing the length in days for construction of each phase.
- 5) Each MOT phase shall include all proposed construction in that phase and the completed construction of the previous phase.
- 6) All existing and proposed temporary pavement markings shall be shown using Class I, II, or III, markings and shall include a legend.
- 7) All signalized intersections shall be shown in full and include all existing and temporary signal items including be not limited to temporary poles, existing loop or video detection, temporary video detection, signal heads in existing and shifted position, overhead signage, pole mounted signage, pedestrian signal heads, and pedestals.

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- 8) All street closures shall be shown and a detour provided, when required. Portable Changeable Message Signs, (PCMS) are required for closures on streets other than residential and alley ways. Detours shall be shown on separate sheet and not included on MOT phase plan sheets.
- 9) A pedestrian detour shall be provided when closing crosswalks and or sidewalks following the OMUTCD, Typical Application (TA-28) and (TA-29). No mid-block crossings shall be shown without the permission of the MOT Coordinator.
- 10) No typicals shall be used without the permission of the MOT Coordinator.
- 11) A legend, uniformly used throughout the plan, shall be provided on one MOT plan sheet including all temporary signage with sign codes and sizes, temporary traffic control devices including drums, drum spacing chart, cones, flashing arrow panels, portable changeable message signs, portable concrete barrier including end treatments or Triton barrier and temporary markings.

GENERAL SUMMARY

- 1) Quantities shall be calculated and presented in the plan in such a manner that they may be traced from the General Summary Sheet to their origin through a system of cross referencing.
- 2) Plans will typically show development of project line items and quantities in stages. Stage 1 submittal may not include General Summary tables or any line items. The Stage 2 submittal shall include the General Summary table listing the plan sheet numbers, CMSC item numbers, descriptions & units of measure. The Stage 3 submittal shall include the General Summary complete with all calculated values for all line items.
- 3) The sheet number columns are used to show a cross reference to the sheet from which the quantities are carried.
- 4) A ‘Standard’ line item is one whose requirements are defined in the CMSC or Supplemental Specifications. The description of a ‘Standard’ line item is consistent from plan to plan and is listed under the ‘Basis of Payment’ section of the CMSC or Supplemental Specifications. An ‘As Per Plan’ item is a standard pay item whose requirements need to be modified from that which is defined in the Standard Drawings, the CMSC or Supplemental Specifications. Every ‘As Per Plan’ item shall have a corresponding plan note or plan detail or combination thereof which clearly and completely explains the deviations from the standard item. An ‘Item Special’ is an item that does not exist in the Standard Drawings or CMSC. It shall be created by means of corresponding plan note(s) or plan detail(s) or combination thereof which clearly and completely explains all aspects of the item. If an item is an ‘Item Special’ the word ‘Special’ shall be inserted in the item column.
- 5) City’s Design Project Manager (DPM) shall be consulted on field office and bond sign requirements.
- 6) The various items of work are grouped in order under the following headings:
 - Roadway
 - Pavement
 - Maintenance of Traffic
 - Storm Water Pollution Prevention Plan
 - Storm Water
 - Water
 - Traffic Control
 - Traffic Signal
 - Interconnect
 - Street Lighting
 - Landscaping
 - Right-of-Way
- 7) Field office, mobilization, bond signs, CPM schedule & construction layout staking shall be listed at the end of the general summary.

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- 8) Contingency quantities shall be clearly denoted in the General Summary by adding an asterisk at each quantity that is a part of the total quantity.
- 9) When authorized, alternate bid items shall be listed as “Alternate” at the end of the work group that they would normally occur.

CALCULATIONS

- 1) Computations for large quantity items such as pavement, subgrade, walk, curb and resurfacing will typically be shown on this plan sheet. They shall clearly show how the quantities were derived.
- 2) Irregular areas should be noted as CADD generated.
- 3) Quantities shall be carried to the General Summary.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- 1) Information to be presented on the plans should be obtained by contacting respective Division of the Department of Public Utilities for their requirements.
- 2) Item layout for SWPPP shall be shown in plan view.
- 3) Refer to the current City of Columbus Storm Water Drainage Manual for additional information.

PLAN & PROFILE

- 1) Plan & Profile (P&P) sheets show what an area looks like before (existing) and after (proposed) construction of the project and identifies the work items, quantities and other information required to construct the project.
- 2) Identify the project work limits if it occurs on the sheet - Begin Project, End Project, Suspend, Resume, as applicable.
- 3) Plan & Profile sheets are normally drawn to: 20 scale H & 5 scale V. Downtown or dense urban areas should consider use of 10 scale H.
- 4) If abbreviations and/or patterns are used, a legend shall be provided that is uniformly applied throughout the plan set. Shading as a pattern is not allowed.
- 5) Plan & Profile sheets are typically comprised of plan, profile and quantities (Sub-Summary table). It is preferable for these parts to be shown on a single sheet. However due to the complexity of the project, it may be necessary to show the quantities on a separate sheet in which case the separate sheet shall immediately follow the respective Plan & Profile sheet.
- 6) Reference designations (balloons) are used to tie the items on the plan to the pay quantities in the Sub-Summary tables. The designations within the balloon correspond with the reference designation in the Sub-Summary. Dashed balloons are used to indicate that quantities are picked up on other sheets. Reference balloon numbering may be restarted on each plan view or may be carried through the entire plan. A consistent system of reference balloon numbering shall be used for each project.
- 7) Plans will typically show development of project line items and quantities in stages. Stage 1 submittal may not include Sub-Summary tables or any line items. The Stage 2 submittal shall include the Sub-Summary table listing reference designations, plan sheet number (when applicable), stationing, side, CMSC item numbers, descriptions & units of measure. The Stage 3 submittal shall include the Sub-Summary table(s) complete with all calculated values for all line items.
- 8) All boundary lines shall be shown and labeled including property lines, centerline monuments, existing and proposed right-of-way (R/W), easements (temporary & permanent), construction limits and governmental jurisdictional boundaries. Property Owner, address and Parcel ID shall be labeled on each parcel. If Right-of-Way plans are part of the Scope of Services to be provided by the Consultant, verify that lines and labels are

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consistent between Plan & Profile sheets and Right-of-Way plan sheets. All encroachments, along with their disposition, are to be specifically identified and shown on the Plan & Profile.

- 9) Temporary benchmark (TBM) information (elevation, station/offset & description) should be listed on applicable Plan & Profile sheet.
- 10) Match lines shall be clearly labeled with a station location and reference to the matching sheet number.
- 11) All centerlines and baselines shall be labeled and the relationship between each other shown.
- 12) Stationing shall be labeled every 100LF with tick marks @ 50LF intervals.
- 13) Tapers, transitions, deflections & tie in points shall be located, stationed and labeled for pavement, pedestrian facilities, curbs, medians, et cetera.
- 14) On each sheet, provide dimensions from street centerline to the right-of-way lines and face-of-curb or edge-of-pavement.
- 15) All existing infrastructure (above and below ground) and features should be shown and labeled with the disposition noted (DND or remain, remove, relocate, ATG (Adjust To-Grade), etc.) for items in existing and/or proposed right-of-way. Buildings, pedestrian entry ways into the R/W or structures near R/W and easements should be shown. In downtown or high urbanized areas, particular attention shall be given to showing existing items such as, but not limited to, underground vaults, basements, pits, tunnels, foundations, tie-backs, steps, handrails (check encroachment into PAR), walls or other encroachments in the right-of-way as well as streetscape, landscape, planters, fences, trees, grates, benches, trash receptacles, bus shelters, bike racks, structures, signs, parking meters, permit parking and loading zones.
- 16) Show and label proposed infrastructure (above and below ground) and surface features in a heavier solid line. In downtown or high urbanized areas, show any proposed items (listed in previous paragraph), with station location.
- 17) Items scheduled for removal shall be X'd out; items that will remain undisturbed shall be labeled 'DND (Do Not Disturb)'.
- 18) Occasionally, a separate plan sheet for 'Demolition' may be added to the plan set which depicts the items scheduled for removal separately from the Plan & Profile sheet for clarity and to eliminate congestion on the Plan & Profile sheet. If 'Demolition' sheet(s) are added, then the disposition (remove, replace, relocate) of those items disturbed shall be notated on the Demolition sheet. The Plan and Profiles sheets shall show these items (replaced or relocated) in final configuration along with proposed and existing infrastructure items (that remain or are not disturbed). In no case shall items that existed that were removed be shown on the Plan & Profile sheet.
- 19) Identify existing curb type (concrete- straight or combination curb and gutter, sandstone, granite, etc.) with disposition noted.
- 20) Utilities (existing & proposed) shall be shown and labeled with sizes of pipe, conduit, or duct bank along with related surface features such as pull boxes, control panels, pedestals, valves, hydrants, poles, light fixtures, signal facilities, manholes and catch basins. Storm structures shall have a numerical identifier and tied to the Utility Profiles and utility survey coordinate data. Large pipe and duct banks \geq 36 inches and structures should be shown to scale and labeled.
- 21) Layout of proposed storm lines and storm structures located beyond the curb line at intersection radii should be avoided, reserving area for possible future needs.
- 22) Label access and drive types (Residential or Non-Residential), drive pavement type and alignment with street centerline. Centerlines of drives shall be stationed.
- 23) Show street intersections labeled with 'street name' and station of each street centerline at point of intersection and alignment angle. If the street is a 'private' street (not in City R/W) then label street as 'street name (Private)'.
- 24) For pedestrian facilities, the PAR (Pedestrian Access Route) is defined as a continuous route, minimum 48" wide, clear of any obstruction, encroachment, or projection (e.g. handrail, door swing, balcony, canopy or over-hang). The PAR shall be in the right-of-way or in a public access easement for any portion that is outside the right-of-way.
- 25) Show, label and dimension the existing and proposed pedestrian facilities (sidewalk or shared-use-path).

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- 26) The location and orientation of all (existing and proposed) ADA ramps shall be accurately depicted and labeled. Existing ramps shall be verified to be ADA compliant – those compliant shall be labeled ‘existing ADA compliant ramp (DND)’, those not ADA compliant shall be addressed to be made compliant. If it is not clear in the scope, or if there is a question on whether or not an existing ADA ramp that is not compliant is to be made compliant, then the Consultant shall clearly identify those ramps at the Stage 1 submittal for determination of final disposition by the City Design Project Manager.
- 27) When work on pedestrian facilities (sidewalk or shared-use-path) is to be performed, provide a continuous ADA compliant PAR within the project limits. Existing pavements (e.g. street, alley, drive, pedestrian facility, etc.) shall be checked along the PAR by the Consultant for cross-slope and the % cross-slope shown on the plan. Any location of a non-compliant PAR shall be made compliant. If it is not clear in the scope, or there is a question on whether or not a non-compliant PAR is to be made compliant, then the Consultant shall clearly identify the location(s) at the Stage 1 submittal for determination of final disposition by the City Design Project Manager.
- 28) Drainage items shall be shown. Special drainage structures, such as BMPs should be cross referenced to details.
- 29) Under drains that deviate from the Typical Section shall be shown including bends & outlets located and labeled.
- 30) Show and label existing and proposed water lines, valves, fire hydrants, et cetera. Provide station/offset on proposed or relocated fire hydrants.
- 31) Show and label lighting facilities and electric distribution. Provide station/offset on proposed or relocated lights.
- 32) Project construction limits shall be shown and labeled.
- 33) On projects with proposed or reconstructed streets, the profile should show street profile and percent grade; elevations at 50 feet and every grade break; vertical curve data with length of curve and elevation at equal increments, station and elevation at PVI, PVC, PVT, low point, and at crest. Show intersecting streets with stations and elevations of intersecting centerline, PC, and curb lines; utility crossings with name of utility, size and elevation. On projects with work limited to only a proposed pedestrian facility, show and label the profile grade of the pedestrian facility.
- 34) Projects that are phased or adjoin other projects in construction should identify the work being done by a separate construction plan and reference made to that Plan Number (E-plan, CC-Plan, City Water or Power plan) where the projects interface or overlap.
- 35) Floodway and floodplain limit line (when applicable).

CROSS- SECTIONS

- 1) Plans shall be in ½-foot dotted grids or plain 5-foot vertical and 10’ horizontal grids.
- 2) Existing private utilities and existing/proposed public utilities shall be shown.
- 3) Label existing/proposed Top-of-Pavement (T/P) elevations.
- 4) Stationing shall increase from bottom to top of sheet.
- 5) Intervals between regular sections shall normally be 50 lineal feet.
- 6) Existing features shall be shown in dashed lines & proposed features shall be solid lines.
- 7) Limits of existing and proposed pavement shall be shown.
- 8) Follow the slope criteria of the Standard Drawings in each component of the cross-section.
- 9) Seeding quantities and Earthwork shall be listed as end areas/volumes, as applicable.
- 10) Ditch line elevations & flow arrows.
- 11) Drive profiles are strongly recommended to be included in the cross sections with existing drive elevations being shown to approximately 25’ beyond limit of proposed drive work with % slopes labeled. Maximum grade breaks shall not exceed ODOT requirements. Each drive shall be designed keeping in mind the specific use of the property and the design vehicles that should be considered.
- 12) Drive profiles not falling on a full section shall be shown on a partial section.
- 13) Existing and proposed fences, walls, walks, etc. shall be shown.
- 14) Existing and proposed right-of-way, easements and construction limits shall be shown.

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15) Floodway and floodplain limit (when applicable) and any encroachment.

DETAIL SHEETS

- 1) All details shall show right-of-way lines, easements, construction limits, all infrastructure and topographic features that will remain in the final configuration.
- 2) The location and orientation of all ramps at an intersection or drive shall be shown including existing ramps to allow check on alignment. Existing ramps within the project work limits shall be verified to be ADA compliant. Those compliant shall be labeled as 'existing ADA compliant ramp (DND)'. Those not ADA compliant shall be addressed to be made compliant.
- 3) Detail of the entire intersection shall be shown beyond the point-of-tangent with intersection angles, pavement widths, radius return curve data, centerline & pavement elevations, crown of the road in a phantom line, radius center-point, elevations around the radius returns every 10', top-of-curb (T/C) and edge-of-pavement (E/P) elevations, proposed and existing ADA ramps. It is preferred to combine the intersection pavement details and curb ramp details on the same sheet - pavement information in street (20 scale) and the ramp details at outer edges (10 scale). Centerline location of the proposed ramps should be referenced by station/offset. Show and label the limits of 8" thick sidewalk per Standard Drawing 2303. On signalized intersections, show signal facilities including pushbuttons.
- 4) Details (10 scale) of the entire drive shall include station location, drive type (residential or non-residential) and show the geometry, geometric data and pavement buildup of the drive. Show the outline of the PAR with phantom lines, key elevations, % slopes and dimensions of each segment (apron, PAR, etc.). The detail shall include centerline alignment of the drive to the street centerline.
- 5) For ramps and transitions, show dimensions, % slopes, spot elevations, flares and detectable warnings (when applicable).
- 6) ADA Design Guidance
 - a. Infrastructure located at an intersection can be affected by ADA ramps. It is recommended that ADA ramps be located early in the design process to reconcile any conflict.
 - b. Comply with City of Columbus Standard Drawings and the Department of Public Service Rules and Regulations for 'Wheelchair Ramp Requirements'
 - c. Street Crossings:
 - i. On curbed streets, the ADA ramp shall be radial with the centerline oriented perpendicular to the curb, unless approved otherwise in writing.
 - ii. On uncurbed streets, the ADA transition panel can be oriented so that the centerline axis of the pedestrian facility is perpendicular or skewed to the edge-of-pavement, whichever provides best alignment.
 - d. On alleys and standard private drive approaches, the centerline of the ADA ramp or transition panel is parallel to the street. Make every attempt to get the PAR crossing the drive at sidewalk grade to minimize or eliminate any transition from the walk to the approach.
 - e. For drives serving large commercial areas, or signalized drives (under signal control) that are designed as an intersection on a curbed street, it is preferred that the ramps be oriented the same as for a 'Street Crossings' (see above). If this is not possible due to R/W limitations, then the ramp (or transition) may be oriented as shown on the Driveway-Non Residential and designed with slopes to ensure positive and complete drainage from the ramp with no ponding in the landing located at the curb line.
 - f. Detectable warnings are required on 'street crossings', 'alleys' and 'signalized drives'. Restricted drives, such as Right-In/Right-Out or private drives under STOP control require a detectable warning. Private drives, not signalized, do not require detectable warnings unless deemed necessary. A detectable

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warning should be located behind the curb for curbed streets and behind the paved shoulder (or aggregate berm) on uncurbed streets.

- g. Landings (minimum 4' X 4' with 1.56% cross-slope, each way) shall be provided at ramps, intersection of pedestrian facilities, or where wheelchair turns are necessary.

CITY STORM PROFILES & UTILITY COORDINATE DATA

- 1) Information to be presented on the plans should be obtained by contacting respective Division of the Department of Public Utilities for their requirements. To facilitate review by the Department of Public Service for proposed utilities in the right-of-way, the following is required:
- Drainage profiles shall show station/offset for all structures, top-of-casting elevation, % grade of pipe, backfill type, flow line elevations, length of pipe (to structure center centerlines) & type of structure.
 - Structures shall have a numerical identifier that is tied to the plan views.
 - Existing and proposed utilities shall be shown.
 - Existing and proposed ground shall be shown, as applicable.
 - Backfill type and concrete encasement as specified in the CMSC shall be shown and limits labeled.
 - Waterlines shall be shown and labeled in the plan view & profile, including the size.
 - Provide a plan sheet for proposed lighting fixtures and electrical in the right-of-way, as applicable.

PAVEMENT MARKING AND SIGNING

- 1) The traffic control plan shall include all roadway items including but not limited to, curb lines or edge-of-pavement, drives, medians, all islands, sidewalk with curb ramps, all curb cuts, final right-of-way (R/W) lines, easements, street names, utility poles, signal poles and signal items, manholes and pull boxes, parking meters when applicable, marked crosswalks distinguish if painted, brick or both, street lighting street side trees, and hydrants.
- 2) Permanent, existing and proposed, pavement markings shall be shown in full and include only the existing markings that have NOT been removed within the project limits. Existing markings may include those outside the project limits for alignment purposes and shall include the area 400' past the projects limits on the mainline or to the nearest intersection and 200' on side streets. All intersections shall be shown in full.
- 3) Permanent, existing and proposed, signing shall be shown in full with the same limits as the proposed pavement markings. All existing signing shall be shown as removed with the exception of those outside the project limits shown for plan review purposes only and proposed signing as new. Each proposed sign shall show the sign symbols if existing and the sign text. The sign code, size, state pole mounted when applicable, and station shall be included for each sign. Offset stationing when required.
- 4) Street Name Signs shall be shown with the appropriate street name and dimension of the sign height, (9", 12" or 18") and VAR. for the sign length.
- 5) Street Name Signs shall be shown on sign supports, wooden utility or signal poles. When shown on signal poles the signs shall be shown on the signal pole orientation chart.
- 6) Proposed markings shall be labeled, stationed and include a legend with type marking material.
- 7) Roadway Pavement Markers (RPM) shall be shown. A word document or auto-cad drawing set may be obtained from the traffic control plan reviewer for RPM spacing requirements.
- 8) Contact the traffic control plan reviewer for Inlay Marking specifications.

TRAFFIC SIGNAL AND TRAFFIC SIGNAL INTERCONNECT

- 1) Information may be obtained by contacting Department of Public Service-Signal Design Staff and in accordance with the City of Columbus Ohio Traffic Signal Design Manual.

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RESOURCES

- 1) Project Scope of Improvements. (City Design Project Manager)
- 2) Website - City of Columbus, Ohio - Department of Public Service.
- 3) General Design Requirements for Capital Improvement Project (CIP) for City of Columbus, Department of Public Service.
- 4) Construction and Material Specifications – City of Columbus Ohio (CMSC) and all editions of Supplemental Specification 1100.
- 5) Supplemental Specifications.
- 6) Capital Improvement Plan (CIP) Sample Plan Sheets
- 7) Standard Drawings.
- 8) Wheelchair Ramp Requirements, Department of Public Service Rules and Regulations.
- 9) Non-Residential Street Pavement Design Policy.
- 10) Residential Street Pavement Design.
- 11) Traffic Signal Design Manual
- 12) Website - City of Columbus Ohio, Department of Public Utilities.