Station West Phase 2: Site Eng Comments provided July 7, 2021

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Site Eng	Architectural Drawings	The architectural drawings submitted by Core Architects Inc. (dated May 26, 2021) suggest a phased construction approach to the sites 5 storey underground parking structure. Is the intent to construct a portion of the 5 storey underground structure in each of the 3 phases? Or to construct the entire underground parking structure while constructing Building B (Phase 1)? Site Engineering staff would require the entire underground parking structure to be constructed at the same time to ensure the site adheres to the City's site servicing requirements. Please confirm.		As indicated by drawing 2/A103 The intent is to construct the below grade parking in 2 Phases. Phase 1 would be built with 'Building B' which is above grade Phase 1. This first below grade phase would provided proportionally enough vehicle and bicycle parking supply to cover the first 2 above grade phases ie. Building B and Building C. The remainder of the below grade (phase 2 per 2/A103) would be built with phase 3 of the above grade which is 'Building A'.	
General Comments:					
Site Eng		Masonry Court is a City of Burlington owned road: Deemed width = 20m; Existing width = 20m. Therefore, no widening required. Cook Boulevard is a future City of Burlington owned road (to be dedicated to the City once fully constructed as per the approved plans and found acceptable by City staff): Deemed width = 17m; Existing width = 17m. Therefore, no widening required. Applicant is advised that a new Standard is in effect as of July 12, 2017, S-114-B, requiring any disturbance to the municipally owned ROW asphalt to be restored curb to curb for the entire frontage(s) of the property, it may also mean that a City contractor will complete the works, and the costs borne by the Applicant Not regulated by CH according to GIS			
Updated Stormwater Management Brief:					
Site Eng	SWM Brief	Reference the approved Functional Servicing Report / Stormwater Management Design submitted through the first phase of development.		Phase 1 report referenced in the MTE Functional Servicing and Stormwater management report sections 2 and 3.	
	SWM Brief	The subject site was provided with a 450mm diameter storm sewer outlet at the property line, as part of the first phase of development. The stormwater "Quantity Control Criteria" applied to the site was as follows: post-development storm events up to and including the 100yr be controlled to the 2yr pre-development peak flow. The run-off coefficient applied to the subject site was (0.75). A proposed design that exceeds (0.75) will require on site storage.		Stormwater management criteria adhered to and discussed in the MTE Functional Servicing and Stormwater management report section 2.	
	SWM Brief	Quality Control Criteria – Enhanced 80% Total Suspended Solid Removal to be achieved.	Page 12 of Functional Servicing and Stormwater Management Report	80% TSS removal has been achieved. See Functional Servicing and Stormwater Management Report for details.	
Geotechnical Report:					
Site Eng	Geotech Report	Required to verify groundwater impacts and excavation methods. Please ensure the boreholes are completed at depths in line with the proposed underside of foundation.		Geotechnical Report has been completed for the site	

		Precondition survey of area buildings prior to start of excavation and vibration monitoring for the duration of construction, will be required, limits of study area to be determined by the acoustical consultant/geotechnical engineer.		Precondition Survey limits are not defined by a Geotechnical Consultant
		In the event groundwater is detected, please submit a Hydrogeological Study confirming how you propose to manage the estimated short-term and long-term groundwater dewatering from the site. (Groundwater to be tested to ensure MECP Standards for residential are adhered too)		Noted.
Environmental Site Assessment (Phase One):				
Site Eng	ESA Ph1	For a complete application we request at minimum a Phase One ESA and a copy of the Regional Environmental site screening questionnaire. Please note all environmental site assessments must be completed in accordance with the requirements of the O.Reg. 153-04.		Completed.
Noise & Vibration Feasibility Study:				
Site Eng	Noise & Vibration Report	As per NPC-300		
		Applicants consultant to use capacity volume of Waterdown Road, Masonry Court and other surrounding roads for STAMSON calculations; contact the City's Traffic Operations group for volumes.	SLR Noise Report Appendix B.	Traffic data provided by the City for historical projects in the area were applied in the assessment. Traffic data was grown to a future year of 2041, which is considered acceptable by the City of Burlington Transportation Services
		Applicant's consultant to also consider the building as a stationary source and detail any mitigation measures required to prevent noise nuisance on adjacent residential. For the development itself and need to see if there are any negative impacts on existing surrounding residential (due to rooftop mechanical, underground parking fans/vents/etc.).	SLR Noise Report Sections 4.0 and 5.0	To be completed when development mechanical systems are sufficiently designed.
		Please also consider nearby existing and proposed buildings as potential stationary sources of noise.	SLR Noise Report Sections 2.0 and 3.0	Roadway, Railway and Surrounding Industrial facilities and Rail Yard have been assessed.
		Please have the acoustical engineer consult with the architect and structural engineer as to the optimal placement of vents and fans for the underground parking	n/a	Acknowledged. Any concerns with placement will be raised with Architect.
		Please advise the noise consultant that reflective surface should be used in Stamson calculations	SLR Noise Report Sections 2.4 and Appendix B.	Reflective ground has been applied in the Transportation Noise modelling
		Please also advise the noise consultant that although NPC-300 tables indicate 60dBA in the OLA (both at ground and upper levels) with warning clauses, it is not acceptable to the City, we request that all possible measures be taken to control the noise in the OLA to 55dBA or less, if not feasible, then we request calculations to confirm what levels could be achieved, i.e. 60dBA would require a 3m noise barrier, 59 a 3.5m, 58dBA a 4.0m, etc. all the way to 55dBA. Please have the architect consult with the noise consultant as to the optimal placement of outdoor living areas (including upper level OLA's) for residents, shielded from sources of noise.	SLR Noise Report Section 2.6.1	An assessment of barrier requirements was completed, as required.
		All STAMSON calculations to be included in the report	SLR Noise Report Sections 2.4 and Appendix B.	A validation file was included confirming distance propagation, screening and angles of exposure are consistent between ORNAMENT and CadnaA noise modelling.
		Actual noise measurements to be included in the report	n/a	Noise measurements were not required or completed as part of the noise study.
		Copies of correspondence from the City of Burlington confirming traffic capacity must be included in the brief.	SLR Noise Report Appendix B.	Traffic data provided by the City for historical projects in the area were applied in the assessment.

		Site plan to be included in the report	SLR Noise Report Figure 2, Appendix B.	included in Report
		Key plan showing points of reception to be included & a chart referencing the key plan, detailing the estimated noise levels, allowable levels, and mitigated noise levels	SLR Noise Report Figures section	Noise impacts on the development are presented in a figure format.
		Area context plan to be included showing potential sources of noise Please refer to accompanying check list for further details.	SLR Noise Report Figure 1 and 7	included in Report
Shoring and Excavation Plan/Details:				
Site Eng	Shoring and Excavation Plan	Provide staff with 4 cross section details (north, south, east and west sides) and a shoring key plan, which outlines the following:		
		1. Proposed shoring system (Raker, Tie Backs, etc…)	SH1-SH11	Done
		2. Dimensions from the property line to the outside of the proposed foundation (ensure the plan includes all 5-underground parking storey's)	SH1-SH11	Done
		3. Dimensions from the property line to the proposed Piles, Caissons, weeping tile / drainage feature	SH1-SH11	Done
		4. In the event tie backs are required, provide an encroachment setback taken from the property line	SH1-SH11	Done
		5. Include all existing and or proposed underground utilities on plan. (Locates required)	SH1-SH11	Done
		6. All temporary or permanent encroachments on neighbouring properties require written consent signed and dated by the property owners.	SH1-SH11	Noted
Construction & Mobility Management Plan:				
Site Eng	CMMP	Construction Management and Mobility Plan (CCMP) is required for the application to be complete. Due to the nature of the proposed development (i.e. large building footprint) and the likelihood that use of the City's road allowance will be necessary during construction of the proposed development a CCMP is required to ensure that the development works can be completed in a manner that is to the satisfaction of the Executive Director of Capital Works and the Director of Transportation Services, as the use of the City's road allowance for construction staging has not been approved and in order to minimize the impact to residents, vehicles, pedestrians and local businesses the following is required (please refer to the attached check list and staff report):	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		1. CMMP, plotted to scale on 24" x 36" sheet	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		2. Proposed limits of construction	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		3. Proposed construction staging areas, including any staging areas required on the City's road allowance for concrete pours, material deliveries, site servicing, etc. and written justification for any construction staging areas on the City's road allowance	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		4. Proposed temporary/permanent encroachments on the City's road allowance and written justification of any required encroachment on the City's road allowance	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		5. Proposed truck haulage routes and location of truck stacking	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.

		6. Proposed location of mud mat and vehicle wash down area	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		7. Proposed location of crane assembly and swing radius	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		8. Proposed traffic control measures, specifically addressing signage and/or any lane closures/restrictions	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		9. Pedestrian control measures, specifically addressing signage and Pedestrian routing	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		10. Zero/reduced setbacks are a challenge - All elements of the underground parking structure (i.e. walls, foundation drains, shoring, etc.) are required to be within the limits of the subject property, a detail is required to demonstrate that the underground parking structure can be constructed within the property limits.	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
		11. A phasing plan and separate plans for each phase of construction will is required.	C1.1-C1.3	The required CMMP check list items have been addressed and incorporated into the drawings.
Urban Forestry & Landscape Comments:				
RE: Existing Trees				
Forestry & Landscape	Tree Preservation Plan & Arborist Report	1. A Tree Inventory and Preservation Plan and Arborist Report is required for all existing trees greater than 10cm DBH on site and on adjacent properties within 6m of the property lines, and trees of any size on city property. See the City of Burlington: Pre-Submission Checklist for requirements.	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted
		2. Removal of city trees will require council approval. Removal of city trees should be avoided where possible, and proposal for removal will require an arborist's assessment of health and structural condition prior to the request being accepted. Additionally, alternate layouts and construction measures should be considered to preserve city trees and discussed in the Arborist's Report, and in the absence of alternatives, justification provided for any requested removals.	L-1 Tree Protection Plan, Arborist Report	Noted. Two municipal trees (#12 and 15) require removal for the ramp connection to Waterdown Road
		3. A Tree Permit is required for all work around city trees, in accordance with Public Tree Bylaw 68-2013, including the payment of the Tree Permit fee and securities for trees to be retained. The details of the Tree Permit will be finalized at the Site Plan stage.	L-1 Tree Protection Plan, Arborist Report	Noted.
		4. All existing public and private trees to be retained require tree protection fencing. Please see the City of Burlington Tree Preservation and Protection Specification SS12A for further tree protection details. Minimum Tree Protection Zones (MTPZ) and Critical Root Zones (CRZ) should be clearly shown and labeled on the Tree Inventory and Preservation Plan, in addition to tree protection fencing. Any encroachments into the MTPZ of existing trees to retain should be discussed in the Arborist Report.	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted
		5. The site development (limits of excavation, grading and servicing) should be informed by the Tree Inventory and Preservation Plan and Arborist Report (MTPZ, CRZ, tree protection areas) and the Arborist Report should be coordinated with and discuss impacts shown on other plans to ensure proposed tree preservation is possible (e.g. trenchless utility installation, root exploration and pruning, etc.).	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted

6. Removal or damage to trees on neighboring properties within 6.0m of the property line and boundary trees (which are protected under the Provincial Forestry Act (RSO 1990) Section 10) will require:		
a) The adjacent property owners shall be consulted and made aware of the proposed development and potential impacts to their trees and boundary trees and requested to submit in writing that there are no concerns with proposed treatment of the existing trees. OR	L-1 Tree Protection Plan, Arborist Report	Noted. No adjacent or boundary trees are required for removal
b) A qualified professional (as defined in Pre-Submission Checklist) shall be retained to address the potential impacts on the neighbor's trees and/or boundary trees and provide a letter or report confirming in their opinion regarding impacts to the boundary trees from proposed construction. The arborist letter or report shall also include the preservation methods, including pruning and fertilizing, that can be implemented by the owner to ensure the health of trees on neighboring properties.	L-1 Tree Protection Plan, Arborist Report	Noted. No adjacent or boundary trees are required for removal
7. If trees on private property are proposed to be removed prior to Site Plan approval, a Tree Permit is required for removal or injury of trees on private property within the Urban Planning Area Boundary of the City of Burlington, in accordance with the Private Tree Bylaw 20-2020, including the payment of the Tree Permit fee and compensation for trees required to be removed. A Private Tree Permit application should be applied for through the online application system: https://webforms.burlington.ca/Roads-and-Parks-Maintenance/Private-Tree-Permit-Application.	L-1 Tree Protection Plan, Arborist Report	Noted. No on property trees are required for removal
8. Trees that are injured or removed under the provisions of a private tree permit will need to be replaced using the City's method of calculation. The tree's size, as well as the overall condition rating will impact the total number of cm's required to be replaced. Generally, one replacement tree is required for every 10 cm diameter removed. It is recommended that the replacement trees are replanted on the subject site. If there is no room on site for the replacement trees, there will be a charge of $400 per replacement tree. This information and calculations should be included in the submitted Arborist Report and Tree Preservation Plan.	L-01 Landscape Master Plan	Completed & Submitted
9. All existing public and private trees to be retained require tree protection fencing. Please see the City of Burlington Tree Preservation and Protection Specification SS12A for further tree protection details. Minimum Tree Protection Zones (MTPZ) and Critical Root Zones (CRZ) should be clearly shown and labeled on the Tree Inventory and Preservation Plan, in addition to tree protection fencing. Any encroachments into the MTPZ of existing trees to retain should be discussed in the Arborist Report.	L-01 Landscape Master Plan	Completed & Submitted: replacement trees shown.
10. Show existing trees to be preserved and tree preservation fencing on the Construction Management and Mobility Plan.		No on property trees are required for removal
11. A qualified professional (as defined in the City of Burlington's Pre-submission Checklist) may be required to be retained to address potential impact on the existing trees on site during excavation operations to ensure no damage to the protected trees or their root systems. Requirement to be determined at the Site Plan stage.	L-1 Tree Protection Plan, Arborist Report	Noted. No on property trees are required for removal

		12. Do not remove any trees from the site until after the Rezoning and Official Plan applications have been approved.	L-1 Tree Protection Plan, Arborist Report	Noted.
RE: Landscape				
Forestry & Landscape	Landscape Plan	1. A Landscape Concept Plan will be required, showing the general layout and intent of what is proposed for landscaped areas and buffers, outdoor amenity areas (at grade and on podium), fence location and types and pedestrian circulation. See the Pre-Submission Checklist for requirements.	L-01 Landscape Master Plan, L-02&03 Rooftop Amenity Plans	Completed & Submitted
		2. I defer to the Transportation Department for comment on parking, but layby parking is not supported in the city right-of-way (ROW), as it conflicts with bicycle infrastructure. Please remove the note "Layby parking spots will be added" along Cooke Blvd, unless advised otherwise by city Transportation staff.		Subject to further consultation with staff as the development application process advances.
		3. Please remove the trees shown conceptually in the city ROW along Waterdown Road and remove the note "Native, coniferous trees to slow wind within the site as per the wind study". Any wind mitigation measures required (e.g. screens, tree plantings) should be located on the subject site.	L-01 Landscape Master Plan	Subject to further consultation with staff as the development application process advances.
		4. Please consult with the city's Parks Design and Construction department regarding the use of the Elevated Lawn area as a privately owned publicly-accessible space (POPS) and any specific requirements (e.g. signage, access).	L-01 Landscape Master Plan	Noted.
		5. Planting Plan, Plant List and Details won't be required until the Site Plan Stage, but for your information any proposed trees planted in the ROW should be shown conceptually and noted "To be planted by city Forestry staff". Cash-in-lieu of tree planting in the ROW will be required. Soil provided shall be to the satisfaction of Forestry staff. In the event that hard surfaces are required around proposed tree plantings (ex. sidewalks, plazas, etc.), soil volume shall be provided with the inclusion of a structural soil cell, inclusive of all required irrigation and drainage.	L-01 Landscape Master Plan	Noted.
		6. Clearly show the limits of underground parking on the Landscape Concept Plan and ensure there is sufficient soil volume for full sized large canopy trees.	L-01 Landscape Master Plan	Noted.
		• Minimum required soil volumes are 30m3 of soil per tree in a single tree pit, 20m3 per tree in a shared planting environment. Excavation for each planting environment should be 0.75m to 1.2m depth and should not exceed 1.5m depth.	L-01 Landscape Master Plan	Noted and shown.
		• Show structural soil cells layouts, raised planters or berms where required.	L-01 Landscape Master Plan	Noted and shown.
		• Limits of underground parking should be set back from property lines to grow large canopy trees that will not need to be removed when the underground parking garage requires repairs (i.e. trees planted on the roof slab of the underground parking garage).	L-01 Landscape Master Plan	Noted and shown.
		7. Show and dimension pedestrian walkways (1500mm minimum width, 1800mm recommended) and connections to the city sidewalks residential and retail entrances and Outdoor Amenity areas. Consider the width of the pedestrian walkways around buildings minus any doors that open out.	L-01 Landscape Master Plan	Noted and shown.

	8. Once the number of parking spaces is finalized, confirm the required number of Type “A” and Type “B” barrier free parking spaces required. Type “A” shall be 3400 mm in width and signed to indicate Van Accessible Parking. Type “B” shall be 2750 mm as per city zoning by-law. As per city zoning by-law, the access aisle shall be 2000 mm. The access aisle is to be clearly identified and can be shared by both spaces. Please see GAATES Figure 2.6.4.1 (page 127) for Van Accessible Signage detail.		Refer to table 5/A100 ‘Parking and Bike parking statistics’. This indicates proposed supply of Type A and Type B barrier free parking. See also below grade parking layouts A200-A203.
	Locate the barrier free parking spaces closest to the main entrances with direct pedestrian access (not crossing vehicular traffic). Contact the city’s Accessibility Coordinator if you have any questions: Judi Lytle, 905-335-7600, ext. 7865, judi.lytle@burlington.ca.		Subject to further consultation with staff as the development application process advances.
	9. Show bicycle parking and snow storage locations.	L-01 Landscape Master Plan	Noted and shown.
	10. Show the location of air vents/shafts and coordinate with landscape concept (e.g. do not locate vents in walkways and coordinate with proposed planting locations). Setting the intake shafts north off of the walkway north of the Elevated Lawn area is recommended.	L-01 Landscape Master Plan	Noted and shown.
Park Design & Construction Comments:			
	• Park dedication will be a condition of approval and will be taken as cash-in-lieu of park dedication under current park dedications policies		N/A for this application, park is City owned.
	• Is it the intent of the applicant to make the amenity space in the north east corner of the site as a Privately Owned, Publicly Accessible Space (POPS)? If this is the case, the City will provide calculations on credit for CIL based on a savings by number of units.		The park is City owned and public right of way.
CMMP	• The parking garage structures appear to be up to the property line. No structures such as footings or tie backs etc. will be allowed into the open space to the north of the property.		The proposed building requires temporary encroachments for the shoring system and construction as indicated on the plan. Please refer to shoring plans by contractor for details.
Landscape Plan	• The Landscape concept identifies a sloped area extending from the north west corner of the site into the road allowance. Please provide details on the intended purpose of this sloped area.		This is a vehicular ramp/road access from Waterdown Rd. direct to our P1 below grade parking. i.e. a secondary site entrance to help ease congestion at the main site entry at Cooke Blvd.
Landscape Plan	• The landscape concept identifies planning in the city road allowance as per wind study. This area provides access to the storm water infrastructure. Please show the existing access road to ensure its function will not be impaired by the off-site plantings.	L-01 Landscape Master Plan	Noted and shown.
	• Ensure the overall development contributes to a walkable community by providing an accessible and attractive pedestrian environment with appropriate internal links, such as sidewalks, greenways and connections to adjacent residential and commercial neighborhoods	L-01 Landscape Master Plan	Noted and shown.
CMMP	• The city will be considering implementation of the park block and pedestrian connection to the Go station upon completion of phase 1 currently under construction. As such the use of the park block will not be available for construction staging. The construction management plan will not include the park block for construction storage or staging.		The park block won’t be used for construction storage or staging. Please refer to shoring plans by contractor for details.
	• If the north east corner of the site is to become a Privately Owned Publicly Accessible Space, the applicant is encourage to meet with the Manager of Park Design and Construction to ensure the public park and the private space designs are coordinated together.		N/A as the park is owned by City.

Station West Phase 2: Acoustics & Wind

City of Burlington Comments
Halton Region Comments
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BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Planning Dept	**Noise/Vibration Feasibility Study**	Required to evaluate potential impacts from the adjacent railway corridor and employment uses	SLR Noise Report Sections 2.0 and 3.0	Roadway, Railway and Surrounding Industrial facilities and Rail Yard have been assessed.	Required for applications as set out in Part II, Section 3.3.2, subsections r), s), and t), and Part II, Section 3.7.2, subsections d), e), and f) of the City's OP, Part IV, Sections 142-143 of the Regional OP, and for all properties abutting arterial roads.
Site Engineering		Applicant's consultant to also consider the building as a stationary source and detail any mitigation measures required to prevent noise nuisance on adjacent residential. For the development itself and need to see if there are any negative impacts on existing surrounding residential (due to rooftop mechanical, underground parking fans/vents/etc.)	SLR Noise Report Sections 4.0 and 5.0	To be completed when development mechanical systems are sufficiently designed.	
Site Engineering		Please also consider nearby existing and proposed buildings as potential stationary sources of noise	SLR Noise Report Sections 4.0 and 5.0	To be completed when development mechanical systems are sufficiently designed.	
Site Engineering		Please have the acoustical engineer consult with the architect and structural engineer as to the optimal placement of vents and fans for the underground parking	SLR Noise Report Sections 4.0 and 5.0	To be completed as part of mechanical system design.	
Site Engineering		Please advise the noise consultant that reflective surface should be used in Stamson calculations	SLR Noise Report Sections 2.4 and Appendix B.	Reflective ground has been applied in the Transportation Noise modelling	
Site Engineering		Please also advise the noise consultant that although NPC-300 tables indicate 60dBA in the OLA (both at ground and upper levels) with warning clauses, it is not acceptable to the City, we request that all possible measures be taken to control the noise in the OLA to 55dBA or less, if not feasible, then we request calculations to confirm what levels could be achieved, i.e. 60dBA would require a 3m noise barrier, 59 a 3.5m, 58dBA a 4.0m, etc. all the way to 55dBA.	SLR Noise Report Sections 2.6	An assessment of barrier requirements was completed, as required.	
Site Engineering		All STAMSON calculations to be included in the report	SLR Noise Report Sections 2.4 and Appendix B.	A validation file was included confirming distance propagation, screening and angles of exposure are consistent between ORNAMENT and CadnaA noise modelling.	
Site Engineering		Actual noise measurements to be included in the report	n/a	Noise measurements were not required or completed as part of the noise study.	
Site Engineering		Copies of correspondence from the City of Burlington confirming traffic capacity must be included in the brief.	SLR Noise Report Appendix B.	Traffic data provided by the City for historical projects in the area were applied in the assessment.	
Site Engineering		Site plan to be included in the report	SLR Noise Report Figure 2, Appendix B.	included in Report	
Site Engineering		Key plan showing points of reception to be included & a chart referencing the key plan, detailing the estimated noise levels, allowable levels, and mitigated noise levels	SLR Noise Report Figures section	Noise impacts on the development are presented in a figure format.	
Site Engineering		Area context plan to be included showing potential sources of noise	SLR Noise Report Figure 7	Noise Sources shown in Figure 7.	
CoB		Is prepared, signed and stamped by a Professional Engineer	SLR Noise Report Title Page	Final Report stamped by a P.Eng., experienced in the field of Environemntal Noise.	

CoB		Includes determination of project feasibility	SLR Noise Report Section 6.3	Concluding statements provided in Conclusions of report.
CoB		Includes assessment of existing and proposed transportation sources of noise and stationary sources of noise and vibration.	SLR Noise Report Sections 2 and 3.	Transportation and Stationary noise source impacts assessed, as required to meet NPC-300 guideline and Halton Region guideline requirements.
CoB		Includes traffic/train counts confirmed by relevant agencies and includes correspondence from those agencies in an appendix.	SLR Noise Report Appendix B.	Traffic data included in Appendix B.
CoB		Includes assessment of outdoor and indoor acoustical environments, including those onsite and on neighbouring noise sensitive land uses	SLR Noise Report Sections 2 and 3.	Transportation and Stationary noise source impacts assessed, as required to meet NPC-300 guideline and Halton Region guideline requirements.
CoB		Includes clearly defined environmental sound levels for transportation sources of noise and stationary sources of noise as per City's requirements and the MOECC publication NPC-216 and NPC-300 as amended	SLR Noise Report Sections 2 and 3.	Transportation and Stationary noise source impacts assessed, as required to meet NPC-300 guideline and Halton Region guideline requirements.
CoB		Includes investigation of feasible means of noise impact mitigation, including a chart outlining noise control measures required to achieve sound levels of 55dBA (or as close as possible) for each outdoor living area	SLR Noise Report Section 2.6.1	An assessment of barrier requirements was completed, as required.
CoB		Includes all calculations and modeling (i.e. STAMSON output)	SLR Noise Report Sections 2.4 and Appendix B.	A validation file was included confirming distance propagation, screening and angles of exposure are consistent between ORNAMENT and CadnaA noise modelling.
CoB		Includes technical details, and clarifies the responsibility for the implementation and maintenance of the required noise control measures.	n/a	not applicable, as barriers are located on the rooftop of the development, and are the responsibility of the building owners.
CoB		Includes recommendations for warning clauses.	SLR Noise Report Sections 2.4 and Appendix C.	Transportation and Stationary source warning clauses included.
Planning Dept	**Pedestrian Wind Level Study**	May be required to predict and assess the wind impacts of proposed buildings and site design on surrounding public and private spaces in addition to on-site wind conditions, in compliance with the City's Pedestrian Level Wind Guidelines and Terms of Reference	Pedestrian Level Wind Study.	See report.
CoB		Completed in accordance with the City's Pedestrian Level Wind Study Guidelines and Terms of Reference	Pedestrian Level Wind Study.	See report and Checklist

Station West Phase 2: Architectural				City of Burlington Comments Halton Region Comments City of Burlington Pre-Submission Checklist: BUD Panel Comments: Required at SPA Stage:	
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Planning Dept	**Conceptual Site Plan Layout**	General plan required showing proposed building envelopes, driveways, parking and landscape areas.	A104	Provided	
Planning Dept	**Shadow Study**	May be required to demonstrate the potential shadow impacts of a proposed development on its surrounding context, in compliance with the City's Shadow Study Guidelines and Terms of Reference	Shadow Study	Provided	
Planning Dept		Required to show how the proposed buildings and site design will impact the public realm, proposed outdoor amenity areas, and surrounding public open spaces and private outdoor amenity areas	Shadow Study	Provided	
Planning Dept		Should show how height, setbacks, terracing, and massing have been considered to reduce impact on the existing townhouses, mid-rise buildings, and low-rise houses to the east/southeast, and the future public park to the north.	Shadow Study	Provided	
Planning Dept		Height survey of adjacent buildings should also be provided	Shadow Study	Provided	
CoB		Completed in accordance with the City's Shadow Study Guidelines and Terms of Reference	Shadow Study	Provided	
CoB	**3D Model of Proposed Buildings**	N/A			
BUD Panel		How was the park designed/planned to accommodate this level of density?		The location of the outdoor amenity 'park' space was designed to link with both the neighbourhood park to the N/E and the flood plain to the N/W to create a large continuous outdoor green space	
		Since this area is close to transit, a mix of uses and a more active uses at grade would be desirable. Were café or offices ever considered?	A204/A205	Commercial space eg. Café or Retail has been implemented at Groun Level of Phase 1 (Building B) at the prominent corner of Masonry/Cooke.	
		What types of unit sizes have you incorporated into the development?	A100	Refer to stats on A100	
		What design strategies have you used to encourage active trasnportation by residents of this development, and ensure a vibrant, pedestrian oriented public real along Masonry Crt, Cooke Blvd, and Waterdown Road, in light of the grade changes along Masonry and Waterdown and the planned future pedestrian connection to the GO station at the north terminus of Cooke Blvd?		The site layout allows pedestrian/bike flow through the site and public parks to link Cooke blvd with the the Go station. Bike storage at exterior on site and at ground level. Direct access from podium to surrounding intersections for ease of access to streets for walking and public transit	
		How has the site and podium been designed to relate to the Waterdown/Masonry and Cooke/Masonry intersections?	A203/A204	Masonry/Waterdown intersection- Due to the higher grade at this corner of the site a residential lobby entrance has been created al Level 2 of the podium to link the street with the interior of the site for ease of access/connectivity. Masonry/Cooke Intersection- At Ground Level we have both retail/cafe etrance facing the intersection with exterior patio space, plus residential entrance connecting to Building B lobby and the interior of the site.	
		Have you considered the Panel's recommendation that the podiums be turned outwards to address the streets, with at grade entrances, lobbies, and retail spaces facing the streets?	A203/A204	Yes this has been considered and implemented per response above	

Have you minimized building shadows on Cooke Blvd?	Shadow Study	Building B closest to Cooke is the lowest tower. Also we have proceeded with 3 tower option rather than the originally proposed 4 tower option and have therefore removed one tower directly adjacent to Cooke blvd. The higher portion of the development are kept to the West closer to Waterdown.
How have you miminized the shadows on the public park?	Shadow Study	A study was carried out with tower A in various orientation which all resulted in a similar amount of shadow cast on the amenity space and park. The final orientation of buiding A was determined by the results of the wind study which determined the current orientation would create the best wind conditions within the park
How has the overall form, massing, and materiality of the towers and podiums contributed to an interesting skyline and achieving a human-scaled environment at street level?	A600-A602	The street facing podiums are 3 to 4 storey in height with the towers set back +3m for their majority to create a more human scale to the streetscape. The patterned configuration of the linear balconies and projecting panels help break up the podium facades and add interest to the streetscape, with street connecting terraces for at grade units. The simple form of the towers and their minimal material palette were chosen to create more passive elements in comparison to the busier street-facing podium.
The Panel advised that transitions to adjacent properties and between the buildings within the site, in terms of scale, mass and height, are missing. The City's Tall Building Guidelines exemplify a very clear, gradual transition in height (e.g. 24 storeys to 16, 8 and finally 3 storeys). Has this been addressed? The Panel felt that ultimately, the number and height of towers and overall density should be significantly reduced. The easterly towers, in particular, should be reconsidered. In addition to removing towers and significantly reducing the height of towers, the Panel recommended that the applicant experiment with different tower and podium shapes, heights and orientations and test the options with shadow studies to ensure that sun access to the open space area and courtyard is improved. Has this been considered/addressed?		The towers transition from the highest on the west side along waterdown to the lowest on Cooke Blvd which is opposite the next tallest building from Station West Phase 1 being the midrise buildings along Masonry Court. Although this does not conform exactly to the specified storey transitions suggested in the tall buidlings guidelines Different orientations for the towers were tested from a shadow standpoint however ultimately the challenging wind conditions on the site and the surrounding public spaces determined the orientation of the towers and their setbacks to podiums.

Station West Phase 2: Civil (MTE)

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Site Engineering	**Stormwater Management Report**	Quality control criteria - enhanced 80% TSS removal to be achieved	Page 12 of Functional Servicing and Stormwater Management Report	80% TSS removal has been achieved. See Functional Servicing and Stormwater Management Report for details.	Required in accordance with Part II, Section 2.11.3 subsections a) & d) of the OP
Site Engineering		Refers to the Ministry of the Environment "Stormwater Management Planning and Design Manual" and the TRCA/CVC Low Impact Development Stormwater Management Planning and Design Guide.	Page 2 of Functional Servicing and Stormwater Management Report	Standards referenced throughout the Functional Servicing and Stormwater Management Report	
Site Engineering		Is prepared, signed and stamped by a Professional Engineer	Page 20 of Functional Servicing and Stormwater Management Report is stamped.	Functional Servicing and Stormwater Management Report is stamped	
Site Engineering		Includes pre and post development drainage area plans that are legible, plotted to an acceptable metric scale, plotted on 24" by 36" paper and plotted on a consistent base map layer	Page 8 and 10 of the Functional Servicing and Stormwater Management Report.	Have been included in the Functional Servicing and Stormwater Management Report.	
Site Engineering		Includes site grading and servicing plans that are legible, plotted to a metric scale of 1:200, 1:250, 1:300 or 1:500, plotted on 24" by 36" paper and plotted on a consistent base map layer	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are at a 1:300 scale and plotted on a 24" by 36" paper.	
Site Engineering		Includes digital copies of modeling, modelling program acceptability to be confirmed with City Staff prior to use and prior to submission of report.	See zip file.	Digital copies of the modelling programs have been included to the City (WaterCAD and SWMHYMO)	
Site Engineering		Includes a list of all past reports and current technical documents that have been consulted.	Page 2 of Functional Servicing and Stormwater Management Report	Included in the Functional Servicing and Stormwater Management Report	
Site Engineering		Includes all calculations, modelling, and parameters (as per City Standard Drawings S-IDF, S-2D, S-3D, etc., as amended)	See Appendix A of the Functional Servicing and Stormwater Management Report	Included Functional Servicing and Stormwater Management Report	
Site Engineering		Includes clearly defined stormwater criteria for the site (including source) and demonstrates in report how these criteria will be satisfied.	Page 7 Functional Servicing and Stormwater Management Report	Included Functional Servicing and Stormwater Management Report	
Site Engineering		Addresses all interim conditions as well as the ultimate condition	Page 13 Functional Servicing and Stormwater Management Report	OGS and stormwater tank designed for ultimate buildout and will be constructed in 1st phase of construction. Therefore, interim conditions are addressed.	

Site Engineering		Contains engineering details and cross-sections showing existing utility locations if any temporary and/or permanent encroachments are proposed.	C2.4, C2.5, and C2.6	Cross sections included in civil drawing set.	
Site Engineering		Provide chemical analysis of groundwater to determine if it satisfies the City's storm sewer discharge criteria for water quality. (including documentation from the Geotechnical or Environmental Engineer in the appendix)	Page 3 Functional Servicing and Stormwater Management Report	Previous Phase 2 ESA report indicates that the groundwater meets MOE requirements. Further analysis required to determine if City requirements are met. The Owner is undertaking a hydrogeological and geotechnical review and results will be incorporated once available.	
Site Engineering		If groundwater cannot be directly outletted to the municipal storm system, detail where it will outlet, i.e. treated then outlet to storm or outlet to the sanitary system.	Page 2/3 Functional Servicing and Stormwater Management Report	Owner is undertaking a hydrogeological and geotechnical review. Once complete, results will be incorporated into the servicing drawings and reports.	
Site Engineering		Provide an estimate of groundwater flow to be permanently managed in the site storm system (including documentation from the Geotechnical Engineer or Hydro-geologist in the appendix)	Page 2/3 Functional Servicing and Stormwater Management Report	Owner is undertaking a hydrogeological and geotechnical review. Once complete, results will be incorporated into the servicing drawings and reports.	
Site Engineering		Provide comment on whether or not it is anticipated a permit to take water would be necessary either temporarily during construction or permanently.	Page 2/3 Functional Servicing and Stormwater Management Report	Owner is undertaking a hydrogeological and geotechnical review. Once complete, results will be incorporated into the servicing drawings and reports.	
Halton (Planning)/Planning/Site Engineering	**Functional Servicing Report**	Inclusion of watermains, water services, fire hydrants, sanitary sewer mains, sanitary forcemain, sanitary sewer services, stormwater mains and services to show options for how the property is proposed to be serviced according to City of Burlington and Halton Region standards	C2.2	Included in civil drawings.	Required in accordance with Part II, Section 2.11.3 subsection e) of the Burlington OP.
Planning Dept		Local watermain and wastewater main hydraulic analysis to be conducted - should include details about other developments properties in the drainage area in analysis (if any)	Page 15/16 Functional Servicing and Stormwater Management Report	The City of Burlington development application website was reviewed to identify other developments within the subject area. The sanitary analysis includes the proposed design flows from these developments.	Required for all applications in urban areas in accordance with Part III, Sections 87-89 of the Regional OP. Municipal (urban) Servicing Guidelines are available from Region of Halton
Planning Dept		Phasing, timing of the development, and required/available capacity shall be detailed	Page 15/16 Functional Servicing and Stormwater Management Report	Any external upgrades to the sanitary sewers are proposed for the first phase of development.	
Planning Dept		Include details about potential external main upsizing or main extensions to accommodate the development	Page 15/16 Functional Servicing and Stormwater Management Report	Any external upgrades to the sanitary sewers are proposed for the first phase of development.	
Planning Dept		FSR should speak to how it aligns with any greater Area Servicing Plan that is undertaken for the area	Page 3 Functional Servicing and Stormwater Management Report	Discussion included in Functional Servicing and Stormwater Management Report	

Servicing		FSR should incorporate Fire Flow Rate Testing of representative Regional Fire Hydrants in the area; include a copy of the fireflow rate testing results, and the Fire Underwriters Survey Requirements for the development.	Page 17 Functional Servicing and Stormwater Management Report	Test included in Appendix C. Discussion provided in Functional Servicing and Stormwater Management Report section 4.3 and 4.4.
Servicing		FSR should include info related to all other Utilities infrastructure in the area and potential conflicts	C2.2	Included in civil drawings.
Servicing		FSR should show existing site services and note how they are proposed to be decommissioned to make way for development	C2.2	Included in civil drawings.
Servicing		Demonstrate that full size water chambers, if required, can fit within the boulevard, while giving adequate separation distances from other utilities in the area.	C2.2	No water chambers required. Meters shown on civil drawing C2.2
CoB		Follows the terms of reference agreed upon by the Regional and City staff in advance of study commencement. Includes a copy of this approved Terms of Reference as an Appendix.	Appendix D.	Preconsultation comments included in Appendix D and discussions with the City regarding SWM requirements in Appendix A.
CoB		Is prepared, signed and stamped by a Professional Engineer.	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are stamped and signed.
CoB		Contains legible drawings , including all dimensions, plotted to a metric scale of 1:200, 1:250, 1:300 or 1:500 on 24x36 inch paper, and on a consistent base map layer .	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are at a 1:300 scale and plotted on a 24" by 36" paper.
CoB		Includes digital copies of models.	See zip file.	Digital copies of the modelling programs have been included to the City (WaterCAD and SWMHYMO)
CoB		Includes all dimensions in metric, to scale, and on a consistent	C1.1, C2.1, C2.2,	Drawings are at a 1:300 scale and plotted on a consistent base.
Planning Dept	**Area Servicing Plan**	Any site-specific development application should conform to the recommendations of the supporting/approved Area Servicing Plan	Appendix D.	Preconsultation comments included in Appendix D and discussions with the City regarding SWM requirements in Appendix A.
Planning Dept		Detailed technical comments provided under separate cover	Appendix D.	Preconsultation comments included in Appendix D and discussions with the City regarding SWM requirements in Appendix A.
Servicing		An Area Servicing Plan is required for the mobility hub/secondary plan area including the proposed development (the timing and scoping are to be discussed).	Appendix B.	External sanitary sewer analysis completed and included in Appendix B.
CoB		Follows the terms of reference agreed upon by the Regional and City staff in advance of study commencement. Includes a copy of this approved Terms of Reference as an Appendix.	SA1 drawing. Appendix B and D.	Appendix D includes a copy of the preconsulation meeting minutes. Section 3.4 and drawing SA1 includes discussion regarding the area servicing plan. External upgrades have been identified on the downstream sanitary system.
CoB		Is prepared, signed and stamped by a Professional Engineer.	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are stamped and signed.
CoB		Contains legible drawings , including all dimensions, plotted to a metric scale of 1:200, 1:250, 1:300 or 1:500 on 24x36 inch paper, and on a consistent base map layer .	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are at a 1:300 scale and plotted on a 24" by 36" paper.
CoB		Includes digital copies of models.	See zip file.	Digital copies of the modelling programs have been included to the City (WaterCAD and SWMHYMO)

CoB		Includes all dimensions in metric, to scale, and on a consistent base map layer.	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are at a 1:300 scale and plotted on a consistent base.
Site Engineering	**Detailed Grading and Servicing Plans**	Must be separate Plans	C2.1 and C2.2 drawings.	Drawings are separate plans
CoB		Are stamped and signed by a Professional Engineer	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are stamped and signed.
CoB		Contains legible drawings, plotted to a metric scale of 1:200, 1:250, 1:300 or 1:500, on 24" by 36" paper and plotted on a consistent base map layer	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Drawings are scaled at 1:300
CoB		Identifies property lines, dedications, easements, regulated areas, impermeable surfaces (including curbs, roads, driveways, sidewalks, etc.), buildings and entrances, and other information as needed	C2.1	Information included on drawing.
CoB		Identifies the location of all underground, at grade and overhead utilities	C2.2	Information included on drawing.
CoB		Identifies the location of all storm water management infrastructure, including swales, sub-drains, catch basins, pipes, and other quality and quantity controls as required	C2.1 and C2.2 drawings.	Information included on drawings.
CoB		Identifies Municipal Benchmark and Horizontal Control	C1.1, C2.1, C2.2, C2.3, C2.4, C2.5, and C2.6	Included on drawings.
Site Engineering	**Construction & Mobility Management Plan**	CMMP, plotted to scale on 24" x 36" sheet	C1.1, C1.2, C1.3	Drawings are to scale on 24 by 36" sheets.
Site Engineering		Proposed limits of construction	C1.1, C1.2, C1.3	Information included on drawings.
Site Engineering		Proposed construction staging areas, including any staging areas required on the City's road allowance for concrete pours, material deliveries, site servicing, etc. and written justification for any construction staging areas on the city's road allowance	C1.1, C1.2, C1.3	Information included on drawings. The use of half of the Masonry Ct. and half of the Cooke Blvd. ROW's are required for staging as the proposed development underground parking is proposed over the entire site area.
Site Engineering		Proposed temporary/permanent encroachments on the City's road allowance and written justification of any required encroachment on the City's road allowance	C1.1, C1.2, C1.3	There are no permanent encroachments, besides the new proposed road accesses to the site and the shoring tiebacks.
Site Engineering		Proposed truck haulage routes and location of truck stacking	C1.1, C1.2, C1.3	Truck haul route included on drawings.
Site Engineering		Proposed location of mud mat and vehicle wash down area	C1.1, C1.2, C1.3	Locations shown on drawings
Site Engineering		Proposed location of crane assembly and swing radius	C1.1, C1.2, C1.3	Locations shown on drawings
Site Engineering		Proposed traffic control measures, specifically addressing signage and/or any lane closures/restrictions	C1.1, C1.2, C1.3	Vehicle signage will comply with Ontario traffic manual temporary conditions book 7 to be provided to indicate temporary routing of pedestrians south on cooke blvd. Preliminary information is included on the drawings.
Site Engineering		Pedestrian control measures, specifically addressing signage and pedestrian routing	C1.1, C1.2, C1.3	Pedestrian signage will comply with Ontario traffic manual temporary conditions book 7 to be provided to indicate temporary routing of pedestrians south on cooke blvd. Preliminary information is included on the drawings.

Site Engineering		Zero/reduced setbacks are a challenge - All elements of the underground parking structure (i.e. walls, foundation drains, shoring, etc.) are required to be within the limits of the subject property, a detail is required to demonstrate that the underground parking structure can be constructed within the property limits.	C1.1, C1.2, C1.3	The proposed building requires temporary encroachments for the shoring system and construction as indicated on the plan are proposed.
Site Engineering		A phasing plan and separate plans for each phase of construction will is required.	C1.1, C1.2, C1.3	Multiple plans provided for each phase of construction.
CoB		Legible, metric scale drawing on 24” x 36” paper	C1.1, C1.2, C1.3	Drawings are to scale on 24 by 36" sheets.
CoB		Clearly identify property lines, easements, floodlines & hazard lands, natural heritage buffers, existing trees and vegetation to be retained, etc.	C1.1, C1.2, C1.3	Information included on drawings
CoB		Clearly identify limits of above ground development, including buildings, parking, sidewalks, curbs, etc.	C1.1, C1.2, C1.3	Information included on drawings
CoB		Clearly identify limits of underground parking structure, including dimensioning distance from property lines	C1.1, C1.2, C1.3	Information included on drawings
CoB		Includes shoring and excavation details		Information provided on the shoring plans. CMMP plan includes reference to the shoring plans and has been corrdinated.
CoB		Clearly identify limits of all elements of the underground parking structure including foundation drainage system/shoring/tiebacks/etc.		Information provided on the shoring plans. CMMP plan includes reference to the shoring plans and has been corrdinated.
CoB		Clearly identify limits of temporary perimeter/security fencing, covered sidewalk protection (if proposed) and tree protection fencing	C1.1, C1.2, C1.3	Information included on drawings
CoB		Clearly identify proposed temporary (trailers/material storage/fencing/etc.) and/or permanent encroachments (tiebacks/shoring/etc.) into the Right of Way and identify approximate time line of closure	C1.1, C1.2, C1.3	Information provided on the shoring plans. CMMP plan includes reference to the shoring plans and has been corrdinated.
CoB		Clearly identify any proposed temporary sidewalk and/or lane closures and identify approximate time line of closure.	C1.1, C1.2, C1.3	Information included on drawings
CoB		Identify haul route, i.e. what roads are to be used for material deliveries	C1.1, C1.2, C1.3	Information included on drawings
CoB		Identify crane location and swing radius – please note that further detail/additional requirements will be provided at the site plan stage	C1.1, C1.2, C1.3	Information included on drawings
CoB		Drawing must clearly note that no trades parking or truck staging will be allowed on the Municipal Right of Way	C1.1, C1.2, C1.3	Note added to drawing.
CoB		The applicant is advised that if the Official Plan Amendment/Re-Zoning application is approved, at the Site Plan stage additional construction management details may be required, including requirement of Road Occupancy and Municipal Consent permits if applicable.	N/A	Noted.
Site Engineering	**Utility Coordination Plan**	N/A		Noted. To be addressed in Site Plan application.

Station West Phase 2: Civil (EXP)

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Planning Dept	**Risk Assessment Report**	Required for applications proposing sensitive land uses in proximity to existing industrial uses, or vice versa, in accordance with Part II, Section 2.7.3 subsections n) & o) and Part II, Section 4.3 subsection d) of City's OP, Part IV Sections 146-147 of the Regional OP, and the MoE D-6 series guidelines.	D-6 Land Use Compatibilty - Air Quality Assessment	Please refer to report.	
CoB		Is signed by qualified professional	D-6 Land Use Compatibilty - Air Quality Assessment	Yes	
CoB		Illustrates how the proposal satisfies Provincial D6 Guidelines criteria and Regional Land Use Compatibility Guidelines	D-6 Land Use Compatibilty - Air Quality	Yes	
Planning Dept	**Air Quality Assessment**	Required to evaluate potential impacts from adjacent railway corridor and employment uses	D-6 Land Use Compatibilty - Air Quality Assessment	Please refer to report.	

Station West Phase 2:

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Halton Planning/ Site Engineering	**Environmental Site Screening Checklist**	Required in addition to A Phase 1 (at min.) (to O. Reg 153/04 standards and with a Letter of Reliance).	ESSQ	Checklist Completed	
Halton Planning/ Site Engineering	**ESA Update Letter**	Additional ESAs may be required depending upon the recommendations of the Phase 1 ESA.	Phase One ESA Update Letter	Letter Completed	
Planning Dept	**Record of Site Condition Report**	A letter of reliance from the Environmental Consultant/Qualified Person, confirming the City of Burlington and Region of Halton can rely on the info contained in the report is required (must be signed by qualified person)	RSC	Completed for the entire site at the Phase 1 Development investigation stage	Required to assess site contamination in accordance with Part II, Section 2.4, subsections i) and j) of the City's OP. All requirements of O.reg 153/04 must be met for Phase 1/2 studies and required Records of Site Condition
Halton Planning/ Site		A mandatory Records of Site Condition filing may be required.	RSC	As above	
Site Engineering	**Geotechnical Report**	Required to verify groundwater impacts and excavation methods - ensure boreholes are completed at depths in line with the proposed underside of foundation	Geotechnical Investigation	Geotechnical Report has been completed for the site	
Site Engineering		Precondition survey of area buildings prior to start of excavation and vibration monitoring for the duration of construction, will be required, limits of study area to be determined by the acoustical consultant/geotechnical engineer	Geotechnical Investigation	Precondition Survey limits are not defined by a Geotechnical Consultant	
Site Engineering		In the event groundwater is detected, please submit a Hydrogeological Study confirming how you propose to manage the estimated short-term and long-term groundwater dewatering from the site. (Groundwater to be tested to ensure MECP Standards for residential are adhered too)	Geotechnical Investigation	A proposal for Hydrogeological Services has been submitted to Adi. Awaiting authorization.	
CoB		Is prepared, signed and stamped by a Professional Engineer	Geotechnical Investigation	See Geotechnical Investigation Report	
CoB		Contains legible drawings	Geotechnical Investigation	See Geotechnical Investigation Report	
CoB		Includes digital copies of models	Geotechnical Investigation	No models developed or required for the Geotechnical Investigation.	
CoB		Includes all dimensions in metric, to scale, and on a consistent base map layer.	Geotechnical Investigation	See Geotechnical Investigation Report	
CoB		Includes groundwater information (for example: dewatering during construction vs. permanent dewatering to be accommodated in a stormpond). Includes estimated volumes of groundwater to be permanently managed.	Geotechnical Investigation	To be determined by Hydrogeological Assessment	
CoB		Indicates if a Permit to Take Water would be required either during construction or permanently.	Geotechnical Investigation	To be determined by Hydrogeological Assessment	
CoB		Includes testing of groundwater to ensure it meets municipal stormwater discharge criteria. (City and Regional staff have been contacted if groundwater does not meet discharge criteria.)	Geotechnical Investigation	To be determined by Hydrogeological Assessment	
CoB		Contains sufficient quantity and distribution of boreholes to map soil and groundwater conditions for the soil type.	Geotechnical Investigation	See Geotechnical Investigation Report	

CoB	Provides sufficient monitoring data to address groundwater level seasonality	Geotechnical Investigation	To be determined by Hydrogeological Assessment
CoB	Contains results of any geotechnical test completed	Geotechnical Investigation	See Geotechnical Investigation Report
CoB	Discusses infiltration capabilities if Low Impact Development is proposed		To be determined by Hydrogeological Assessment
CoB	Contains shoring and excavation details (for example: tiebacks, caissons, foundations, forming, piles) if underground parking or encroachments are proposed.	SH1-SH11	Provided in Shoring & Excavation Plan.
CoB	Includes cross-sections, and dimensions from property lines and details of over-digging	SH1-SH11	Provided in Shoring & Excavation Plan.
CoB	Includes a stable slope assessment if required at the preconsultation stage. This study refers to the Ministry of Natural Resources and Forestry Technical Guidelines “Natural Hazards Manual Technical Guide – River and Stream Systems: Erosion Hazard Limit” and final topographical survey drawings with stable top of bank delineation signed and stamped by a Professional Engineer.		No slopes at the site so not required.
CoB	Contains confirmation of the need for pre-construction surveys of surrounding buildings, to an extent determined by a Professional Engineer specializing in vibration, OR confirmation that pre-construction surveys are not warranted.		Not a Geotechnical element, though pre-construction surveys are usually recommended for liability purposes to establish baseline data.

Station West Phase 2: Landscape

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Urban Forestry & Landscape	**Tree Inventory and Protection Plan**	A tree survey must be prepared, identifying all existing trees, their type, size and condition, those trees proposed to be removed and retained, and the methods to be used to ensure preservation and protection of those trees to be retained	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	Required when a property under application contains woodlots, tree stands or hedgerows, in accordance with Part II, Section 6 of the City' OP and Part IV, Sections 146-147 of the Regional OP.
Urban Forestry & Landscape		A Tree Permit is required for all work around city trees, in accordance with Public Tree Bylaw 68-2013, including the payment of the Tree Permit fee and securities for trees to be retained. Removal of city trees will require council approval. Removal of city trees should be avoided where possible, and proposal for removal will require an arborist's assessment of health and structural condition prior to the request being accepted.	L-1 Tree Protection Plan, Arborist Report	Two City trees require removal (#12 & #15) due to ramp from Masonry Court ROW	
Urban Forestry & Landscape		Clearly show the limits of the underground parking and discuss the impact of excavation for the underground parking structure on the preservation of existing trees on the subject property and on neighboring properties in the Arborist Report.	L-1 Tree Protection Plan, Arborist Report	Limits of underground parking shown, tree #1 minimally affected by excavation	
Urban Forestry & Landscape		Existing trees on the subject property should be evaluated for retention. Trees that are injured or removed under the provisions of a private tree permit will need to be replaced using the City's method of calculation. The tree's size, as well as the overall condition rating will impact the total number of cm's required to be replaced. Generally, one replacement tree is required for every 10 cm diameter removed. It is recommended that the replacement trees are replanted on the subject site. If there is no room on site for the replacement trees, there will be a charge of $400 per replacement tree. This information and calculations should be included in the submitted Arborist Report and Tree Preservation Plan.	L-1 Tree Protection Plan, Arborist Report	There are no private/on property trees	
Urban Forestry & Landscape		If trees on private property are proposed to be removed prior to Site Plan approval, a Tree Permit is required for removal or injury of trees on private property within the Urban Planning Area Boundary of the City of Burlington, in accordance with the Private Tree Bylaw 20-2020, including the payment of the Tree Permit fee and compensation for trees required to be removed.	L-1 Tree Protection Plan, Arborist Report	There are no private/on property trees	
Urban Forestry & Landscape		All public and private trees to be retained require tree protection fencing. Please see the City of Burlington Tree Preservation and Protection Specification SS12A for further tree protection details.	L-1 Tree Protection Plan, Arborist Report	All Municpal trees' MTPZs have been properly protected except for tree #1, review Arborist Report for futher information.	
Urban Forestry & Landscape		Removal or damage to trees on neighboring properties within 3.0m of the property line and boundary trees (which are protected under the Provincial Forestry Act (RSO 1990) Section 10) will require:	L-1 Tree Protection Plan, Arborist Report	There are no neighbouring trees in the vicinity	
Urban Forestry & Landscape		• The adjacent property owners shall be consulted and made aware of the proposed development and potential impacts to their trees and boundary trees and requested to submit in writing that there are no concerns with proposed treatment of the existing trees.	L-1 Tree Protection Plan, Arborist Report	There are no neighbouring trees in the vicinity	

Urban Forestry & Landscape		OR			
Urban Forestry & Landscape		• A qualified professional (as defined in the City of Burlington's Pre-submission Checklist) shall be retained to address the potential impacts on the neighbor's trees and/or boundary trees and provide a letter or report confirming in their opinion regarding impacts to the boundary trees from proposed construction. The arborist letter or report shall also include the preservation methods, including pruning and fertilizing, that can be implemented by the owner to ensure the health of trees on neighboring properties.	L-1 Tree Protection Plan, Arborist Report	There are no neighbouring trees in the vicinity	
Urban Forestry & Landscape		A qualified professional (as defined in the City of Burlington's Pre-submission Checklist) may be required to be retained to address potential impact on the existing trees on site during excavation operations to ensure no damage to the protected trees or their root systems. Requirement to be determined at the Site Plan stage.	NA	Noted	
Urban Forestry & Landscape		Do not remove any trees from the site until after the Rezoning and Official Plan application has been approved.	NA	Noted	
CoB		Is prepared by a qualified professional (e.g. Arborist certified by the International Society of Arboriculture (ISA), including ISA number; qualified by Ministry of Training, Colleges and Universities (MTCU) or Ontario Training and Apprentice Board (OTAB); registered professional Forester in Ontario, etc.)	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Contains legible drawings on 24x36 or 11x17 inch paper	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Includes all dimensions in metric, to scale, and on a consistent base map layer	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Identifies all existing trees (over 10cm diameter at breast height (DBH) measured at 1.4m above the ground) on site and within 3m of the property lines, their common and botanical name, size (DBH and height), structural and physiological condition, ownership, comments and notes, recommendations, and photos	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Identifies trees proposed to be removed and retained, and the methods to be used to ensure preservation and protection of trees to be retained, including location and detail of tree protection fencing in accordance with the City of Burlington's Tree Protection and Preservation Specification SS12A	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Minimum Tree Protection Zones clearly shown and labeled in addition to tree protection fencing	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Tree Preservation reports should describe the scope and methodology of proposed construction works and the tree preservation measures	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
CoB		Abbreviations should be defined and industry standard terminology used	L-1 Tree Protection Plan, Arborist Report	Completed & Submitted	
Landscape	**Conceptual Landscape Plan**	Must be prepared by a certified member of the OALA, identifying the location and general design intent of the proposed plantings.	L-01 Landscape Master Plan	Completed & Submitted	Required in accordance with Part II, Section 6 of the City's OP.
Landscape		A Landscape Concept Plan will be required, showing general layout and intent of what is proposed for landscaped areas, including landscape areas and buffer planting, at grade and podium outdoor amenity areas, and safe and accessible pedestrian and bicycle circulation	L-01 Landscape Master Plan	Completed & Submitted	

Landscape	Show the general layout and proposed use of all at grade and podium Exterior Amenity areas.	L-01 Landscape Master Plan	Completed & Submitted
Landscape	Options 1 offers a better opportunity to create usable outdoor amenity and community gathering space than Option 2.	L-01 Landscape Master Plan	Option #1 used
Landscape	Consider the effects of wind and shadows on the usability and comfort of outdoor amenity and pedestrian areas (incorporate results and recommendations of wind and shadow studies).	L-01 Landscape Master Plan	Coordinated with Wind Study. Areas noted
Landscape	Show garage ventilation exhaust openings to ensure there are no conflicts with proposed landscaping, walkways, etc. and incorporate into the landscape concept (e.g. screening, vent duct design).	L-01 Landscape Master Plan	Completed & Submitted
Landscape	Clearly show the limits of the underground parking on the Landscape Concept Plan and ensure there is sufficient soil volume for full sized large canopy trees:	L-01 Landscape Master Plan	Completed & Submitted
Landscape	• Minimum required soil volumes range from 15m3 to 30m3, depending on the tree species and planting layout (e.g. soil volume share in a continuous trench for multiple trees, use of structural soil cells or engineered structural soil.)	L-01 Landscape Master Plan	Noted
Landscape	• The draft City Tree Planting Guidelines specify 30m3 of soil per tree in a single tree pit, 15m3 per tree in a shared planting environment. Excavation for each planting environment should be 0.75m to 1.2m depth and should not exceed 1.5m depth. Smaller rooting volume (minimum 15-20m3) may be proposed for smaller trees.	L-01 Landscape Master Plan	Noted
Landscape	• Enough space between the property line and the limit of underground parking should be provided to grow large canopy trees that will not need to be removed when the underground parking garage requires repairs (i.e. trees planted on the roof slab of the underground parking garage).	L-01 Landscape Master Plan	Noted
Landscape	Once the number of parking spaces is finalized, confirm the required number of Type “A” and Type “B” barrier free parking spaces required. Type “A” shall be 3400 mm in width and signed to indicate Van Accessible Parking. Type “B” shall be 2750 mm as per city zoning by-law. As per city zoning by-law, the access aisle shall be 2000 mm. The access aisle is to be clearly identified and can be shared by both spaces.	Arch Drawing: Table 5/A100	Refer to table 5/A100 ‘Parking and Bike parking statistics’. This indicates proposed supply of Type A and Type B barrier free parking. See also below grade parking layouts A200-A203.
Landscape	Show how short-term parking for passenger drop-off and pick-up, deliveries, etc. will be accommodated.	L-01 Landscape Master Plan	Completed & Submitted
Landscape	Show pedestrian walkways and connections to the city sidewalks, parking spaces, entrances, outdoor amenity areas.	L-01 Landscape Master Plan	Completed & Submitted
Landscape	Show the pedestrian and bicycle connection to the Aldershot Go Station.	N/A	Not shown on L-01 because it's outside this scope
Landscape	Show at grade bicycle parking locations	L-01 Landscape Master Plan	Completed & Submitted
Landscape	Minimum requird soil volumes must be identified for proposed planting areas	L-01 Landscape Master Plan	Completed & Submitted
CoB	Is stamped and signed by a qualified member of the Ontario Association of Landscape Architects	L-01 Landscape Master Plan	Completed & Submitted
CoB	Contains legible drawings on 24x36 inch paper	L-01 Landscape Master Plan	Completed & Submitted
CoB	Includes all dimensions in metric, to scale, and on a consistent base map layer	L-01 Landscape Master Plan	Completed & Submitted

CoB		Identifies the location and general design intent of the proposed plantings, identifying minimum required soil volumes, and location of any structural soil cell installation areas to achieve minimum soil volumes.	L-01 Landscape Master Plan	Completed & Submitted
CoB		Identifies property lines, easements, regulated areas, impermeable surfaces (including curbs, roads, driveways, sidewalks, etc.), buildings and entrances, landscaped beds, lawns or other permeable surface areas, other information as needed	L-01 Landscape Master Plan	Completed & Submitted
CoB		Identifies the location of all underground, at grade and overhead utilities	L-01 Landscape Master Plan	Completed & Submitted
CoB		Identifies the location of any storm water management infrastructure, including swales, sub-drains, catch basins, pipes, and other quality and quantity controls as required	L-01 Landscape Master Plan	Completed & Submitted
CoB	**Urban Design Brief Support**	N/A		

Station West Phase 2: Planning				City of Burlington Comments Halton Region Comments City of Burlington Pre-Submission Checklist: BUD Panel Comments: Required at SPA Stage:	
Requested By	**Report/Studies/Plans**	**Requirements/City & Regional Comments**	**Report/Page #**	**Response**	**Additional Requirement Details**
Planning Dept	**Planning Justification Report**	Signed report providing planning justification for the proposed amendment (outlining principles, objectives, and policies of the City's OP and technical studies accompanying the application)	PJR, Section 5.5, 6.2-6.4	Please refer to PJR.	
Planning Dept		Describe site context;	PJR, Section 3	Please refer to PJR.	
Planning Dept		Address applicable provincial and regional policy;	PJR, Section 5.1-5.4, 6.1	Please refer to PJR.	
Planning Dept		Describe proposal in detail including prelim site plan details if applicable;	PJR, Section 4	Please refer to PJR.	
Planning Dept		Explain why requested increase in height, density, and FAR is desirable and represents good planning	PJR, Section 5, 6, 9	Please refer to PJR.	
Planning Dept		Address applicable local OP policies (e.g. compatibility, intensification, redesignation criteria, and conversion policies);	PJR, Section	Please refer to PJR.	
Planning Dept		Describe how the proposal meets Council approved Design Guidelines;	PJR, Section 6.4	Please refer to PJR.	
Planning Dept		Discuss findings of the technical studies in the context of the Part II Functional Policies of the OP;	PJR, Section 5.5	Please refer to PJR.	
Planning Dept		Explain how input received from Burlington Urban Design Review Panel has been used to refine the proposal	PJR, Section 7.0	Please refer to PJR.	
Planning Dept		Include how public input was used to modify the development proposal	PJR, Section 7.0	Please refer to PJR.	
Planning Dept		Section 37 Benefits may be required	TBD	Community benefits will be subject to further discussion as the development application process advances.	
CoB	**Official Plan and Zoning By-Law Amendments**	N/A	Draft OPA & ZBA Provided		
CoB	**Cover Letter**	N/A	Cover Letter Provided		

Station West Phase 2: Shoring				City of Burlington Comments Halton Region Comments City of Burlington Pre-Submission Checklist: BUD Panel Comments: Required at SPA Stage:	
Requested By	**Report/Studies/Plans**	**Requirements/City & Regional Comments**	**Report/Page #**	**Response**	**Additional Requirement Details**
Site Engineering	**Shoring/Excavation Plan Details**	Provide staff with 4 cross section details (N,S,E,W sides) and a shoring key plan, which outlines the following:	SH1-SH11	Done	
Site Engineering		Proposed shoring system (Raker, Tie Backs, etc…)	SH1-SH11	Done	
Site Engineering		Dimensions from the property line to the outside of the proposed foundation (ensure the plan includes all 5-underground parking storey's)	SH1-SH11	Done	
Site Engineering		Dimensions from the property line to the proposed Piles, Caissons, weeping tile / drainage feature	SH1-SH11	Done	
Site Engineering		In the event tie backs are required, provide an encroachment setback taken from the property line	SH1-SH11	Done	
Site Engineering		Include all existing and or proposed underground utilities on plan. (Locates required)	SH1-SH11	Done	
Site Engineering		All temporary or permanent encroachments on neighbouring properties require written consent signed and dated by the property owners.		Noted. To be addressed.	

Station West Phase 2: Survey

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Planning Dept	**Site Survey**	Survey of site showing PINS, easements, property boundaries, etc.	Survey, Drawing No. : 3211-8T.DWG	Please refer to Topographical Survey.	
		Prepared and signed by an OLS Surveyor	Survey, Drawing No. : 3211-8T.DWG	Please refer to Topographical Survey.	
		Shows any required right-of-way widenings, daylight triangles and any easements, etc	Survey, Drawing No. : 3211-8T.DWG	Please refer to Topographical Survey.	
	Reference Plan and PIN Report	N/A	Reference Plan, Drawing No.: 3211-9R.DWG	PIN 07114-0198 (LT). Please refer to Reference Plan.	
	Topographic Survey	N/A	Survey, Drawing No. : 3211-8T.DWG	Please refer to Topographical Survey.	

Station West Phase 2: Traffic

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Planning Dept/MTO	**Traffic Impact Study**	Contact City Transportation Planning/Regional Public Works Staff for background information and to assess TIS assumptions	TIS Appendix A - Terms of Reference Forecasts and analysis assumptions in Section	TIS prepared in accordance with agreed upon Terms of Reference.	Required for applications as set out in Part II, Subsection 3.2.2 d) of the City's OP and Part IV, Sections 171-173 of the Region OP.
Planning Dept/MTO		For Regional roads, applicants are referred to the "Guidelines for the Preparation of Traffic Impact Studies"	TIS Appendix A - Terms of Reference Forecasts and analysis	TIS prepared in accordance with agreed upon Terms of Reference.	
MTO		MTO must be contacted for lands near provincial highways	TIS Appendix A - Terms of Reference	Pre-consultation held with MTO and Terms of Reference circulated and commented on by MTO.	
MTO		As per the MTO's comments dated April 30, 2018 (attached for reference), in order to proceed with this phase of development, the developer has two options:	TIS Appendix A - Terms of Reference Forecasts and analysis	TIS prepared in accordance with agreed upon Terms of Reference.	
MTO		a) Complete a TIS for the entire development (Phase 1 & 2) and area (I-Hamp study required) to MTO standards.			
MTO		b) Wait for Burlington to complete the Prosperity Corridor Study for the entire area and ensure the development matches the requirements of land use.		Noted.	
		Confirmation of Scope of Work by Burlington Transportation Services, MTO, and Regional staff.	TIS Appendix A - Terms of Reference	TIS prepared in accordance with agreed upon Terms of Reference.	
		In consideration of the requirement to complete an I-HAMP, please refer to Chapter 4 in the Highway Corridor Management Manual			
BUD Panel		Are there any long-term plans for Waterdown Road, such as widenings?	Section 3.0 and Section 9.0 of TIS	There are already plans by the City to widen the bridge over Highway 403 to a 5-lane cross-section. Further widenings are not currently identify by municipal TMPs. Local intersection improvements will be required to support regional growth, Metrolinx expansion and site traffic.	

Station West Phase 2: Waste

City of Burlington Comments
Halton Region Comments
City of Burlington Pre-Submission Checklist:
BUD Panel Comments:
Required at SPA Stage:

Requested By	Report/Studies/Plans	Requirements/City & Regional Comments	Report/Page #	Response	Additional Requirement Details
Planning Dept	**Waste Management**	Waste Management Plan is required to address waste collection for the proposed development	Waste Management Memo	See Waste Management Memo	
Planning Dept		Refernece Region's Development Design Guidelines for Source Separation of Solid Waste for site design requirements/dimensions	Waste Management Memo	See Waste Management Memo	
Planning Dept		Solid waste management plan	Waste Management Memo	See Waste Management Memo	
		Contains a loading plan showing turning radii for trucks	See Ground Level Plan with auto-turns.	Provided.	
		Contains building elevations illustrating vertical clearance for truck access	Waste Management Memo	Waste Management Memo; outdoor loading area dedicated for waste collection has no overhead restrictions	
		Contains details of layout for waste storage areas	Waste Management Memo	See Waste Management Memo and referenced plans with indoor storage areas for waste containers.	
		If no public waste collection is proposed, includes a letter confirming private pick-up.	Waste Management Memo	Public waste collection is proposed, see waste management memo.	