# Private Development Estimate Process

Requirements for fee-in-lieu submissions

# Purpose and Introduction

Private development projects may be required to make improvements within the Right-of-Way as part of redevelopment. These improvements may be triggered by the Sidewalk and Shared Use Path Facility Requirements Rules and Regulations, or by a Traffic Impact Study (TIS) or Traffic Access Study (TAS) prepared in accordance with the Traffic Standards Code (Chapter 4309 of the Columbus City Codes) that shows roadway improvements are needed. Improvements identified in the TIS may extend beyond the parcel boundary of the development. The developer may be required to submit a fee-in-lieu of constructing those improvements. An estimate must be produced to support the fee-in-lieu amount. The developer may be responsible for 100% of the costs in the estimate or a portion of the required future improvements, determined through the TIS process. This process establishes the requirements for estimates submitted as a part of these projects. All submittals shall be submitted to the Division of Traffic Management.

The City of Columbus reserves the right to modify the requirements described herein for any projects submitted.

# Preliminary Design and Estimate Format and Standards

When a developer is required to submit a cost estimate for fee-in-lieu costs, a preliminary design submittal is required. Preliminary design submissions shall include sufficient detail to show the limits, width, and materials proposed. Construction limits shall be shown based on at least one assumed typical section, which shall be provided. Where the typical section varies significantly, multiple typical sections shall be provided. Profile information is not required for the roadway or utilities.

Estimates submitted as part of a Private Development may use any format. The estimate shall include the following costs for contingency, inflation, and inspection calculated as follows:

- (A) Construction Subtotal
- (B) Contingency (35%) = 0.35\*A
- (C) Inflation = (A+B)\*(Calculated %)<sup>1</sup>
- (D) Inspection = (A+B+C)\*.11

#### Grand Total = A+B+C+D

<sup>1</sup> Use the current version of ODOT's Inflation Calculator

(<u>https://www.dot.state.oh.us/Divisions/ConstructionMgt/Estimating/Pages/BART.aspx</u>) to determine the inflation rate. Replace the place holder date range with the start date (the date the inflation was calculated) through the construction mid-point. The mid-point of construction shall be 5 years from the date the developer submits the estimate to the City.

The developer may use the City's Engineer's Estimate Template. The estimate template can be downloaded here: <u>https://www.columbus.gov/Business-Development/Design-Construction</u> under Design Documents > CIP Designer Resources.

Given the preliminary status of these submittals, lump sum items can be used to capture a set of smaller items (e.g. Erosion Control, Striping). Example lump sum item codes are provided in Table 1 below. For other items captured as a lump sum, the developer will need to find an existing item code within that cost category that is paid as lump sum. All major cost drivers shall be itemized individually in the

estimate. Elements of the project that require additional design beyond the preliminary design efforts or scale with overall project cost (stormwater control practices, maintenance of traffic, mobilization, construction staking, field office, etc.) can be estimated as a percentage of the overall subtotal. See Table 1 on the following page. The appropriate percentage varies based on the size and type of project. The Designer shall use similar projects as an example to develop their assumptions.

For stormwater control practices (SCP), on-site solutions shall be the basis of the estimate. On-site in this context refers to the project footprint or right-of-way for the required public improvements. Developers are encouraged to oversize SCPs within the private development parcel(s) to account for the requirements of the right-of-way improvements. If over-sizing meets the quality and quantity control requirements of the right-of-way improvements (in addition to site requirements) per the Stormwater Drainage Manual, no cost for SCP is required in the estimate. The feasibility of providing quantity or quality control volumes on the developer's property will depend on the location of the public improvement relative to the parcel(s) and the surrounding drainage patterns and watershed area(s). If an off-site solution is part of the outcome of preliminary engineering, the right-of-way costs for the off-site improvement must be included within the right-of-way estimate. If preliminary engineering does not determine a specific type of stormwater solution, use the estimate provided in Table 1.

A few items within the estimate are standard items that would be required on any project. Two tables (Table 1) have been provided with standardized costs for different project types. The ITEM CODE information is only necessary if using the City's estimate template. These shall be included in all estimates unless the developer performs additional preliminary engineering that determines these to be not applicable.

TABLE 1 - STANDARD COST ESTIMATE ITEMS AND COSTS					
ITEM CODE	ITEM NO.	DESCRIPTION	UNITS	QUANTITY	UNIT COST (CALCULATION)
611C06800	611	DETENTION BASIN	LS	1	12% OF CONSTRUCTION SUBTOTAL
614C11000	614	MAINTAINING TRAFFIC	LS	1	6% OF CONSTRUCTION SUBTOTAL
623C00800	623	CONSTRUCTION LAYOUT STAKES	LS	1	1% OF CONSTRUCTION SUBTOTAL
624C00650	624	MOBILIZATION	LS	1	4% OF CONSTRUCTION SUBTOTAL

### Sidewalk/Bikeway Requirements and Assumptions

For developments that are required to install sidewalk and/or shared use path (SUP) improvements along the frontage of the property, fee-in-lieu may be allowed via exemption and amounts are predetermined through the Sidewalk and Shared Use Path Facility Requirements Rules and Regulations, found here: <u>https://www.columbus.gov/files/sharedassets/city/v/1/building-and-zoning/document-library/traffic-management-sidewalk-and-sup-facility-requirements.pdf</u>

# Right-of-Way Improvements Triggered by TIS or TAS

For projects where a TIS requires additional improvements beyond the individual parcel(s) developed, costs shall be included for sidewalk or SUP installed on the impacted side of the roadway. For example, a roadway project that adds a turn lane and widens to one side of the roadway would be required to install sidewalk on only that side of the roadway. Projects impacting both sides of the roadway would need to install a pedestrian facility on both sides of the roadway. Where sidewalk would be required, but the City's Bike Plus Plan (BPP) calls for SUP, sidewalk on the opposite side of the roadway is only required if triggered by impacts. Sidewalk limits shall be for the full length of the roadway terminate at a public street. In cases where the roadway improvements extend beyond the development parcel for a

distance of less than 100', the sidewalk may terminate at the edge of the parcel. Where improvements are proposed on multiple legs of an intersection sidewalk shall extend to the next public street on all applicable legs. If there are no public streets within the limits of the roadway improvements, sidewalk may be omitted with approval from the Division of Traffic Management. See Appendix A, example A.

Bikeway type shall be as determined in the BPP. Limits of the bikeway installation shall follow the same logic as the sidewalk requirements above. For on-street bike facilities, the estimate shall assume installation of the on-street facility from the public street(s) at which a roadway improvement is required to the next public street. Where improvements are proposed on multiple legs of an intersection the on-street bike facility shall extend to the next public street on all applicable legs.

### Additional Improvements Assumptions

Projects resulting from a TIS may also impact a footprint that warrants consideration for additional improvements beyond the pedestrian/bicycle facilities discussed in the previous section. The following subsections discuss the assumptions for estimating these projects.

#### Curb vs Uncurbed Roadway

If the existing roadway is curbed, any widening or modification to that roadway shall include curb. On uncurbed roadways where the existing right-of-way width provides sufficient space for an uncurbed section following STD DWG 2130 or 2135, including appropriate stormwater conveyance, the preliminary design and estimate may assume an uncurbed section. If the widths shown in the respective standard drawing would require additional right-of-way acquisition, the Designer shall assume the new roadway segments will include curb and associated closed system stormwater improvements. Curb type to match existing curb types on the roadway beyond the improvement limits. If there is no existing curb as a basis, assume curb and gutter per standard drawings.

#### Street Trees

Street trees shall be assumed to be planted at 40' spacing for all projects where new curb is proposed and any project with at least 5' of right-of-way behind the proposed sidewalk/SUP when following the assumed cross section in the Cross Section Design Memo. Street tree installation shall match the limits of roadway improvements including sidewalk/SUP. The developer shall include a cost for tree removal and mitigation in accordance with section 5.3 of the Technical Tree Manual, which can be found here: <a href="https://columbusrecparks.com/nature/urban-forestry/tree-technical-manual/">https://columbusrecparks.com/nature/urban-forestry/tree-technical-manual/</a>

#### Signals and Interconnect

Projects that impact, modify, or replace a traffic signal shall install follow the requirements of the Traffic Signal Design Manual. If more than two (2) signal poles or one (1) signal pole and the signal cabinet are impacted by a project, full replacement of the signal shall be assumed. All impacted pedestrian push buttons, pedestrian signal heads or their associated pedestals shall be replaced new. If a project impacts existing interconnect along a roadway, the interconnect shall be replaced/relocated in kind. If a project installs, replaces, or modifies a traffic signal cabinet or the spans, costs shall be included to install or replace interconnect at the intersection.

#### Street Lighting

If there is existing street lighting, the project shall include costs for the replacement of any impacted street lights and associated conduit or wiring. All projects shall assume the installation of street lighting where street lighting does not exist within the project footprint along the subject roadway. Photometrics are not required. In the absence of lighting analysis the Designer shall assume the following:

- All intersections shall include lighting for the length of any turn lanes. If the total lanes, including turn lanes are more than 3, assume street lighting space of 100' on one side of the roadway.
- Roadways with 1 through lane in each direction shall assume street lighting spacing of 175' on one side of the roadway.
- Roadways with more than 1 through lane in each direction shall assume street lighting spacing of 100' on one side of the roadway.
- Lighting wiring shall be assumed to be underground, 3-wire installation for new lights.
- Lighting types shall be per MIS standard drawings.

#### Private Utility Relocations

Projects that impact, modify, or replace private utilities outside of existing right-of-way prior to any right-of-way dedicated by the developer shall include the cost of relocating those utilities in the cost estimate. For private utilities within the existing right-of-way that require relocation, assume the utilities will relocate at their own cost.

# Right-of-Way Estimating

A right-of-way estimate shall be provided separately and in conjunction with the engineer's estimate for project improvements. The estimate shall use the Department of Public Service Right-of-Way Estimate Form which can be requested from the Division of Traffic Management. The right-of-way estimate shall be based on conceptual construction limits provided in the preliminary design documents. A property value cost shall be determined by averaging the land value from the Auditor's website in addition to any impacted improvements. A per-parcel cost of \$10,000 shall be included for administrative costs. A 25% contingency must be included on top of the aforementioned itemized estimate items.

### **Engineering Costs**

The cost estimate shall also include a separate cost for engineering design costs. This shall be shown as 15% of the construction subtotal plus the 35% contingency cost (A+B above).

### Project-specific Adjustments

Projects submitted may have specific cost-driver variables that are not considered in the above guidance. If the Designer recommends adjustments to the assumptions above based on specific project details, those can be submitted via email to the Division of Traffic Management's Development Engineering team for consideration. Sufficient detail and reasoning must be provided as part of the request.

GRAPHIC SCAL



