

BULLETIN 2022-01-UMB

April 6, 2022

Key Plan Process and Requirements

A key plan is a drawing to present the overall design, show the interaction between various design disciplines (i.e. utilities, transportation, landscape), and to check for and coordinate conflicts among the various existing and proposed features.

Key Plan Requirements

The condition for a key plan is included in the development permit prior-to letter. A key plan will be required for all developments when one of the following two conditions are met:

1. The City's infrastructure is upgraded or altered, through:
 - changes to curb, sidewalk, boulevard, and roadway alignment;
 - a sewer main upgrade;
 - a water main upgrade; or,
 - an electrical upgrade.
2. An enhanced utility coordination is required. Utilities Management Branch's conditional review may trigger the need for a key plan under the following conditions:
 - a development size of greater than six units; or
 - the presence of sewer (sanitary and storm or combined) and third-party utilities in the laneway proposed for servicing; or,
 - other areas where the Utilities Management Branch may deem necessary for a key plan.

Key Plan Process

The key plan should be prepared by the developer's engineering consultant. The key plan drawing must conform to the specifications stated in Section 2.4.4 of the City of Vancouver's Engineering Design Manual, which can be located at: <https://vancouver.ca/files/cov/engineering-design-manual.PDF>.

The engineering consultant will establish a base map for the key plan. The engineering consultant may request a GIS drawing from the City as a starting point, which contains utilities in the street right-of-way. The GIS drawing may be obtained by sending the request to covutilities@vancouver.ca.

Responsibilities and Liability

Please note, that the City of Vancouver assumes no responsibility for the accuracy or completeness of the information shown on the GIS drawing. All work carried out is done wholly at the risk of the party undertaking the work who agrees, as a condition of such undertaking, to release the City of Vancouver from all liability. Location of all utilities shall be confirmed by the engineering consultant or the developer through various means (i.e. BC One Call, private locator, daylighting, ground penetrating radar, M-Scope, etc.).

The limit and extent of a base map may extend beyond the development's lot lines and will be defined by the scope requirements from all stakeholders involved in the development.

The engineering consultant shall coordinate with all key stakeholders to produce a comprehensive key plan at an early stage to avoid overall schedule and financial risks for the development. The engineering consultant shall review the designs and address all deficiencies, non-conformances, and conflicts with the appropriate stakeholders prior to submitting the key plan to the City of Vancouver for formal review and approval. An example of a comprehensive key plan is provided in Appendix D for reference.

Coordinating with City and Third-Party Utilities

The engineering consultant is required to coordinate all transportation, street, City of Vancouver utilities designs. Examples of utilities include water, sewer, green rainwater infrastructure (GRI), neighbourhood energy utility (NEU), electrical (TEOD), and third-party utilities such as BC Hydro, TELUS, Shaw and FortisBC.

In addition, the consultant shall acquire a written acceptance from all relevant third-party utilities to confirm that the proposed new build to service the development is accurately shown on the key plan prior to submitting to the City for review and approval. The engineering consultant must include the sign-off sheet with the key plan submission. An example of the sign-off sheet can be found in Appendix C for reference. Please note that there will be some developments where third-party utilities such as TELUS, Shaw, and FortisBC may not be required for servicing. If one of the third-party utilities is not required to service the development, a written confirmation from the utility company will still be required and submitted to the City. An e-mail correspondence between the third-party utility company and the engineering consultant will be acceptable.

The key plan is to be submitted to the assigned City development permit application project facilitator or project coordinator as applicable.

Review Process

The key plan, depending on the proposed features for the development, may be reviewed by the following City branches but not limited to:

- Transportation Design
- Streets Design
- Sewer Design
- Water Design

- Traffic, Electrical and Operations Design
- Utilities Management

The timeline to review the key plan will vary depending on the complexity of the proposed features and size of the development. In general, developers and third-party utilities should expect initial review of the key plan to take a minimum of two months. After all required branches at the City review and accept the designs, the overall key plan will be approved. The approved key plan will be issued to the developer and/or its engineering consultant. The approved key plan will be valid for twelve months; however, an extension may be granted upon request. It is the developer or its engineering consultant's responsibility to notify the third-party utilities that the key plan has been approved by the City.

Utility Companies: Process and Responsibilities

1. The developer or engineering consultant notifies utility companies that a key plan is required for the new development.
2. Utility companies provide a proposed design to service the new development and coordinate with the developer's engineering consultant. At minimum, the utility companies' design should include proposed alignment with quantity of ducts and structures (i.e. maintenance hole, service vault, etc.) with proper scale and offsets. Utility companies should provide the engineering consultant with all the design and construction standards and requirements.
3. The engineering consultant follows the key plan process outlined and notify the utility companies that approval by the City has been obtained.
4. Once utility companies receive confirmation from the developer or its engineering consultant that a key plan has been approved by the City, each utility company submits a detailed permit drawing to the Utilities Management Branch for permit review and approval. It is the utility company's responsibility to ensure the proposed alignment shown on the detailed permit drawing is in the same corridor as shown on the approved key plan. Any discrepancies from the key plan may result in requiring a revision of the detailed permit drawing and potential delays in servicing for the development site.
5. The Utilities Management Branch reviews the permit drawings from the utility companies individually and issue an approval to the respective utility companies.

Please note, it is expected that a minor adjustment in alignment or a slight shift in the placement of the structure(s) may still be required prior to achieving the final approval. As profiles are not included on the key plan, utility companies should account for additional changes if there is a conflict with the proposed vertical corridor.

Appendix A**Developer/Engineering Consultant: Key Plan Checklist**

- ☐ Established base map per features required for the development
- ☐ Designed or obtained City's utilities (i.e. water, sewer, GRI, NEU, electrical, etc.)
- ☐ Contacted third-party utilities (BC Hydro, TELUS, Shaw, FortisBC, etc.) to obtain their designs
- ☐ Compiled all designs and incorporated into key plan
- ☐ Reviewed key plan, addressed and coordinated deficiencies, non-compliance, and conflicts with appropriate stakeholders
- ☐ Obtained written acceptance from third-party utilities by completing sign-off sheet/block to confirm that proposed new build to service the development is accurately shown on key plan
- ☐ Submitted key plan with sign-off sheet to City's development permit application project facilitator/coordinator
- ☐ After key plan approval, notified third-party utilities that key plan has been approved by the City and third-party utilities can submit individual permit drawing to Utilities Management Branch for official review and approval

Appendix B**Utility Companies: Key Plan Checklist**

- ☐ Provided design, standards, and requirements to developer/engineering consultant to service new development
- ☐ Reviewed key plan to verify that proposed design is captured accurately
- ☐ Provided written confirmation to developer/engineering consultant to verify accuracy of proposed design shown on key plan and sign-off
- ☐ Following key plan approval by City, submitted detailed permit drawing to Utilities Management Branch for official review and approval

Appendix C

Example of Key Plan Sign-off Sheet

Key Plan Sign-off Sheet (Development Address: _____)			
Key Plan Prepared By: Company Name, Contact Information			
Asset Owner	Name	Signature/Initials	Date
BC Hydro			
FortisBC			
Telecommunications (_____)			
Telecommunications (_____)			
Telecommunications (_____)			
Other (_____)			
City Water			
City Sewer			
City Electrical			
City Transportation			
City UMB			
City _____			

Appendix D

Sample Key Plan



LEGEND

PROPOSED CURB & GUTTER	
EXISTING CURB & GUTTER	
PROPOSED STORM SEWER	
PROPOSED STORM SERVICE CONNECTION	
EXISTING STORM SEWER	
EXISTING STORM SERVICE CONNECTION	
PROPOSED SANITARY SEWER	
PROPOSED SANITARY SERVICE CONNECTION	
EXISTING SANITARY SEWER	
EXISTING SANITARY SERVICE CONNECTION	
EXISTING COMBINED SEWER	
EXISTING COMBINED SERVICE CONNECTION	
PROPOSED WATER SERVICE CONNECTION	
EXISTING WATERMAIN	
EXISTING WATER SERVICE CONNECTION	
PROPOSED TELUS CONDUIT	
EXISTING TELUS CONDUIT	
EXISTING TELUS CONDUIT TO BE ABANDONED	
PROPOSED SHAW CONDUIT	
EXISTING SHAW CONDUIT	
PROPOSED U/G HYDRO CONDUIT	
EXISTING O/H HYDRO LINE	
PROPOSED GAS MAIN	
EXISTING GAS MAIN	
ABANDONED GAS MAIN	
PROPOSED STREETLIGHTING DUCT	
EXISTING STREETLIGHTING DUCT	
PROPOSED STORM/ SANITARY MH	
EXISTING COMBINED MH	
RELOCATED/ EXISTING CATCH BASIN	
RELOCATED/ EXISTING HYDRANT	
RELOCATED/ EXISTING VALVE	
EXISTING POWER POLE	
RELOCATED/ EXISTING STREETLIGHT	
PROPOSED PEDESTRIAN LIGHTING	
PROPOSED SIGNAGE	
PROPOSED BOULEVARD	
PROPOSED CONCRETE SIDEWALK	
PROPOSED CONCRETE LANEWAY CROSSING	
PROPOSED FULL-DEPTH ROAD RECONSTRUCTION	
PROPOSED ASPHALT SURFACE MILL & PAVE	
PROPOSED ROAD RESTORATION	
PROPOSED BIKE PATH	

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

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