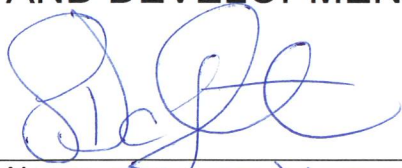


2020 DEVELOPMENT AGREEMENT STANDARD TERMS AND CONDITIONS

AS APPROVED BY THE GENERAL MANAGER OF PLANNING
AND DEVELOPMENT ON June 17, 2020



Name: STUART DALGLEISH
Title: General Manager

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PART 1 - ADMINISTRATIVE PROVISIONS

A. DEFINITIONS

1.01 In the Agreement the following terms have the meanings set out below:

- (1) **"2020 Development Agreement Standard Terms and Conditions"** means these Development Agreement Standard Terms and Conditions;
- (2) **"Actual Cost"** means the cost to the City for the construction of Boundary Roads and Lanes being the Unit Rate at the Effective Date and the accrued interest at Alberta Capital Finance Authority rates;
- (3) **"Additional Insured"** means a party added as an insured party entitled to benefit from a current comprehensive general liability insurance policy held by the Developer and as further defined in such policy;
- (4) **"Agreement"** means the agreement between the City and the Developer and includes the following:
 - (a) Development Agreement; and
 - (b) these 2020 Development Agreement Standard Terms and Conditions;
- (5) **"Approving Authority"** means:
 - (a) in the case of subdivision applications, those City employees authorized to approve subdivision applications; and
 - (b) in the case of development permit applications, those City employees authorized to approve development permit applications, or the Calgary Planning Commission;
- (6) **"As-built Drawings"** means the plans and schedules showing the locations of the Infrastructure, constructed or installed, together with the lengths and sizes of materials, using for this purpose standard symbols and forms as authorized by the Development Engineer;
- (7) **"Boulevard"** means the area between the back of a curb and edge of a separate sidewalk;
- (8) **"Boundary Costs"** means the cost of the construction of Boundary Roads and Lanes including the sidewalks, curbs and gutters, catch basins and leads, street lighting, paved roads and paved and gravelled lanes and regional pathways constructed within the Boundary Roads and Lanes computed using either the Unit Rate Schedule or Unit Rate as the case may be;
- (9) **"Boundary Roads and Lanes"** means a road or lane constructed along a boundary of the Development Area;

- (10) **"City"** means The City of Calgary, a municipal corporation in the Province of Alberta;
- (11) **"City Solicitor"** means the individual appointed to the position and holding title of the City Solicitor of the City of Calgary from time to time or the individual designated to act in his or her place generally or for the purpose of administering the Agreement;
- (12) **"City Specifications"** means the design and construction requirements for items arising in connection with the subdivision or development of land contained in all City policy documents, as amended and replaced from time to time, including but not limited to the Infrastructure, parks, subdivision servicing and erosion and sediment control;
- (13) **"Commercial Development"** means development that contains a commercial land use district of the City of Calgary Land Use Bylaw 1P2007, as amended and replaced from time to time, and may contain an industrial land use district but does not contain a residential land use district;
- (14) **"Community Park"** means municipal reserve parcels or municipal school reserve parcels that are approximately 3.6 to 9.2 hectares in size, dedicated to the City as part of the 10% reserve land dedication requirements pursuant to the Municipal Government Act, including but not limited to tot lots, school grounds, recreation grounds or community centre building sites;
- (15) **"Conceptual Site Plan"** means those drawings containing the design details associated with the landscaping, development and construction of all parks within the Development Area;
- (16) **"Construction Completion Certificate"** means a document:
- (a) signed and sealed by the Consulting Engineer and stamped with his or her Association of Professional Engineers and Geoscientists of Alberta permit to practice stamp, certifying that the particular piece of Infrastructure identified was constructed in accordance with the City Specifications, or in the case of Infrastructure contemplated in paragraph 22.13 herein, either signed by the Consulting Engineer or a Landscape Architect certifying that the particular piece of Infrastructure was constructed in accordance with City Specifications;
 - (b) that contains the projected earliest maintenance expiry date for a specific piece of Infrastructure; and
 - (c) is acknowledged and dated by the Director, Calgary Approvals Coordination;
- (17) **"Construction Completion Date"** means six (6) years from the Effective Date unless otherwise specified in writing by the Director, Calgary Approvals Coordination;

- (18) **“Construction Drawings”** means those drawings containing the technical details associated with the design, construction and installation of the Infrastructure, including any applicable revisions, as approved by the Director, Calgary Approvals Coordination, and which form a part of the Agreement;
- (19) **“Consulting Engineer”** means a Professional Engineer registered in the Province of Alberta who is a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta and is employed or retained by the Developer in connection with the obligations contained in the Agreement;
- (20) **“Consulting Engineer’s Field Services Guidelines”** means that document entitled “Consulting Engineer’s Field Services Guidelines” drafted by the City, in force as of the Effective Date, and as amended and replaced from time to time until the relevant Final Acceptance Certificate is issued, which governs the minimum level of field services to be performed by the Consulting Engineer relating to the construction, installation and inspection of the Infrastructure;
- (21) **“Contractor”** means the individual or corporation hired by the Developer to undertake the obligations contained in the Agreement on behalf of the Developer for the installation, construction and maintenance of the Infrastructure;
- (22) **“Deep Fills Report”** means a geotechnical analysis of the soils within areas of the Development Area being filled more than two metres deep by a Geotechnical Engineering Consultant prepared in accordance with the City’s “Geotechnical Report Guidelines for Land Development Applications”, as amended and replaced from time to time, which contains recommendations on any development restrictions, including bearing certificates and special foundation designs, that may be necessary to ensure the integrity of any structure, including buildings, roads and utilities, constructed on those fill areas;
- (23) **“Developer”** has the meaning given in the Development Agreement;
- (24) **“Developer Funded Infrastructure Stabilization Fund – Major Road Standard Oversize”** means the trust account into which the funds from the Major Road Standard Oversize Charge are paid and redistributed back to developers based on specific criteria, which fund is monitored by the BILD – Calgary Region on behalf of the development industry and administered by the City;
- (25) **“Developer Funded Infrastructure Stabilization Fund – Utility Oversize”** means the trust account into which the funds from the Utility Oversize Charge are paid and redistributed back to developers based on specific criteria, which fund is monitored by the BILD – Calgary Region on behalf of the development industry and administered by the City;
- (26) **“Developer of Record”** means the Developer of Record as defined in the Development Agreement;
- (27) **“Development Agreement”** means the document that identifies all parts of the Agreement and is signed by all parties to the Agreement, and incorporates these 2020 Development Agreement Standard Terms and Conditions;

- (28) **“Development Area”** means any portion of the Lands that are the subject of a subdivision or development permit approval, which the Developer intends to immediately develop, and for which the Developer will be obligated to design, construct and install the Infrastructure, which will be more particularly described in the Development Agreement between the Developer and the City;
- (29) **“Development Engineer”** means the City employee appointed to the position of Development Engineer or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (30) **“Development Officer”** means the City employee appointed to and holding the position of Development Officer as contemplated by the City of Calgary Land Use Bylaw 1P2007 and the Municipal Government Act, both as amended and replaced from time to time;
- (31) **“Director, Calgary Approvals Coordination”** means the City employee appointed to the position of Director, Calgary Approvals Coordination, or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (32) **“Director, Calgary Parks”** means the City employee appointed to the position of Director, Parks or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (33) **“Director, Community Planning”** means the City employee appointed to the position of Director, Community Planning or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (34) **“Director, Environmental and Safety Management”** means the City employee appointed to the position of Director, Environmental and Safety Management or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (35) **“Director, Roads”** means the City employee appointed to the position of Director, Roads or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (36) **“Director, Water Resources”** means the City employee appointed to the position of Director, Water Resources or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (37) **“Director, Water Services”** means the City employee appointed to the position of Director, Water Services or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (38) **“District Park”** means municipal reserve or municipal school reserve parcels that are greater than or equal to 9.2 hectares in size, and are not part of the 10% reserve dedication pursuant to the Municipal Government Act, and which are defined by the Park Specifications as “District Parks”;

- (39) **“Drainage Plans”** means one or more engineering design drawings included in the Construction Drawings, which detail the design parameters and solutions for all aspects associated with the management of storm water in and around the Development Area. Supporting these Drainage plans are Stormwater Management Reports, Staged Master Drainage Plans and Pond Reports;
- (40) **“Effective Date”** means the effective date of the Agreement as set out in the Development Agreement;
- (41) **“Entrance Road Standard”** means a portion of the road network extending from an arterial or collector road, as defined in the Roads Standards and Specifications, into a portion of the Development Area, which for marketing or aesthetic purposes the Developer determined that additional amenities are planned to be constructed in excess of the minimum technical requirements for the said portion of the road;
- (42) **“Erosion and Sediment Control Plan”** means that document, including applications and drawings, prepared in accordance with the City’s requirements contained in the Water Resources’ submission requirements for erosion and sediment control, as amended and replaced from time to time, satisfactory to the Team Lead, Stormwater Pollution Prevention, outlining measures to protect infrastructure, watercourses and adjacent lands from erosion and sediment pollution arising from the Development Area. The Erosion and Sediment Control Plan must be adhered to prior to commencement of stripping and grading operations associated with the Development Area until completion of grading, infrastructure installation and site rehabilitation, which may be required until all Final Acceptance Certificates for the Development Area are acknowledged;
- (43) **“Final Acceptance Certificate”** means a document:
- (a) signed and sealed by a registered Professional Engineer and stamped with an Association of Professional Engineers and Geoscientists of Alberta permit to practice stamp, certifying that the particular piece of Infrastructure identified was maintained in accordance with City Specifications;
 - (b) that identifies that the particular piece of Infrastructure is in order for acceptance by the Director, Calgary Approvals Coordination; and
 - (c) is acknowledged and dated by the Director, Calgary Approvals Coordination;
- (44) **“Final Inspection Report”** means a report stating that deficiencies have been corrected and that a specific portion of the Infrastructure is recommended for acceptance by the City;
- (45) **“Geotechnical Engineering Consultant”** means a Professional Engineer who is a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta and knowledgeable or certified in the specialization of geotechnical engineering;

- (46) **"Growing Season"** means that period of time between the dates that the Park Development Inspector acknowledges the Construction Completion Certificate to:
- (a) June 30 of the following year; or
 - (b) the date when, in the sole opinion of the Director, Parks, the irrigation system(s) are operating and the vegetation is in full leaf, whichever event occurs last;
- (47) **"Industrial Development"** means development that contains an industrial land use district of the City of Calgary Land Use Bylaw 1P2007, as amended and replaced from time to time but does not contain a residential or commercial land use district;
- (48) **"Infrastructure"** means those utilities (including but not limited to sanitary sewers, storm sewers, Storm Water Pond Facilities, water mains and hydrants, sewer and water service connections), improvements (including but not limited to sidewalks, curbs and gutters, paved roads, paved walkways, paved and/or gravelled lanes, Surface Drainage Facilities, bridges, culverts, retaining walls, stairways and landscaping), street lights, Boulevards, public utility lots and reserve parcels (including landscaping) and other services, as shown in the Construction Drawings, designed and intended to service the Development Area, and such other lands as the Director, Calgary Approvals Coordination determines appropriate;
- (49) **"Inspection and Testing Company"** means a consulting engineering firm certified by the Association of Professional Engineers and Geoscientists of Alberta as evidenced by a permit to practice to undertake geotechnical engineering analysis;
- (50) **"Inspection Fee"** means the charge per hectare for each and every hectare or part thereof within the Development Area, including those areas which may be dedicated to the City for reserve parcels and any other public use, but excluding those lands dedicated as Environmental Reserve, regardless of the location of the Development Area within the City, the total amount of which will be specified in the Development Agreement, which will be used by the City towards the cost of inspections by the City related to the installation of: sanitary sewers; storm sewers; water mains and hydrants; sewer and water service connections; parks irrigation systems; and for the construction of surface improvements including parks landscaping requirements. More specifically this covers only the cost of manpower and equipment required by the City for: inspections; the cost of quality control; and the materials testing program operated by the Roads Business Unit;
- (51) **"Joint Inspection Certificate"** means a document that is submitted to the City with the relevant Construction Completion Certificate, and is signed by both the relevant City inspector for the specific Infrastructure and
- (a) a Landscape Architect or the Consulting Engineer in the case of a Joint Inspection Certificate for Parks as contemplated in paragraph 22.13; or

- (b) signed and sealed by the Consulting Engineer in all other cases stating that the Infrastructure identified has been completed with the exception of the noted deficiencies;
- (52) **"Lands"** means those lands situated in The City of Calgary, Province of Alberta, which the Developer is the owner or will become the owner, and for which the Developer intends to receive subdivision or development permit approval;
- (53) **"Landscape Architect"** means an individual with membership in good standing with the Alberta Association of Landscape Architects;
- (54) **"Linear Park"** means that park type defined by the Park Specifications as "Linear Park";
- (55) **"Major Regional Park"** means a park in excess of five (5) hectares, which provides open space on a regional rather than local level;
- (56) **"Major Road / Arterial Standard"** means:
- (a) a four or six lane roadway designed to carry between 12,500 to 30,000 vehicle trips per day;
 - (b) direct vehicular access from/to residential lots abutting this road is prohibited and possibly restricted from commercial and industrial lots; and
 - (c) which is usually divided in residential areas, undivided in industrial areas or either in commercial areas;
- (57) **"Major Road Standard Oversize Charge"** means the charge per hectare for each and every hectare or part thereof within the Development Area including those areas which may be dedicated to the City for reserve parcels and any other public use, excluding those lands dedicated as Environmental Reserve, the total amount of which will be specified in the Development Agreement, and which will be deposited into the Developer Funded Infrastructure Stabilization Fund – Major Road Standard Oversize and will be used by the City towards the cost of Oversize for Major Road / Arterial Standard within the City, regardless of the location of the Development Area within the City;
- (58) **"Manager, Transportation Planning"** means the City employee appointed to the position of Manager, Transportation Planning or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (59) **"Manager, Water Quality Services"** means the City employee appointed to the position of Manager, Water Quality Services or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (60) **"Municipal Government Act"** means the *Municipal Government Act*, R.S.A. 2000, c.M-26, as amended and replaced from time to time;
- (61) **"Neighbourhood Park"** means that park type defined by the Park Specifications as "Neighbourhood Park";

- (62) **"Off-Site Levies"** means the transportation levy, treatment plant levy, sanitary sewer levy, storm sewer levy, water levy, and the community services charge as defined, described, and identified in Bylaw 2M2016, as amended and replaced from time to time;
- (63) **"Optional Subdivision Amenities"** means facilities constructed by the Developer on public lands, at its choice, above the minimum requirements of the City, including but not limited to entrance signage and gates, walls and flower beds of generally high quality material, park features such as benches, gazebos, water features or other high maintenance cost features, all of which require a perpetual maintenance solution as a condition of approval, which are usually in the form of deposit or payment by the developer sufficient to remove the facility or assumption of the maintenance and repair obligations by either a homeowner, resident or community association;
- (64) **"Oversize"** means the difference in size of the facility required to serve the Development Area and the size of the facility which the Developer is required by the condition of subdivision or development permit approval relating to the Lands and terms of the Agreement to construct either within or outside of the Development Area to service additional lands outside of the Development Area;
- (65) **"Park Development Inspector"** means the City employee appointed to and holding the position of Park Development Inspector who performs landscape construction inspections in accordance with the Park Specifications;
- (66) **"Park Specifications"** means that document entitled "Development Guidelines and Standard Specifications: Landscape Construction" drafted by the City and as amended and replaced from time to time until the relevant Final Acceptance Certificate is issued, that outlines the minimum specifications, standards and requirements associated with the development, landscaping and maintenance requirement for City parks;
- (67) **"Payment Date"** means one year from the Effective Date;
- (68) **"Phase 3 ESA or Environmental Site Assessment"** means an implementation of the decontamination of a site in accordance with requirements set out in the Phase 2 ESA or Environmental Site Assessment, which is a report analyzing an environmental problem identified through a Phase 1 ESA or Environmental Site Assessment, and which recommends a solution and implementation plan to address the problem;
- (69) **"Primary Collector"** means a four-lane divided roadway designed to carry between 5,500 and 12,500 vehicle trips per day, to or from which direct vehicular access to or from residential lots abutting this road is allowed;
- (70) **"Qualified Plumber"** means an individual holding a certificate of competency in the plumbing discipline as contemplated by the Certification and Permit Regulation AR 295/2009, as amended and replaced from time to time;

- (71) **"Residential Development"** means development that contains either or both a low density residential or multi-residential land use district of the City of Calgary Land Use Bylaw 1P2007, as amended and replaced from time to time;
- (72) **"Roads Standards and Specifications"** means the City Specifications document entitled "Roads Construction Standard Specifications" drafted by the City, and as amended and replaced from time to time until the relevant Final Acceptance Certificate is issued, that governs matters associated with the design and construction of roads and all associated appurtenances;
- (73) **"School Board"** means the Calgary Board of Education or the Roman Catholic Separate School Board as the case may be;
- (74) **"School Site"** means the land set aside for each type of school, such as Elementary, Junior High, Senior High operated by the School Board, including but not limited to municipal school reserve;
- (75) **"Security"** means an irrevocable letter of credit with a Canadian chartered bank at a branch in Calgary, Alberta, or other form of Security satisfactory to the Director, Calgary Approvals Coordination, provided by the Developer to the City that will be used to secure the performance of any and all obligations contained in the Agreement and any amendments hereto;
- (76) **"Shallow Utilities"** means those utilities that are operated by third party service providers including, but not limited to telephone, gas, cable and electric;
- (77) **"Storm Drainage"** means runoff that is the result of precipitation;
- (78) **"Storm Drainage System"** means the system for collecting, storing and disposing of Storm Drainage, and includes:
- (a) the catch basins, sewers and pumping stations that make up the storm drainage collection system;
 - (b) the storm drainage facilities, structures or things used for storage, management and treatment to buffer the effects of the peak runoff or improve the quality of the storm water;
 - (c) the sewers and pumping stations that transport Storm Drainage to the location where it is treated or disposed of;
 - (d) the storm drainage outfall structures; and
 - (e) the Surface Drainage Facilities; but
 - (f) does not include plumbing or service connections in buildings;
- (79) **"Storm Water Impound Easement"** means an area designated for the temporary storage of storm water from which the outflow is restricted to prevent surcharging of the storm sewer system;

- (80) **"Storm Water Pond Facilities"** means facilities either constructed or naturally existing for the purpose of collecting; retaining, treating and ultimately discharging storm water, including the storm water reuse infrastructure;
- (81) **"Stripping and Rough Grading Compaction Report"** means an engineering report prepared by the Consulting Engineer and submitted on behalf of the Developer to the City indicating how the land form of the Development Area has been changed to accommodate the proposed development, that outlines the cuts and fills made during the stripping and grading, and provides compaction certification for all of the mass grading work undertaken;
- (82) **"Subdivision Approval"** means the tentative plan approval of any subdivision application of the Lands by the Approving Authority identified in the Development Agreement;
- (83) **"Sub-neighbourhood Park"** means that park type defined by the Park Specifications as "Sub-neighbourhood Parks";
- (84) **"Surface Drainage Facilities"** means any facility or facilities associates with drainage or control of Storm Drainage that is ultimately directed to a Street or Storm Drainage System, and includes, but is not limited to:
- (a) a grass swale;
 - (b) a concrete or asphalt walkway, gutter or swale;
 - (c) a drainage control fence or structure; or
 - (d) the sloping and contouring of land to facilitate or control Storm Drainage;
- (85) **"Surveys Act"** means the *Surveys Act*, R.S.A. 2000, c.S-26, as amended;
- (86) **"Team Lead, Stormwater Pollution Prevention"** means the City employee appointed to the position of Team Lead, Stormwater Pollution Prevention or the individual authorized to act in his or her place generally or for the purpose of administering the Agreement;
- (87) **"Tier A and B Developers, Tier C Developers, Tier D Developers, and Tier E Developers"** means the classifications into one of which the Developer will be placed in the sole discretion of the Director, Calgary Approvals Coordination, which classification will be specified in the Development Agreement, and which will dictate the Security payable by the Developer, the form of Security and the availability of Security reduction all in accordance with PART 18 (Security) herein;
- (88) **"Traffic Signage and Road Marking Charge"** means the charge per hectare for each and every hectare or part thereof within the Development Area including those areas which may be dedicated to the City for reserve parcels and any other public use, but excluding those lands dedicated as Environmental Reserve, the total amount of which will be specified within the Development Agreement, which will be used by the City towards the cost of the manufacturing and placement of

subdivision traffic signage and road markings, and any permanent Transportation and Utility Corridor signage, regardless of the location of the Development Area within the City;

- (89) **"Traffic Signal Construction Specifications"** means the City Specifications document entitled "Standard Specifications Street Lighting Construction" drafted by the City, and as amended and replaced from time to time until the relevant Final Acceptance Certificate is issued, which governs matters associated with the design and construction of traffic signals and all associated appurtenances;
- (90) **"Transportation and Utility Corridor"** means land owned by the Province of Alberta identified for the purpose of installing and constructing public infrastructure including, but not limited to sanitary and storm sewers, Storm Water Pond Facilities, water mains, roadways or high voltage electrical distribution facilities;
- (91) **"Transportation and Utility Corridor (T.U.C.) Signage Policy"** means the policy approved by City Council requiring developers of land abutting Transportation and Utility Corridors to post signs thereon indicating that the land is a Transportation Utility Corridor and that the intent is to install and construct public infrastructure thereon;
- (92) **"Trapped Low Area"** means a component of a storm water overland drainage system that may be located on both public and privately owned lands, that is used to control and contain storm water through the temporary storage of storm water on streets, lanes and adjacent lands during and after high intensity rainfall events;
- (93) **"Unit Rate Schedule"** means the schedule of the Unit Rates for the year of the Agreement used in calculating cost recoveries identified herein for Infrastructure, or portions thereof, installed or constructed by the Developer or the City, which is attached hereto as Schedule **Error! Reference source not found.**;
- (94) **"Unit Rate"** means the relevant rate that may change from year to year that is used in calculating cost recoveries contemplated in the Agreement;
- (95) **"Utility Oversize Charge"** means the charge per hectare for each and every hectare or part thereof within the Development Area including those areas which may be dedicated to the City for reserve parcels and any other public use, but excluding those lands dedicated as Environmental Reserve, the total amount of which will be specified in the Development Agreement, and which shall be deposited into the Developer Funded Infrastructure Stabilization Fund – Utility Oversize and shall be used by the City towards the cost of Oversize and water pressure reducing valve chambers within the City regardless of location of the Development Area within the City;
- (96) **"Winter Season"** means that period of time between November 1 and April 30 of the year following completion of construction.

B. NOTICES

- 1.02 (1) Unless otherwise specified within the Agreement, any notice, communications or request to be given to either party shall be in writing and delivered by personal delivery or registered mail addressed to such party at the following address:
- As to the City (by mail): Director, Calgary Approvals Coordination (#8032)
P.O. Box 2100, Postal Station "M"
Calgary AB T2P 2M5
- As to the City (location): 5th Floor, 800 Macleod Trail S.E.
Calgary AB
- As to the Developer: at the address specified in the Development Agreement
or at such address as the City or the Developer may from time to time advise the other in writing by notice.
- (2) When notices, communications or requests made in connection with the Agreement are delivered:
- (a) by personal delivery, they are deemed received on the date of delivery;
and
- (b) by registered mail, they are deemed received three (3) days after posting.
- (3) Only the Developer of Record is entitled to notices, communications or requests made in connection with the Agreement.

C. REGISTRATION OF AGREEMENT

- 1.03 As further security for the obligations contained in the Agreement, the Developer hereby mortgages and charges the Developer's right, title and interest in the Lands in the amount of One Hundred (\$100) Dollars. Any amounts of money presently or hereafter owing by the Developer to the City pursuant to the provisions of this Agreement, whether by way of a liquidated or unliquidated claim, and howsoever arising, shall be a charge and encumbrance against the Lands. Upon default by the Developer, the City shall be entitled to recover any such monies owing, together with all costs on a solicitor and client basis, by enforcing the charge and encumbrance against such lands.
- 1.04 (1) The City may file and maintain caveats evidencing the City's interest under the Agreement against each and every Certificate of Title within the Development Area.
- (2) The Developer shall pay all costs associated with the registration of the Agreement and all other costs incurred by the City as a result of the registration of any other documents pertaining to the Agreement, including but not limited to any amendment hereto, notwithstanding that such registration may be solely at the direction of the City.

- (3) The caveats referred to herein and the Agreement shall remain registered and in full force and effect until the last Final Acceptance Certificate has been issued.
- 1.05 (1) The City agrees to discharge the Agreement and any documents pertaining hereto from the Certificate of Title to the Lands upon the latter of:
- (a) acknowledgement of the last Final Acceptance Certificate as contemplated herein; or
 - (b) the direction of the Director, Calgary Approvals Coordination, following approval of the As-built Drawings of the Infrastructure.
- (2) The Developer shall pay all costs associated with the discharge of the Agreement and any documents pertaining to the Agreement, including but not limited to any amendment to the Agreement.

D. OBLIGATIONS AS COVENANTS

- 1.06 The parties hereby acknowledge and agree that every obligation or duty imposed upon them under this Agreement shall constitute a covenant, whether expressed as a covenant or not.

E. APPLICABLE LAW

- 1.07 (1) The Agreement shall be interpreted under and governed by the laws of the Province of Alberta.
- (2) Nothing in the Agreement relieves the Developer from compliance with any permits required by the City in furtherance of the work contemplated in the Agreement, or any all applicable municipal bylaws, laws or regulations established by any other government body that may have jurisdiction over the Lands or activities thereon.

F. INTERPRETATION OF AGREEMENT

- 1.08 (1) If the Agreement cites or refers to an Act, regulation, code, bylaw, policy, guideline, standard of procedure, the citation or reference is to the Act, regulation, code, bylaw, policy, guideline, standard or procedure as amended from time to time and includes reference to any Act, regulation, code, bylaw, policy.
- (2) Unless context requires otherwise, if a word is defined in Section 1.01, the word's other grammatical forms have a corresponding meaning and each of the masculine, feminine and neuter genders include all other genders.
- (3) Headings and titles in the Agreement are for convenience and ease of reference only and do not define, limit, describe, or interpret the scope or intent of the Agreement.
- (4) The Schedules to the Agreement are an integral part of the Agreement and a reference to the Agreement includes a reference to the Schedules.

- (5) All references in the Agreement to a Schedule are references to a Schedule of the Agreement.
- (6) If more than one entity constitutes the Developer, Developer and all words pending thereon will be read and construed in the plural instead of the singular, in which case the covenants will bind the entities severally as well as jointly.
- (7) Every provision of the Agreement by which the Developer is obligated in any way is deemed to include the words "at the expense of the Developer" unless the context otherwise requires.
- (8) Whenever a statement or provision in the Agreement is followed by words denoting inclusion or example and then a list of or reference to specific items, such list or reference will not be read so as to limit the generality of that statement or provision, even if words such as "without limiting the generality of the foregoing" or "including but not limited to" do not precede such list or reference.
- (9) All covenants and conditions contained in the Agreement are severable, and should any covenant or condition in the Agreement be declared invalid or unenforceable by a court of competent jurisdiction, the remaining covenants and conditions and the remainder of the Agreement will remain valid and not terminate thereby.
- (10) The Agreement does not constitute a development permit nor any other permit issued by the City.
- (11) Every provision of the Agreement by which the Developer is:
 - (a) obligated to contact the City;
 - (b) obligated to submit documents to the City for approval or acknowledgement;
 - (c) obligated to post Security to the City; or
 - (d) entitled to receive payment from the City or other developers
 the term "Developer" will be deemed to be the "Developer of Record".

G. EFFECTIVE DATE AND TERM

- 1.09 (1) The Agreement will come into force and effect on the Effective Date.
- (2) The Agreement will continue from the Effective Date until all design, installation, construction and maintenance of the Infrastructure contemplated herein is complete, and all time periods for which indemnifications from the Developer to the City have expired.

H. WAIVER

- 1.10 (1) The failure of the City at any time to require strict performance by the Developer of any obligation under the Agreement shall in no way affect its right thereafter to enforce such obligation, nor shall the waiver by the City of the performance of any obligation hereunder be taken or held to be a waiver of the performance of any other obligation hereunder at any later time.
- (2) The City specifically retains its rights at law to enforce this entire Agreement.
- (3) The City's waiver of all or any portion of the Agreement must, without exception, be in writing and signed by the Director, Calgary Approvals Coordination, and any action that fails to comply with this requirement will under no circumstances be considered or construed to be a waiver.

I. TIME

- 1.11 (1) Time shall be of the essence of the Agreement.
- (2) Any time limits specified in the Agreement:
- (a) shall be calculated from the Effective Date; and
- (b) may be extended with the consent in writing of both the Developer and the City, but no such extension of time shall operate or be deemed to operate as an extension of any other time limit, and time shall be deemed to remain of the essence of the Agreement notwithstanding any extension of any time limit.

J. SUCCESSORS AND ASSIGNS

- 1.12 (1) The Agreement shall be enforceable by and against the parties hereto, their heirs, executors, administrators, successors and assigns, provided that in the case of an assignment, the assignee has first provided an assumption agreement to the City in accordance with the requirements of subparagraph (2), and has provided Security to satisfy the obligations of the Agreement to the satisfaction of the Director, Calgary Approvals Coordination.
- (2) Prior to any assignment, sale or transfer of all or any portion of the Development Area, the Developer shall cause the assignee, purchaser or transferee to enter into an assumption agreement with the City, in a form satisfactory to the City Solicitor, duly executed by the vendor, assignor or transferor and the assignee, purchaser or transferee, whereby the assignee, purchaser or transferee covenants and agrees to be bound by, observe, assume, perform and cause to be performed all of the covenants, terms and conditions contained in the Agreement, irrespective of whether said covenants, terms and conditions should have been performed prior to the Effective Date.
- (3) Upon receipt by the City of such assumption agreement and Security, the assignor, vendor or transferor of such portion shall be deemed to be released from the obligations contained herein.

K. REPRESENTATIONS OF THE DEVELOPER

- 1.13 (1) The Developer represents and warrants that:
- (a) It has the right, capacity, and authority to enter into the Agreement;
 - (b) The Agreement does not conflict with any other contracts or obligations that bind the Developer;
 - (c) There is no proceeding in progress or pending or threatened against, relating to, or affecting the Developer that may be expected to have a materially adverse effect on the performance of the Developer's obligations under the Agreement;
 - (d) It has or will have the necessary financial resources to complete all Work; and
 - (e) It is in compliance with all Applicable Law that affects the Developer or its operations.

L. SCHEDULES

- 1.14 The schedules attached hereto form part of the Agreement.

M. PERFORMANCE OF OBLIGATIONS

- 1.15 Nothing in the Agreement shall be construed to relieve the Developer from the full performance of all obligations, terms, conditions and work to be performed under the Agreement.

N. STRIKES AND LOCKOUTS

- 1.16 If any party is prevented from carrying out any of its obligations, or is delayed in the performance of such obligations by reason of strikes, lockouts, government restrictions, acts of God, unavailability of materials, labour and similar causes, all beyond the reasonable control of the party in question, and such delay renders it uncertain or unlikely that such party can perform its obligations within the time provided, then the time for carrying out or performing such obligation on the part of such party shall be extended for a reasonable time which will not be greater than the length of the delay caused by such beyond the party's reasonable control.

O. ENTIRE AGREEMENT

- 1.17 The Agreement is the entire agreement between the City and the Developer regarding the subject matter of the Agreement, and supersedes any previous agreements, discussions, negotiations, and understandings. There are no agreements, representations, warranties, terms, conditions, or commitments regarding the subject matter of the Agreement except as expressed in the Agreement.

PART 2 - GENERAL CONSTRUCTION OBLIGATIONS

- 2.01 Until the Developer and the City execute the Development Agreement, and the City receives the security and proof of insurance contemplated therein, the Developer shall not undertake on the Lands any work in connection with or contemplated by the Agreement or any condition of subdivision or development permit approval that requires the entering into of a development agreement, pertaining to the Lands.
- 2.02 The Developer shall not commence construction or development of the Infrastructure or any construction, work, development or activity associated with or required for the construction or installation of the Infrastructure (including but not limited to excavations in road and lane rights of way), either within or external to the Development Area, until written consent to commence is obtained from the Director, Calgary Approvals Coordination.
- 2.03 (1) The Developer represents and warrants that it is familiar with the Consulting Engineer's Field Services Guidelines and with the requirements of the Director, Calgary Approvals Coordination, as they relate to the Agreement.
- (2) The Developer shall ensure that all work to be performed under the Agreement, including all materials and workmanship, shall be in accordance with the Consulting Engineer's Field Services Guidelines and the specific requirements of the Director, Calgary Approvals Coordination.
- (3) If there is a conflict between the Consulting Engineer's Field Services Guidelines and the specific requirements of the Director, Calgary Approvals Coordination, the specific requirements of the Director, Calgary Approvals Coordination shall govern.
- 2.04 (1) The Developer shall employ a Consulting Engineer, who shall be identified in the Development Agreement, to design and supervise all work to be carried out under the Agreement.
- (2) The Developer shall empower the Consulting Engineer to:
- (a) observe and comply with the City Specifications when carrying out any activities in connection with the Agreement; and
- (b) certify that all materials supplied and all work performed in connection with the Agreement conform in all respects with either the City Specifications or the direction of the Director, Calgary Approvals Coordination.
- (3) The Developer may employ additional Consulting Engineers, or substitute or replace the Consulting Engineer identified in the Development Agreement with a new Consulting Engineer upon the Developer giving at least three (3) days written notice to the City prior to the effective date of such change.
- (4) Each and every Consulting Engineer is deemed to be an agent of the Developer for the purpose of the Agreement, which includes, but is not limited to:

- (a) certifying that all materials supplied and all work performed conforms in all respects to the City Specifications, or as approved by the Director, Calgary Approvals Coordination, in writing;
 - (b) preparing, submitting and certifying Construction Completion Certificates and Final Acceptance Certificates;
 - (c) certifying the correction of all defects and deficiencies as required by the Agreement;
 - (d) carrying out inspections under the Agreement;
 - (e) providing such other certification or documentation as may be required in accordance with the Agreement or the Consulting Engineer's Field Services Guidelines, including but not limited to geotechnical material testing; and
 - (f) the preparation, review, certification and submission of the plans, specifications and schedules which the Developer is required to supply under the Agreement.
- 2.05 The Developer grants to the City, its representatives, agents and contractors the free and uninterrupted access to any and all parts of the Lands for the purpose of making inspections and taking samples of materials being used in connection with the construction and installation of the Infrastructure.
- 2.06 If the Developer fails to comply with the Consulting Engineer's Field Services Guidelines as required herein, the Director, Calgary Approvals Coordination may order (either verbally or in writing) the immediate stoppage of any and all work associated with the non-compliance and the removal of materials considered to be unsatisfactory in the opinion of the Director, Calgary Approvals Coordination from the Development Area, and the Developer shall immediately comply with any such order.
- 2.07 The Developer, at its sole cost and expense, and as and when required by the Director, Calgary Approvals Coordination, shall:
- (1) supply test results from the Inspection and Testing Company of alkalinity and soil resistivity for determining abnormal soil conditions requiring special consideration for sanitary sewers, storm sewers and water mains;
 - (2) supply Standard Proctor Density test results from the Inspection and Testing Company for sidewalk, paving and lane construction and utility trenches; and
 - (3) supply samples of any materials proposed to be used or installed in any Infrastructure under the Agreement, which samples shall be suitable for testing and visual inspection by an Inspection and Testing Company under contract with the City.
- 2.08 (1) When the Agreement requires the Developer to undertake work or supply material for which the City is to pay, either in whole or in part, the Developer shall obtain the written authorization of the Director, Calgary Approvals Coordination

for such work and materials prior to commencement of the work or supply of materials.

- (2) All work to be undertaken and material supplied for which:
 - (a) the City is to pay in whole or in part;
 - (b) the City is to undertake or supply at the Developer's cost; or
 - (c) deferred payments are to be made from the City to the Developer

shall be at the prices specified in the Unit Rate Schedule, unless otherwise specified in writing by the Director, Calgary Approvals Coordination.

- (3) If the Unit Rate Schedule fails to prescribe a price for work to be undertaken or materials supplied, the price shall be mutually agreed upon in writing prior to commencement of the work or supply of material.
- (4) Subject to paragraph 25.01(2)(d), only the Developer of Record or its agent is entitled to submit invoices and receive payment from the City under the Agreement.

2.09 (1) Where the City pays only part of the total cost of any Infrastructure, such as Oversize, the City will pay the Developer of Record a surcharge of 5% for administration computed on the City's share of the cost, but no engineering fees shall be paid.

(2) Notwithstanding subparagraph (1), the City will pay the Developer of Record a surcharge of 5% for engineering fees and 5% for administration computed on the City's share of the cost in the following cases only:

- (a) where the City pays the full cost of any installation of the Infrastructure done by the Developer;
- (b) where the City pays a portion of the cost on boundary utilities and improvements as required herein; and
- (c) where the City pays a portion of the cost of Infrastructure required to service School Sites.

(3) (a) The Developer shall not be entitled to payment from the City for any work undertaken or supply of materials contemplated herein for which the City is obligated to pay, in full or in part, nor shall any such amount be a debt due and owing to the Developer from the City until:

- (i) the Developer of Record submits cost calculations and all supporting documentation to the City for approval by the Director, Calgary Approvals Coordination;
- (ii) the City processes and returns to the Developer of Record, the cost calculations detailing any changes which may be required,

which the City shall complete within sixty (60) days from the date of its receipt thereof; however, if the cost calculations are not returned to the Developer within the sixty (60) day period, the cost calculations will be deemed approved as submitted; and

- (iii) the Developer of Record submits the invoice for the work undertaken and materials supplied along with the cost calculations and all supporting documentation as approved or deemed approved by the City.
- (b) Notwithstanding anything to the contrary contained in the Agreement, the City shall be under no obligation to pay any cost otherwise recoverable by the Developer from the City unless and until the Developer of Record submits to the City an invoice, with all supporting documentation, as required in subparagraph (3)(a)(iii) herein, for the full amount claimed within six (6) years from December 31 of the year the Development Agreement was entered into, and the Developer shall thereafter make no demand or file any action or claim against the City for the payment thereof.
- (4) (a) It is understood and agreed between the parties hereto that payments from the City for Utility Oversize and Major Road Standard Oversize cost recoveries as contemplated herein are paid from the Developer Funded Infrastructure Stabilization Fund - Major Road Standard Oversize and Developer Funded Infrastructure Stabilization Fund - Utility Oversize.
- (b) The Developer understands that funds in the above noted accounts fluctuate from time to time, and there may be insufficient funds available to reimburse the Developer for the said cost recoveries from time to time.
- (c) If funds are insufficient:
 - (i) the City is under no obligation to pay to the Developer the amount stipulated in the invoice(s) for these costs recoveries;
 - (ii) the Developer of Record's invoice will be placed in a queue with other outstanding invoices and paid, in the sole discretion of the Director, Calgary Approvals Coordination, on a first come, first served basis; and
 - (iii) the Developer of Record, in the sole discretion of the Director, Calgary Approvals Coordination, will be reimbursed when sufficient funds become available and shall not be entitled to any interest recovery in the event that payment cannot be made within the normal thirty (30) day period;
- (d) The City shall be under no obligation to pay any cost otherwise recoverable by the Developer from the funds in the above noted accounts unless and until the Developer of Record submits to the City an invoice, with all supporting documentation, as required in subparagraph (3)(a)(iii) herein, for the full amount claimed within six (6) years from December 31

of the year the Development Agreement was entered into, and the Developer shall thereafter make no demand or file any action or claim against the City for the payment thereof.

PART 3 - OFF-SITE LEVIES, CHARGES & FEES

A. OFF-SITE LEVIES

3.01 The Developer shall pay the Off-Site Levies calculated per hectare of the Development Area as set out in Schedule "1" attached hereto, to the City on or before the dates as follows:

thirty (30%) per cent on the Payment Date;
thirty (30%) per cent within one year of the Payment Date; and
forty (40%) per cent within two years of the Payment Date.

3.02 Notwithstanding paragraph 3.01 of the Agreement, if the Development Area is within the Established Area, as identified in Bylaw 2M2016, as amended and replaced from time to time, the Developer shall be required to enter into the City's Off-Site Levy Agreement and pay only the levies required to be paid pursuant to the said Off-Site Levy Agreement.

B. UTILITY OVERSIZE

3.03 On or before the Payment Date, the Developer shall pay to the City the Utility Oversize Charge of \$5,500.00 (Five Thousand Five Hundred Dollars) per hectare of Development Area within the Greenfield Area as identified in Bylaw 2M2016 as amended and replaced from time to time.

C. MAJOR ROAD STANDARD OVERSIZE

3.04 On or before the Payment Date, the Developer shall pay to the City the Major Road Standard Oversize Charge of \$10,500 (Ten Thousand Five Hundred Dollars) per hectare of the Development Area within the Greenfield Area as identified in Bylaw 2M2016 as amended and replaced from time to time.

D. TRAFFIC SIGNAGE AND ROAD MARKINGS

3.05 On or before the Payment Date, the Developer shall pay to the City the Traffic Signage and Road Markings Charge per hectare of Development Area as set out in Schedule 2.

E. INSPECTION FEE

3.06 On or before the Payment Date, the Developer shall pay to the City the Inspection Fee per hectare of the Development Area as set out in Schedule 2, which shall be in addition to the requirements of paragraph 2.07 of the Agreement.

PART 4 - PLANS

- 4.01 (1) The Developer, at its sole cost and expense, shall submit to the City:
- (a) one copy of the tentative plan of subdivision in digital format for each subdivision application for the Lands for the City's circulation and review process; and
 - (b) subsequent to approval of the tentative plan of subdivision by the Approving Authority, one copy of the legal plan in digital format of the Development Area which is intended to be registered at the South Alberta Land Titles Office,
- all to the satisfaction of the Director, Calgary Approvals Coordination.
- (2) The Developer shall provide or obtain the consent of the copyright holder of the above noted plans in digital format, as the case may be, for the City to use and copy the information contained therein for:
- (a) internal City use, including but not limited to tri-services dispatch; and
 - (b) licensing the use by third parties, including but not limited to third party utility companies who require such information to service the Development Area.
- 4.02 The Developer shall submit to the Development Engineer for his or her approval, preliminary Construction Drawings, in duplicate, showing all the work proposed to be done, including but not limited to:
- (1) the Oversize of any sanitary sewers, storm sewers and water mains;
 - (2) extra width and base depth of roads and lanes required as approved by the Development Engineer;
 - (3) a proposed land use classification map indicating the land use classification of all the lots within the Development Area;
 - (4) the location of test holes with logs;
 - (5) contours of the highest water table;
 - (6) proposed lowest top of footing elevation;
 - (7) lot corner elevations;
 - (8) sewer connection invert elevations at the property line, or at three and one half (3.5) metres inside the property line or at five (5.00) metres, inside the property line where the gas line and other shallow utility are located within a front yard easement for each lot where applicable;
 - (9) weeping drain tile requirements;

- (10) storm drainage areas and flow calculations;
 - (11) an overall overland drainage control plan to indicate the overland (emergency) escape route and/or street/lane storage to facilitate major rain storms (trapped lows); and
 - (12) a building grade plan indicating, amongst other things, the suggested front grade, and in identifiable areas the established lot grade for drainage protection, those lots requiring Storm Water Impound Easement; and any other information which the Development Engineer requires as to types of material and construction.
- 4.03 Construction Drawings shall conform to the requirements in the City Specifications documents entitled "Standard Block Profile Specifications for CAD and Manual Formats".
- 4.04 Following examination of the preliminary Construction Drawings, the Development Engineer shall advise the Developer or its representative of any necessary amendments.
- 4.05 The Developer shall provide to the City at least four (4) full copies and three (3) sets of the cover sheets of the final Construction Drawings amended in accordance with the direction of the Development Engineer which must all be approved by the Development Engineer before the Developer may commence construction of the Infrastructure or any part thereof, unless otherwise authorized by the Development Engineer in writing.
- 4.06 If during the course of construction of the Infrastructure changes in the approved Construction Drawings are requested by the Developer, the Developer shall:
- (1) submit four (4) copies of revised Construction Drawings, or a single electronic document to the satisfaction of the Development Engineer, showing the proposed changes; and
 - (2) receive the written approval of the Development Engineer prior to commencing work on the revised portions of the Infrastructure.
- 4.07 The Developer, for each calendar year during the currency of the Agreement, shall furnish the Development Engineer with As-built Drawings as required by the Development Engineer.
- 4.08 The Developer shall submit any and all plans and information that may be required by the Development Engineer with respect to the Development Area and Infrastructure required in connection therewith.
- 4.09 The Developer shall provide all building grades for each lot within the Development Area to the City until the last Final Acceptance Certificate contemplated under the Agreement has been issued, and before the final release from liability is given by the City to the Developer, all building grade slips shall be turned over to the Development Engineer.
- 4.10 The Developer, within six (6) months of completion of construction of the Infrastructure and before being released from public and other liability, shall supply at its sole cost and expense to the Development Engineer:

- (1) plans made on tracing linen, polyester base, or other approved material, or in an electronic format, conforming with the City requirements and standards showing the actual locations of the Infrastructure;
 - (2) profiles showing the elevations referenced to metric geodetic datum as installed by the Developer;
 - (3) all other appurtenant drawings such as outfall, special manholes, lift stations and railway crossing details, as installed by the Developer;
 - (4) profiles of all utility rights-of-way for the purpose of locating underground power, telephone, gas and cable facilities; and
 - (5) indicate and label the road grade to the lip of gutter on all profiles where curb and gutter has been installed.
- 4.11 (1) It is understood that the acknowledgement of each Final Acceptance Certificate (other than Parks) may be withheld until the As-built Drawings have been received and approved by the Development Engineer; and
- (2) For every additional review beyond the review of the initial submission and one re-submission of the As-built Drawings and plans or drawings required pursuant to Section 4.10 above, a fee in the amount of \$125.00 will be assessed against the Developer. This fee will apply where, in the sole discretion of the Development Engineer, the extra review is required as a result of the Developer's failure to provide complete and accurate submissions or the Developer's failure to address requested revisions prior to re-submission.
- 4.12 Before the City's Calgary Approvals Coordination business unit provides a clearance letter to the City's Community Planning Business Unit to facilitate the release of building permits, the Developer shall supply ten (10) copies of the Building Grade Plan to the Director, Calgary Approvals Coordination.
- 4.13 The cost of preparing and supplying all plans and specifications referred to herein shall be borne by the Developer.

PART 5 - SANITARY SEWERS

A. INSTALLATION

- 5.01 The Developer, at its sole cost and expense, except as hereinafter provided, shall install and construct:
- (1) all sanitary sewers complete with manholes and other accessories, including but not limited to pipes, fittings and gaskets, within the Development Area which may, in the opinion of the Director, Calgary Approvals Coordination, be required to serve the Development Area and adjacent areas, whether or not in Boundary Roads and Lanes and/or easements;
 - (2) all sanitary sewer service connections within the Development Area from the sanitary sewers to:

- (a) three and one half (3.5) metres inside the property line of each lot; or
- (b) where the sanitary sewer service connection crosses a gas line and another shallow utility located within a front yard easement, in which case the service connection shall be installed five (5.0) metres inside the property line of each lot,

where the requirements for the sanitary sewer service connections are known during the time prior to the acknowledgement of the last Final Acceptance Certificate by the Director, Calgary Approvals Coordination for the lane or road within which the sanitary sewer service connections are to be installed; and

- (3) a sanitary sewer service connection from the sanitary sewer to the property line, to service a municipal reserve parcel (which shall not include a sanitary sewer service connection to a School Site) within the Development Area, subject to the following:
 - (a) the location and size of the sanitary sewer service connection to a community association building site will be subject to the approval of the Director, Water Resources and shall be shown on the approved Construction Drawings; and
 - (b) the Director, Parks shall provide to the Director, Water Resources the sizing calculations as necessary.

5.02 The installation of any sanitary sewer service connection from the sanitary sewer to any building on a lot within the Development Area shall be made under the supervision of a Qualified Plumber at no cost to the City.

B. OVERSIZE

- 5.03 (1) If the City requires a sanitary sewer either within or external to the Development Area to be larger than necessary to serve the Development Area:
 - (a) all such Oversize sanitary sewer lines shall be designated at the time the Construction Drawings are approved by the Development Engineer;
 - (b) the City shall pay, from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize to the Developer of Record the additional cost of such larger size pipe and accessories as approved by and in the sole discretion of the Director, Calgary Approvals Coordination, at prices in accordance with the Unit Rate Schedule; and
 - (c) the City shall not make any payments from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize unless:
 - (i) the line is established as Oversize at the time the Construction Drawings are given final approval by the Development Engineer; and

- (ii) the internal diameter of the sanitary sewer pipe exceeds three hundred millimetres (300 mm).
- (2) (a) In areas where the sanitary sewer mains are located deeper than six (6) metres, a dual sewer system may be required and the Developer of Record will be entitled to an Oversize recovery for all mains installed at a depth of six (6) metres or more to crown of pipe;
 - (b) The dual sewer system requirement shall be determined as early as possible in the approval process; and
 - (c) The City shall pay from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize to the Developer of Record the additional cost of the oversized portion of the mains that are located deeper than six (6) metres underground as approved by the Director, Calgary Approvals Coordination, at prices in accordance with the Unit Rate Schedule.

PART 6 - STORM SEWERS

A. INSTALLATION

- 6.01 The Developer, at its sole cost and expense, except as hereinafter provided, shall install and construct:
- (1) all storm sewers and accessories, including but not limited to catch basins and catch basin leads (where applicable), whether or not in Boundary Roads and Lanes and/or easements, within the Development Area which may, in the opinion of the Director, Calgary Approvals Coordination, be required to adequately drain the Development Area and adjacent areas, including subsurface drainage;
 - (2) any inlet, storm detention facility or outfall structures with the necessary leads connected to the storm sewer to and from the Development Area as required by the Director, Calgary Approvals Coordination;
 - (3) all storm water reuse infrastructure including the reuse pumphouse, pump, and treatment, pipes and accessories conveying storm water from the storm pond to the Parks irrigation systems within the Development Area which may in the opinion of the Director, Calgary Approvals Coordination be required;
 - (4) all storm sewer service connections within the Development Area from the storm sewers to:
 - (a) three and one half (3.5) metres inside the property line of each lot; or
 - (b) where the storm sewer service connection crosses a gas line and another shallow utility located within a front yard easement, in which case the service connection shall be installed five (5.0) metres inside the property line of each lot where the requirements for the storm sewer service connections are known during the time prior to the acknowledgement of the last Final Acceptance Certificate by the Director, Calgary Approvals

Coordination for the lane or road within which the storm sewer connection is to be installed;

- (5) a storm sewer service connection, extending from the storm sewer to the property line, to service a municipal reserve parcel (which shall not include a storm sewer service connection to a School Site) within the Development Area subject to the following:
 - (a) the location and size of the storm sewer service connection to a Community Association building site will be subject to the approval of the Director, Water Resources and shall be shown on the approved Construction Drawings;
 - (b) the Director, Parks shall provide to the Director, Water Resources the sizing calculations as necessary; and
 - (c) all storm sewer service connections from the storm sewers to the property line of all commercial, multi-family and church sites within the Development Area, where the requirements for the storm sewer service connections are known, or become known during the time prior to the acknowledgement of the Final Acceptance Certificate by the Director, Calgary Approvals Coordination for the lane or road wherein the storm sewer service connections are to be installed.

6.02 The installation of any storm sewer service connection from the storm sewer to any building on a lot within the Development Area shall be made under the supervision of a Qualified Plumber at no cost to the City.

B. OVERSIZE

- 6.03 (1) If the City requires a storm sewer and/or a stormwater reuse pipe within or external to the Development Area to be larger than necessary to serve the Development Area:
 - (a) all such Oversize storm sewer lines shall be designated at the time the Construction Drawings are approved by the Development Engineer;
 - (b) the City shall pay from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize to the Developer of Record the additional cost of such larger size pipe and accessories as approved by and in the sole discretion of the Director, Calgary Approvals Coordination, at prices in accordance with the Unit Rate Schedule; and
 - (c) the City shall not make any payments from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize unless the line is established as Oversize at the time the Construction Drawings are approved by the Development Engineer.
- (2) (a) In areas where the storm sewer mains are located deeper than six (6) metres, a dual sewer system may be required and the Developer of

Record will be entitled to an Oversize recovery for all mains installed at a depth of six (6) meters or more to crown of pipe;

- (b) the dual sewer system requirement shall be determined as early as possible in the approval process; and
- (c) The City shall pay, from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize, to the Developer of Record, the additional cost of the oversized portion of the mains that are located deeper than six (6) metres underground as approved by the Director, Calgary Approvals Coordination, at prices in accordance with the Unit Rate Schedule.

C. DRAINAGE DURING DEVELOPMENT

- 6.04 (1) During the course of construction, activity, work or development, the Developer shall, at its sole cost and expense, take all necessary measures to control the storm water run-off, erosion and sedimentation within the Development Area and to dispose of all storm water in and from the Development Area, during construction, including that which may be cut off from its natural drainage course by work occurring or which has occurred within the Development Area, all to the satisfaction of the Manager, Water Quality Services.
- (2) The Developer shall indemnify and save harmless the City and the owners of adjacent properties and any other parties from any losses or damage which the City or other persons or legal entities may sustain as a result of the Developer's failure to control and dispose of all storm water run-off, erosion and sedimentation in accordance with subparagraph (1).

D. WATER TABLE AND ALKALI CONTENT

- 6.05 (1) The Developer, at its sole cost and expense shall provide to the Manager, Water Quality Services a report from an Inspection and Testing Company identifying:
- (a) the height of the water table that might cause seepage or dampness in basements of buildings; and
 - (b) the presence of alkali in the soil which might damage the concrete in basements of buildings.
- (2) If the above referenced report concludes that the said seepage, dampness or damage to concrete may occur, the Developer shall:
- (a) in the case of a high water table, provide the necessary subsurface drainage from the property to a storm sewer system; and
 - (b) in the case of alkalinity, advise all parties erecting buildings and constructing the Infrastructure that alkali resisting materials must be used, all to the satisfaction of the Manager, Water Quality Services.

E. DRAINAGE CONTROL

6.06 The Developer shall, at its sole cost and expense, control surface drainage within the Development Area to the satisfaction of the Manager, Water Quality Services through:

- (1) (a) the design and construction of Surface Drainage Facilities, as required by and to the satisfaction of the Manager, Water Quality Services, that direct storm water to points of collection into the underground storm water collection system;
- (b) design and construction of Surface Drainage Facilities, including but not limited to such facilities as:
 - (i) berms and grassed swales on reserve lands;
 - (ii) concrete swales, or fence and grassed swale arrangements at back of lots in laneless subdivisions; and
 - (iii) grassed swales to provide overland flow relief at trapped lows in lanes and streets;
- (2) the provision of design details of the drainage control mechanisms;
- (3) concrete swales at the rear of all laneless lots except where it is deemed unnecessary by the Manager, Water Quality Services, in which case the Developer may construct a fence and grassed swale arrangement or a rear walkway system in lieu of concrete swales;
- (4) the planting of grade stakes at the rear corners of the lots affected to show the elevation of the corners of the lots where concrete swales, fence and grassed swale arrangements or rear walkway system are not constructed; and
- (5) the construction of berms and/or grassed swales, as required and subject to the approval of the Manager, Water Quality Services and the Director, Parks, to direct the drainage from ornamental parks and tot lots.

6.07 The design details of the drainage control mechanisms described in the foregoing paragraph will be subject to the approval of the Manager, Water Quality Services and depicted on the Construction Drawings.

6.08 When the construction of the Surface Drainage Facilities required as a condition of Subdivision or Development Permit Approval have been completed to the satisfaction of the Manager, Water Quality Services and in accordance with the Drainage Bylaw, the Developer shall:

- (1) submit a Construction Completion Certificate for approval;
- (2) at its sole cost and expense, maintain the Surface Drainage Facilities, with the exception of the concrete swales, in accordance with the maintenance requirements referenced herein, including but not limited to those contained in Part 23 - (Maintenance) of the Agreement; and

- (3) rectify any and all drainage complaints until the last Final Acceptance Certificate for the Development Area is acknowledged.

6.09 It is expressly understood by the parties hereto that the Final Acceptance Certificate for Surface Drainage Facilities shall include all such facilities except the concrete swales.

F. OVERLAND DRAINAGE EASEMENT AND RESTRICTIVE COVENANT

6.10 The Developer shall, at its sole cost and expense, register an Overland Drainage Easement and Restrictive Covenant to the satisfaction of the Manager, Water Quality Services against all certificates of title for the Lands including that within the Development Area as determined by the Director, Calgary Approvals Coordination to:

- (1) permit the passage of water over the land; and
- (2) prohibit the alteration of side yard grades, rear grades and established overland drainage systems, including but not limited to emergency overland drainage facilities, concrete swales and grassed swales on each subject lot.

G. TRAPPED LOW AREAS (TEMPORARY STORM WATER STREET STORAGE)

6.11 (1) Where Trapped Low Areas are incorporated into the design of a storm water overland drainage system for the Development Area, the Developer, at its sole cost and expense and to the satisfaction of the Director, Calgary Approvals Coordination, shall register a Stormwater Impoundment Easement and Restrictive Covenant against all certificates of title for each of the lots adjacent to the Trapped Low Areas where the maximum depth of the storm water located in the streets and lanes is designed to be greater than 0.30 metres in depth, as shown on the building grade plan approved by the Development Engineer:

- (a) permitting the collection and storage of water on such property; and
- (b) prohibiting either:
 - (i) any grading or re-grading of the lot, except in strict accordance with the building grade plan as approved by the Development Engineer; or
 - (ii) the construction of any opening in the walls of any structures within any lot adjacent to the Trapped Low Areas unless such openings are higher than 0.30 metres above the maximum elevation of the said Trapped Low Areas.

(2) Trapped Low Areas and pertinent grades shall be designed in accordance with City Specifications.

H. NOTIFICATION FOR STORM WATER POND FACILITIES

6.12 If Storm Water Pond Facilities are located on reserve parcels in accordance with City Council's requirements for Storm Water Pond Facilities, the Developer shall, at its sole cost and expense:

- (1) advise and clearly delineate to all potential home owners in the community in which the Development Area is located, through land use signs and marketing literature, the dual functions of the reserve lands on which the Storm Water Pond Facilities are located;
- (2) if requested by the Director, Calgary Approvals Coordination, provide a copy of all Storm Water Pond Facilities literature to be made available to prospective homeowners; and
- (3) post and maintain signs where the Storm Water Pond Facilities and overland drainage routes are located to indicate that the reserve lands serve as a dual use, the wording and location of which signs shall be to the satisfaction of both the Director, Calgary Approvals Coordination and the Director, Parks prior to installation.

PART 7 - WATER

A. INSTALLATION

7.01 The Developer shall, at its sole cost and expense, except as hereinafter provided:

- (1) install all water mains, valves, hydrants and fittings, pressure reducing valve chambers and appurtenances that in the opinion of the Director, Calgary Approvals Coordination, may be required to serve the Development Area and adjacent areas, whether or not the said water mains are in Boundary Roads and Lanes and/or easements;
- (2) install all water service connections within the Development Area from the water mains to:
 - (a) three and one half (3.5) meters inside the property line of each lot; or
 - (b) where the water service connection crosses a gas line and another shallow utility located within a front yard easement, in which case the service connection shall be installed five (5.0) metres inside the property line of each lot,

where the requirements for the water service connections are known during the time prior to the acknowledgement of the last Final Acceptance Certificate by the Director, Calgary Approvals Coordination for the lane or road within which the water service connection is to be installed;

- (3) (a) install a single one hundred and fifty millimetre (150 mm) diameter water service connection and water meter box, which water meter box the City will install at no expense to the Developer, from the water main to the property line of each and every:
 - (i) Sub-neighbourhood Park, Neighbourhood Park, Community Park, District Park and community association building site; and

- (ii) excluding all School Sites and environmental reserve lands within the Development Area;
 - (b) identify the location and size of the water service connection to the Community Association building site, which shall first be approved by the Director of Water Resources and shall be shown on the Construction Drawings and plans; and
 - (c) the Director, Parks shall provide to the Director, Water Resources with the sizing calculations as necessary; and
 - (4) prior to the acknowledgement of the Final Acceptance Certificate for water mains and hydrants, disconnect any temporary water service connection(s) at the water main installed for any temporary irrigation system, all to the satisfaction of the Director, Calgary Approvals Coordination.
- 7.02 The installation of any water service connection from the end of the water service connection to any building on a lot within the Development Area shall be made under the supervision of a Qualified Plumber at no cost to the City.

B. OVERSIZE

- 7.03 If the City requires a water main either within or external to the Development Area to be larger than necessary to serve the Development Area:
- (1) all such water mains shall be designated as Oversize at the time the Construction Drawings are approved by the Development Engineer;
 - (2) when a water main is installed between two lots in an easement or utility right of way, the Developer shall:
 - (a) be obligated to install a carrier and encasement pipe as specified in the Standard Specifications Waterworks Construction; and
 - (b) claim Oversize only for the carrier pipe if the pipe diameter exceeds,
 - (i) for Residential Development, two hundred and fifty millimetres (250 mm) as determined in the sole discretion of the Director, Calgary Approvals Coordination;
 - (ii) for Commercial Development and Industrial Development, three hundred millimetres (300 mm) as determined in the sole discretion of the Director, Calgary Approvals Coordination;
 - (3) prior to awarding any tenders for the pressure reducing valve and chamber, the Developer shall first submit drawings, specifications and tendered documents to the Development Engineer for review and approval;
 - (4) (a) the City shall pay, from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize to the Developer of Record, the additional cost of

such larger size pipe and valves only, at prices in accordance with the Unit Rate Schedule; and

- (b) where the installation of a pressure reducing valve and chamber is required, the City shall pay from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize the full cost in accordance with the Unit Rate Schedule, including a payment of 5% for engineering and 5% for administration;
- (5) the City shall not make any payments from the Developer Funded Infrastructure Stabilization Fund - Utility Oversize for Oversize or pressure reducing valve chambers unless:
 - (a) the water main is designated as Oversize at the time the Construction Drawings are approved by the Development Engineer;
 - (b) the pressure reducing valve is designated for payment prior to the signing of the Development Agreement; and
 - (c) the internal diameter of the water main exceeds:
 - (i) for Residential Development, two hundred and fifty millimetres (250 mm); and
 - (ii) for Commercial Development and Industrial Development, three hundred millimetres (300 mm).

C. WATER FEEDER MAINS

- 7.04 (1) The City, except as hereinafter provided, shall install any water feeder mains from the existing City water mains that may lead into the Development Area as required by the Manager, Water Quality Services; and
- (2) the Developer shall, where possible, coordinate the installation of feeder mains with the City's Water Resources Business Unit so that the water feeder mains will be installed before surface works are undertaken within the Development Area.

D. CONNECTION TO CITY WATER SUPPLY

- 7.05 The Developer shall make arrangements with the Manager, Water Quality Services to have the water mains within the Development Area connected to the City water supply system, and shall pay the City charges for the said work.

E. CHARGES FOR WATER USAGE

- 7.06 (1) The water withdrawn from the water supply system shall be metered.
- (2) Water use will be charged to the Developer at the rate prescribed by the Water Utility Bylaw, 40M2006, as amended and replaced from time to time.
- (3) The Developer shall as soon as the parks water service connection to reserve parcels for irrigation purposes is installed, arrange for the installation of a water

meter and shall pay to the City, on a monthly billing basis computed using the rate prescribed by the Water Utility Bylaw, 40M2006, as amended and replaced from time to time, the cost of the water used in the Development Area and irrigation of all parks located within the Development Area until such time as the Final Acceptance Certificates, as required under the Agreement, for the said parks have been acknowledged by the City.

F. CONDITION OF WATER SHUT-OFF

- 7.07 When the water supply within the Development Area, or any portion thereof, has been turned on and is being used by any third party, the Developer shall not, without the written consent of the Manager, Water Quality Services, shut off the water supply to any water mains or fire hydrants.

G. USE OF FIRE HYDRANTS

- 7.08 (1) Except for grading, pressure testing, disinfecting and flushing of water mains, the Developer and/or his or her Contractor(s) shall not use fire hydrant(s) connected to a closed zone distribution system (i.e. no reservoir on the system) to obtain water for construction purposes unless written permission has first been secured and received from the Director, Water Services.
- (2) The Developer shall endeavour to ensure that the unauthorized use of fire hydrants by all persons engaged in the construction or maintenance of the subdivision and development does not occur.
- (3) When water is withdrawn from a designated hydrant in accordance with the approval from the City's Water Services Business Unit, the Developer must use (or ensure that its Contractor uses) a hydrant connection unit (back flow meter assembly (BMA), meter assembly (MA), back flow assembly (BA)) or approved air gap and adhere to the requirements in the Water Utility Bylaw 40M2006, as amended and replaced from time to time, and in accordance with City Specifications pertaining to waterworks construction.

H. INSTALLATION OF CATHODIC PROTECTION TEST POINTS

- 7.09 (1) The Developer, at its sole cost and expense, shall coordinate the supply and installation of a cathodic protection test point where a metallic water system crosses or parallels a major foreign pipeline; and
- (2) the test point shall have leads connected, in a manner approved by the Director, Water Resources to the foreign pipeline and the water system.

I. WATER SUPPLY – RELEASE OF BUILDING PERMITS

- 7.10 The Developer shall ensure that the infrastructure facilitating water supply to the Lands is installed and functional prior to requesting the release of a building permit for any building to be serviced by the same.

PART 8 - STREETS AND AVENUES**A. CONSTRUCTION**

- 8.01 The Developer, at its sole cost and expense, except as hereinafter provided, shall construct all streets and avenues within the Development Area, including all Boundary Roads and Lanes and roads abutting on or adjacent to all reserve parcels and other lands dedicated to the City for public use, to the width and depth of materials which the Director, Calgary Approvals Coordination may require to serve the Development Area and adjacent areas.
- 8.02 The Developer, at its sole cost and expense, shall rough grade with cuts and fills, the ground surface of all said roads and streets to finished elevation before excavating for any finished surface.
- 8.03 The Developer, at its sole expense, shall:
- (1) construct the temporary public oiled and gravelled turnabouts, which shall also include turnabouts for transit and school buses where required by the Director, Calgary Approvals Coordination, all of which shall be shown on the Construction Drawings; and
 - (2) maintain all the temporary public oiled and gravelled turnabouts including the transit and school bus turnabouts until such time as the permanent construction of the roadways takes place on which the temporary public oiled and gravelled turnabouts are located or until such other time as determined by the Director, Calgary Approvals Coordination in his or her sole discretion.

B. OVERSIZE

- 8.04 Where a roadway is required by the Director, Calgary Approvals Coordination to be a divided Major Road / Arterial Standard in the case of residential roads and an undivided Major Road / Arterial Standard in the case of industrial roads, then the City shall pay the cost of the additional width and depth or equivalent construction design from the Developer Funded Infrastructure Stabilization Fund – Major Road Standard Oversize to the Developer of Record the cost of such extra width and depth at prices in accordance with the Unit Rate Schedule.
- 8.05 Where roads adjacent to Major Regional Parks (including major athletic parks, municipal golf courses, natural open spaces and water areas) are less than a Major Road / Arterial Standard and a road wider than required pursuant to City Specifications is required by the City, then the City shall pay to the Developer of Record the difference in cost between the width of the carriageway constructed, and the cost of the road required.
- 8.06 Where a roadway is required by the Director, Calgary Approvals Coordination to be a divided Primary Collector standard or a divided Entrance Road Standard, Oversize shall not be payable.

C. BOUNDARY

- 8.07 Where roads adjacent to Major Regional Parks (including major athletic parks, municipal golf courses, natural open spaces and water areas) are constructed to a Major Road / Arterial Standard, the City shall pay to the Developer of Record, in addition to any oversize as provided within this Part, the cost of the boundary portion of the carriageway adjacent to the said Major Regional Parks.

D. SOIL INSTABILITY

- 8.08 On the account of instability of the soil and in the opinion of the Director of Roads, it is necessary to provide a greater depth of base for the road, the Developer, at its sole cost and expense, shall excavate, supply gravel for or replace with other suitable fill to the satisfaction of the Director, Calgary Approvals Coordination.

E. INSTALLATION OF TRAFFIC CONTROL DUCTS

- 8.09 The Developer, to the satisfaction of the Director, Roads, shall install the traffic control ducts, as shown on the Construction Drawings approved by the Development Engineer, in accordance with the City's Standard Specifications Street Lighting Construction, and the Developer of Record, shall be entitled to recover the full cost thereof, at prices in accordance with the Unit Rate Schedule, when the work has been certified as complete by the Consulting Engineer and acknowledged by the City.

F. ACCESS ROADS

- 8.10 (1) (a) The Developer is required to maintain to the satisfaction of the Director, Calgary Approvals Coordination any hard surfaced or gravelled access roads, including periodic oiling, into the Development Area until the Final Acceptance Certificate for paved roads, paved lanes and paved walkways has been issued, or as otherwise required by the Director, Calgary Approvals Coordination.
- (b) Prior to release from this maintenance requirement by the City, the Developer, if required by the Director, Calgary Approvals Coordination, shall rebuild or reinstate the said access roads to a condition satisfactory to the Director, Calgary Approvals Coordination or as otherwise set out under the Development Agreement.
- (2) If required, access roads referred to in subparagraph (1) shall be as indicated in the Development Agreement.

PART 9 - LANES AND WALKWAYS**A. CONSTRUCTION**

- 9.01 The Developer, at its sole cost and expense, except as hereinafter provided, shall:
- (1) grade to the standard cross section and profile approved by the Development Engineer and construct all lanes and walkways within the Development Area to the width and depth of the materials which the Director, Calgary Approvals

Coordination may require to serve the Development Area and adjacent areas, including all boundary lanes and walkways, and lanes and walkways abutting, or adjacent to reserve parcels and other lands dedicated to the City for public use;

- (2) (a) construct a gravel base to residential road standards on those sections of the lane within the Development Area so designated at the time of approval of the Construction Drawings and plans by the Development Engineer, in order to prevent erosion; and
 - (b) the City will undertake to complete the asphalt priming and surfacing at its own expense when considered necessary by the Director, Calgary Approvals Coordination;
- (3) rough grade with cuts and fills, the ground surface of all lanes and walkways, including side sloping, to within one hundred and fifty millimetres (150 mm) of design grade before the installation of any underground shallow utilities;
- (4) (a) grade, gravel and pave all public pathways and walkways within the Development Area that are not intended for use by vehicular traffic and shall block off or construct the ends thereof in such a manner as to prevent their use by vehicular traffic; and
 - (b) the Developer shall ensure that the paved surfaces of such public pathways and walkways are left thoroughly compacted and smooth;
- (5) provide concrete steps, landings and metal handrails in any of the aforementioned public ways, narrow lanes or walkways where the Director, Calgary Approvals Coordination deems it necessary;
- (6) compaction requirements in any gravelled lanes shall be no less than 95% of the Standard Proctor Density (with 98% of the Standard Proctor Density preferred) with two (2) tests per hundred (100) metre length, the first of which shall be taken halfway up the utility trench, and the second shall be taken 0.30 of a metre below the finished surface grade;
- (7) (a) construct the temporary public oiled and gravelled lane turnabout(s), as shown on the Construction Drawings; and
 - (b) the Developer, at its sole expense, shall maintain all the temporary public oiled and gravelled lane turnabout(s) until such time as the permanent lanes(s) are constructed over the temporary public oiled and gravelled lane turnabout(s), or until such other time as determined by the Director, Calgary Approvals Coordination.

B. RESTRICTIVE COVENANTS

- 9.02 (1) In laneless subdivisions where public sidewalks or pathways are located within an easement, the Developer shall execute and register on all relevant certificates of title to the satisfaction of the Director, Calgary Approvals Coordination, prohibiting the construction of fences and other structures within the boundaries

of the easement to ensure that the right of pedestrian passage is not interfered with on the said public sidewalks and pathways.

- (2) The Developer shall execute and register on all relevant certificates of title, to the satisfaction of the Director, Calgary Approvals Coordination, a Restrictive Covenant prohibiting the construction of driveways and vehicle accesses over a bus loading area where the upright curb is located within the bus zone.

PART 10 - SIDEWALKS, CURBS AND GUTTERS

A. CONSTRUCTION

10.01 The Developer, at its sole cost and expense except as hereinafter provided, shall construct:

- (1) all sidewalks, curbs and gutters, concrete pedestrian bus stop aprons, and catch basins and leads, within the Development Area, including those along the boundary of the Development Area and those abutting, on or adjacent to reserve parcels and other lands dedicated to the City for public use, in accordance with City Specifications, which the Director, Calgary Approvals Coordination may require to serve the Development Area and adjacent areas;
- (2) (a) all required driveways over sidewalks and related work in connection therewith, including curbs, gutters and approach aprons, prior to the acknowledgement of the Final Acceptance Certificate; however, the Developer shall not be liable for the construction costs of the driveways approved, or constructed, after the acknowledgement of the Final Acceptance Certificate for sidewalks, curbs and gutters; and
- (b) the Developer shall obtain approval from the Director, Calgary Approvals Coordination for all driveways constructed prior to the acknowledgement of the said Construction Completion Certificate, and obtain approval from the Director, Roads for all driveways constructed thereafter; and
- (3) the concrete pedestrian bus stop aprons on roads at those locations designated by the Director, Roads on the Construction Drawings and plans approved by the Development Engineer.

B. BOUNDARY

10.02 Where roads adjacent to Major Regional Parks (including major athletic parks, municipal golf courses, natural open spaces and water areas) are constructed to a major / arterial thoroughfare category, the City shall pay to the Developer of Record the full cost of the sidewalk, curb and gutter, including catch basins and leads, constructed adjacent to the said Major Regional Parks.

PART 11 - FENCING

11.01 (1) The Developer, at its sole cost and expense, and to the satisfaction of the Director, Calgary Approvals Coordination, shall construct a wooden screening fence or a sound attenuation fence, if required, of uniform height and design,

within the property line of the double frontage lots within the Development Area, where the said double frontage lots abut a roadway constructed to a major / arterial thoroughfare category, or lower standard.

- (2) Where it is determined by the Manager, Network Planning that sound attenuation fencing is required to be constructed within the Development Area adjacent to an expressway, skeletal road or freeway, the Developer shall construct the sound attenuation fence to the height and design, as accepted by the Director, Calgary Approvals Coordination, inside the property line of the double frontage lots and on the property line of the road and lane rights-of-way where the double frontage lots and the road and lane rights-of-way abut the expressway, skeletal road or freeway and the Developer of Record shall be entitled to recover a portion of the cost thereof, excluding the portion abutting the T.U.C., based on the cost equivalent of constructing a 1.80 metre high chain link fence, at prices determined by the Director, Calgary Approvals Coordination, when the work has been certified as complete.
- (3) Where it is determined by the Manager, Network Planning that sound attenuation fencing is not required to be constructed adjacent to an existing or proposed expressway, skeletal road or freeway, the Developer shall then be required to construct either a wooden screening fence or 1.80 metre high chain link fence, as approved by the Director, Calgary Approvals Coordination, inside the property line of the double frontage lots where the double frontage lots abut the existing or proposed expressway, skeletal road or freeway, and the Developer of Record shall be entitled to recover a portion of the cost thereof, excluding the portion abutting the T.U.C., based on 50% of the cost equivalent of constructing a 1.80 metre high chain link fence, at prices in accordance with the Unit Rate Schedule, when the work has been certified as complete.
- (4) Where it is determined by the Manager, Network Planning that only a 1.80 metre high chain link fence is required to be constructed on the property line of a public road and/or lane which abuts an expressway, skeletal road or freeway, the Developer shall construct the 1.80 metre high chain link fence and the Developer of Record shall be entitled to recover the cost thereof, excluding the portion abutting T.U.C. based on 50% of the cost equivalent of constructing a 1.80 metre high chain link fence, at prices as accepted by the Director, Calgary Approvals Coordination, when the work has been certified as complete.
- (5) In the event that the Developer chooses and receives approval from the Director, Calgary Approvals Coordination to construct a screening fence in place of the 1.80 metre high chain link fence required under the preceding subparagraph, the Developer shall not be entitled to any cost recovery for the construction of the screening fence.
- (6) The Developer, at its sole cost and expense and to the satisfaction of the Director, Calgary Approvals Coordination and the Director, Parks, shall construct a fence inside the property line of all residential lots, multi-family lots and/or commercial lots where they abut any municipal reserve parcels, school reserve parcels, environmental reserve parcels and/or public utility lots.

- (7) The Developer, at its sole cost and expense and to the satisfaction of the Director, Calgary Approvals Coordination and the Director, Parks, shall construct a post and cable fence on the property line of any lanes where they abut any municipal reserve parcels, school reserve parcels, environmental reserve parcels and/or public utility lots.
- (8) The Developer, at its sole cost and expense and to the satisfaction of the Director, Calgary Approvals Coordination, shall construct a fence inside the property line of all residential lots, multi-family lots and /or commercial lots where they abut any walkways.

PART 12 - STRIPPING AND ROUGH GRADING

12.01 Only the Development Area shall be stripped and rough graded.

12.02 Prior to the commencement of stripping and rough grading of the Development Area, the Developer shall:

- (1) submit for approval by the individual appointed to the position of Corporate Planning Applications Group (CPAG) Utilities and Environmental Protection (UEP) Development Engineering Generalist for the area, the following items:
 - (a) two (2) copies of the cut and fill plans identifying those areas with more than two metres of fill;
 - (b) a Deep Fills Report for those areas being filled more than two metres deep, containing recommendations on any development restrictions, including but not limited to bearing certificates, special foundation designs, that may be necessary to ensure the integrity of any structure constructed on fill areas, including but not limited to buildings, roads and utilities;
 - (c) two (2) copies of an Erosion and Sediment Control (ESC) Plan;
 - (d) a letter from the Developer stating that all affected utility companies have been contacted regarding the relocation or disposition of that utility;
 - (e) plans showing details of edge conditions and/or backsloping requirements and areas to be reseeded, seeded and maintained until self-sustaining, erosion resistant vegetation cover is established;
 - (f) a list identifying the owners of all lands and all parties having an interest in underground utility easements located on those lands, that will be affected by proposed stripping and grading;
 - (g) written documentation from those affected parties, including from Calgary Roads where City road rights-of-way are involved, giving permission to access and/or work on such affected lands or easements;

- (h) where the stripping and grading boundary abuts other property owners, or affects road rights-of-way or underground utility easements, cross sections must be submitted;
 - (i) a letter from the Director, Parks and/or the School Board affected (where applicable) approving the location of the loam stock pile on a Municipal Reserve, School Reserve or Municipal School Reserve site, as contemplated in the Municipal Government Act, and outlining any conditions that may be required; and
 - (j) a letter from the Director, Roads approving the stockpiling of loam on interchange areas, or grading adjacent to existing or proposed roadways, and outlining other required conditions;
- (2) review and comply with the most recent copies of the Water Resources, Erosion and Sediment Control Guidelines and the Erosion and Sediment Control Plan;
 - (3) submit a copy of the approval by the Province of Alberta for any stripping and grading encroachments within a Transportation and Utility Corridor as per the Provincial Transportation Utility Corridor policy;
 - (4) at least two (2) business days in advance of commencing the stripping and grading operations on the site, contact 311 to notify Water Resources' Stormwater Pollution Prevention of project start-up;
 - (5) notify the Team Lead, Stormwater Pollution Prevention of the use of any hard surfaced or gravelled road to be used as an access road;
 - (6) where applicable, erect fencing and provide other measures satisfactory to the Director, Parks to ensure the stripping and grading does not encroach into any land designated as Environmental Reserve; and
 - (7) execute the Development Agreement.
- 12.03 The Developer must contact 311 to make arrangements with Water Services for water supply, including but not limited to backflow prevention and water hydrant usage during the stripping and grading process.
- 12.04 The Developer, at its sole cost and expense, shall erect "Private Property" and "No Trespassing" signs on the perimeter of the Lands, stating the Developer's name and the phone number of a representative.
- 12.05 Any and all stock pile(s) created in connection with the stripping and grading of the Development Area shall be neat in appearance, free from any hazardous condition, in compliance with the Erosion and Sediment Control Plan, and posted with signs prohibiting dumping and designating the Lands as "Private Property", "No Trespassing" and "No Unauthorized Personnel Beyond this Point", all to the satisfaction of the Team Lead, Stormwater Pollution Prevention;
- 12.06 The Developer shall be responsible for controlling noxious weeds as contemplated in the *Weed Control Act*, SA 2008, c.W-5.1, as amended.

- 12.07 (1) Any and all loam stock pile(s) created in connection with the stripping and grading shall be removed by the Payment Date, unless an extension of time is granted in writing by the Director, Calgary Approvals Coordination prior to the said date; and
- (2) Extension applications must be requested in writing thirty (30) days prior to the Payment Date or the request will be automatically denied and removal procedures will be initiated.
- 12.08 No grading, filling or excavation is permitted within utility and road rights-of-way, under any overhead utility lines, or over any underground utilities, unless prior written authorization has been obtained from the utility agencies or City Business Units concerned.
- 12.09 The Developer, at its sole cost and expense, before, during and after the stripping and grading of the Development Area, shall fulfill the obligations contained in the approved Plan regarding erosion and sediment control in and from the Development Area and shall comply with the Approved Erosion and Sediment Control Plan(s) and any associated conditions included in the associated Approval letter.
- 12.10 The Developer, at its sole cost and expense, before, during and after the stripping and grading and development of the Development Area, shall fulfill the obligations contained in the City Specifications regarding the control and disposal of all storm water in and from the Development Area and storm water which may be cut off from its natural drainage route by the development.
- 12.11 If during stripping and grading operations or any other construction within the Development Area, the applicant, owner of the development site, or any of their agents or contractors become aware of any contamination:
- (1) the Developer shall ensure that any person discovering such contamination shall forthwith report the contamination to Alberta Environment and Parks and the Director, Environmental Management.
- (2) the Developer, prior to the release of any building permits, shall submit a Phase 2 Environmental Site Assessment acceptable to Alberta Environment and Parks and the Director, Environmental Management.
- (3) if required to do so by Alberta Environment and Parks or Calgary Health Region or the Director, Environmental Management, the applicant shall submit to Alberta Environment and Parks and the Director, Environmental Management, a remediation plan or risk management plan (Phase 3 ESA), acceptable to Alberta Environment and Parks and the Director, Environmental Management.
- (4) before the Public Infrastructure Section provides a clearance letter to the City's Calgary Building Services Business Unit to facilitate the release of Building Permits, the Developer shall submit to the Team Lead, Development Engineering., a letter, in a form satisfactory to the Director, Calgary Approvals Coordination, certifying that the physical components identified in the Phase 3 ESA have been installed.

- 12.12 If the Developer encroaches into the adjacent land during the stripping and grading of the Development Area, the Developer, at its sole expense, shall rehabilitate the adjacent lands to the satisfaction of the adjacent land owners immediately after cessation of use of the adjacent land.
- 12.13 The Developer, at its sole cost and expense, and to the satisfaction of the Team Lead, Stormwater Pollution Prevention shall rehabilitate in a timely manner any offsite areas or operations, storm water runoff, soil erosion, soil instability, sedimentation, dust or other problems which may arise from the stripping and grading.
- 12.14 A Stripping and Rough Grading Compaction Report shall be submitted by the Consulting Engineer to the Coordinator, Public Infrastructure certifying that rough grading is in compliance as set out in the Consulting Engineer's Field Services Guidelines.
- 12.15 (1) The Developer shall provide written notification to the Director, Calgary Approvals Coordination that all septic systems, including but not limited to fields, tanks and water wells located within the Development Area have been decommissioned to the satisfaction of the Coordinator, Public Infrastructure and that the impacted areas have been rehabilitated and are suitable for the intended use.
- (2) In the event that any septic systems, including but not limited to fields and tanks and water wells, located within the Development Area have not been decommissioned, the Developer shall provide written notification to the Director, Calgary Approvals Coordination indicating why they have not been decommissioned and when they will be decommissioned in the future.

PART 13 - TRANSPORTATION AND UTILITY CORRIDORS

- 13.01 If the community in which the Development Area is located is adjacent to a Transportation and Utility Corridor, the Developer, at its sole cost and expense and to the satisfaction of the Director, Calgary Approvals Coordination, shall install and maintain the temporary signs at the entrances to the community that are both required by and in accordance with the Transportation and Utility Corridor (T.U.C.) Signage Policy.
- 13.02 The Developer shall obtain approval from the Province of Alberta, which may include Ministerial consent for work within or adjacent to the T.U.C. in accordance with the Provincial T.U.C. policies and requirements.

PART 14 - LANDSCAPING OF RESERVE PARCELS, PUBLIC UTILITY LOTS, STREETS AND AVENUES AND UNDERGROUND IRRIGATION

A. GRADING, LOAMING AND SEEDING

- 14.01 The Developer, at its sole cost and expense, except as hereinafter provided shall:
- (1) grade, loam and seed to grass, to the satisfaction of the Director, Parks and in conformity with the Park Specifications, all:
- (a) sub-neighbourhood parks;

- (b) linear parks;
 - (c) public utility lots;
 - (d) boulevards;
 - (e) medians;
 - (f) traffic islands with a minimum five hundred (500) square metres in area;
 - (g) Public Utility Lots located adjacent to Municipal Reserve specifically for shallow utility infrastructure;
 - (h) those portions of the Neighbourhood Park, Community Park, and District Parks that are designated by the City's Parks Business Unit as decorative parks, ornamental parks and tot lots; and
- (2) ensure that the grass is well established and in a vigorous growing condition after the first cutting after germination, to the satisfaction of the Director, Parks.

14.02 Notwithstanding anything contained herein, the Developer shall:

- (1) construct all Neighbourhood Park, Community Park, and District Parks, and associated amenities, required as a condition of Subdivision Approval in accordance with the Park Specifications; and
- (2) use the Conceptual Site Plan approved at the time of the outline plan as a guide to prepare Construction Drawings for the said parks.

14.03 The Final Acceptance Certificate for Community and District Parks shall be submitted to the City no later than:

- (1) at least one full year prior to occupancy of a school located on the park;
- (2) when thirty (30) percent of the lots or projected lots located within all lands located within 1.2 kilometres from the property line of the said Community and District Park, as the case may be, have building permits released and the community has made a formal written request to the Director, Parks to develop the said park;
- (3) when the City requires the said Community and District Parks for municipal purposes; or
- (4) September 30th in the year in which the Community and District Parks are constructed.

14.04 Neighbourhood and Sub-neighbourhood Parks are to be completed to the satisfaction of the Director, Parks once fifty (50) percent of the lots adjacent to the said parks have building permits released.

14.05 The Developer shall ensure that any fill material placed on reserve parcels in accordance with Parks Specifications and the backfilling specifications of the City is placed in a workmanlike manner, including:

- (1) the removal of loam prior to the placement of the fill material; and
- (2) all fill materials and the compaction of all fill materials placed in those areas that can be identified as potential building sites by the City's Joint Use Coordinating Committee.

14.06 The Developer of Record shall be entitled to cost recovery of the minimum landscape development activities as defined in the Park Specifications for Community and District Parks, including amenities, at prices in accordance with the Unit Rate Schedule upon acknowledgement of the relevant Construction Completion Certificate.

14.07 The Developer, at its sole cost and expense shall ensure that prior to the acknowledgement of the respective Construction Completion Certificate, all items referenced in paragraph 14.01 are maintained in a "weed free" condition, all to the satisfaction of the Director, Parks.

B. UNDERGROUND IRRIGATION AND POWER SUPPLY

14.08 The Developer, at its sole cost and expense shall:

- (1) install water service and underground irrigation in all Sub-neighbourhood Parks, Linear Parks and only those portions of the Neighbourhood Park, Community Park, and District Parks which are designated in accordance with the Park Specifications; and
- (2)
 - (a) provide a 110 volt, 30 ampere power supply for all Sub-neighbourhood Parks, Linear Parks, Neighbourhood Parks and Community and District Parks within fifteen (15) metres of the parks water service in accordance with the *Safety Codes Act*, R.S.A. 2000, c.S-1, as amended from time to time and the Park Specifications; and
 - (b) in the case of Sub-neighbourhood Parks and Linear Parks, other types of power supply may be used subject to the approval of the Director, Parks.

C. OPTIONAL SUBDIVISION AMENITIES

14.09 The Developer, at its option, may construct or install Optional Subdivision Amenities in reserve parcels, streets, avenues rights-of-way located within the Development Area, at the locations, to the specifications and subject to any conditions approved by the Approving Authority, as shown on the Construction Drawings.

D. ENVIRONMENTAL RESERVES (PROTECTION AND FENCING)

14.10 The Developer, at its sole cost and expense shall:

- (1)
 - (a) prior to the approval for stripping and rough grading of the Development Area, erect a temporary fence on the property lines of all environmental

- reserves within or adjacent to the boundaries of the Development Area, and the Developer shall continuously maintain the said temporary fence until the final grading and landscaping of the adjacent land is completed, at which time the fence shall be removed by the Developer; and
- (b) erect temporary fencing in the working easement of a utility easement (being the area inside of the utility easement in which the Developer is authorized to work) that is located within land designated as Environmental Reserve when the work is being undertaken in a utility easement;
- (2) grade, loam, seed and rehabilitate to the satisfaction of the Director, Parks, the portions of any environmental reserve that is disturbed as a result of activity undertaken in connection with the Agreement;
 - (3) ensure that the proposed grades of the Development Area are compatible with the existing grades of all lands designated as Environmental Reserve, to the satisfaction of the Director, Calgary Approvals Coordination;
 - (4) institute erosion control measures, that comply with the Approved Erosion and Sediment Control Plan, satisfactory to the Team Lead, Stormwater Pollution Prevention, to protect land designated as Environmental Reserve taking into account the surrounding topography; and
 - (5) keep all lands designated as Environmental Reserve clean of construction debris on an ongoing basis.

E. LOAM STOCKPILING

- 14.11 (1) The Developer may stockpile loam which has been removed from land within the Development Area or land external to the Development Area upon or within which Infrastructure will be constructed as contemplated in the Agreement:
- (a) on a reserve parcel after receipt of written approval from the Director, Parks, provided that it is in accordance with such approval; and
 - (b) on land owned by the Developer within the Development Area after receipt of written approval of the Director, Calgary Approvals Coordination, provided that it is in accordance with such approval.
- (2) In addition to any conditions or obligations imposed by the Director, Parks or the Director, Calgary Approvals Coordination, in connection with an approval contemplated in subparagraph (1) above, the Developer, at its sole cost and expense, shall erect signs around the lands upon which the loam is stockpiled to indicate that the dumping and storage of other materials is prohibited and ensure that erosion and sediment control practices are installed to comply with the Erosion and Sediment Control Guidelines and the Erosion and Sediment Control Plan.
 - (3) (a) Subject to subparagraph 14.11(5) below, a loam stockpile located on a reserve parcel within the Development Area may remain on the said land

for a maximum of two (2) years from the Effective Date, after which the time period may be extended in writing by the Director, Calgary Approvals Coordination, after having consulted with the Director, Parks if the land in question is required for municipal purposes, until the City desires to use the said land or portions thereof for municipal purposes.

- (b) (i) Following the expiration of the two (2) year period, or extension granted pursuant to subparagraph (a) above, the Director, Parks shall notify the Developer of Record in writing of the termination of the Developer's right to stockpile loam on the said land; and
 - (ii) the Developer shall, at its sole cost and expense, remove such loam stockpile within six (6) months from the date of receipt of such written notice from the Director, Parks.
- (4) (a) Subject to subparagraph 14.11(5) below, a loam stockpile located on land owned by the Developer within the Development Area may remain on the said land for a maximum of three (3) years from the Effective Date, after which time the period may be extended until the Director, Calgary Approvals Coordination, in his or her sole discretion, notifies the Developer of Record in writing of the termination of the consent to maintain the loam stockpile on the said land.
- (b) (i) Following the expiration of the three (3) year period, or extension granted pursuant to subparagraph (a) above, the Director, Calgary Approvals Coordination may notify the Developer of Record in writing of the termination of the Developer's right to stockpile loam on the said land; and
 - (ii) the Developer shall, at its sole cost and expense, remove such loam stockpile within six (6) months from the date of receipt of such written notice from the Director, Calgary Approvals Coordination.
- (5) (a) If the Director, Parks or the Director, Calgary Approvals Coordination, as the case may be, determines, in his or her sole opinion, that any such loam stockpile referenced herein is not being operated or maintained:
- (i) in compliance with the terms or conditions of the written approval given by him or her relating to such loam stockpile; or
 - (ii) in compliance with the terms or conditions of the Agreement, he or she may notify the Developer of Record to take such remedial action as he or she deems necessary to remedy or correct such non-compliance within a specified period of time as he or she deems appropriate in his or her sole discretion.
- (b) Upon the failure, neglect or refusal of the Developer to comply with any such notice, or in the event that a hazardous condition exists requiring immediate action (in which case no notice to the Developer shall be required to be given), the City may, but shall not be obliged to perform or

cause to be performed any remedial, corrective or immediate action deemed necessary in the sole opinion of the Director, Parks or the Director, Calgary Approvals Coordination including, but not limited to removal of the loam stockpile, without any notice to and at the sole cost of the Developer.

- (6) If the City removes any loam stockpile pursuant to the terms of the Agreement, it shall:
- (a) have the right, but not the obligation, to store or market and sell the loam or any portions thereof, in any manner and at any price or prices as may be determined in the sole discretion of the Director, Parks or the Director, Calgary Approvals Coordination, as the case may be;
 - (b) be entitled to recover any and all costs and expenses as may be incurred with the removal, storage, management, maintenance, marketing or sale of such loam, and any and all other costs and expenses as may, from time to time, be outstanding from the Developer in respect of the obligations of the Developer under the Agreement; and
 - (c) such proceeds as may be obtained in excess of the City's aforementioned costs and expenses shall be credited to the account of the Developer of Record, and set off against any of the Developer of Record's outstanding debts to the City.
- (7) For clarity, the parties agree that the Developer's indemnification contained in Part 20 - (Indemnification) of the Agreement shall apply to any and all claims, losses, liabilities, actions, demands, damages, causes of actions, interest, legal fees, legal or administrative proceedings, suits, costs and expenses of whatsoever kind or nature, which may be brought against or incurred by the City or its employees by any person or persons for injury, loss or damage whether personal or to property arising directly or indirectly out of the creation, removal, maintenance or existence of any loam stockpile, or the Developer's operations, acts or omissions relating thereto.
- (8) The Developer shall, in accordance with the Municipal Government Act and the City of Calgary Land Use Bylaw 1P2007, as amended and replaced from time to time, submit and obtain approval of a Development Permit application for any stripping of loam operations or stockpiling of any loam intended to be performed or located on any land outside of the Development Area prior to commencing any operations relating to such stripping or loam stockpiling.

F. URBAN FOREST MANAGEMENT (TREE PLANTING)

14.12 The Developer, at its sole cost and expense shall:

- (1) plant all trees within the Development Area in conformity with the Tree Planting Guidelines and the Urban Forest Management Policy using the one tree per two lot formula and giving first priority to the planting of trees on public lands; and

- (2) plant all trees on public land within the Development Area in conformity with Park Specifications, the Tree Planting Guidelines and the Urban Forest Management Policy.

PART 15 - STREET LIGHTING, WALKWAY LIGHTING AND RESERVE PATHWAY LIGHTING

- 15.01 Prior to the installation of any street, walkway or reserve pathway lighting required pursuant to conditions of subdivision or development permit approval, the Developer shall determine whether it will retain a private third party or the City through ENMAX Power Services Corporation (EPSC) to carry out the installation, and shall notify the City of its decision within eight (8) weeks of the desired installation date.
- 15.02 Where the Developer arranges for a private third party to design and install any street, walkway or reserve pathway lighting, it shall do so in accordance with the following, all at the Developer's sole cost and expense, unless otherwise provided:
 - (1) make its own arrangements satisfactory to the Director, Roads, including approval of the electrical consultant to be used, to design and install the street, walkway and reserve pathway lighting in accordance with City Specifications;
 - (2) install all street, walkway and reserve pathway lighting (including all walkways and paved pathways located on reserve parcels forming part of the pedestrian element of the City's overall transportation network) within the Development Area, along all boundary roads and roads abutting or adjacent to all reserve parcels and other lands dedicated to the City for public use, which may be, in the opinion of the Director, Calgary Approvals Coordination, required to serve the Development Area and within offsite areas as required as a condition of subdivision or development approval or otherwise required by the Agreement;
 - (3) prior to the commencement of installation of all street, walkway and reserve pathway lighting, the Developer shall forward the proposed design and Construction Drawings to the Director, Roads and obtain his or her approval, along with confirmation from the City's Community Services and Protective Services Business Unit of the location of pathways located on reserve land;
 - (4) provide temporary street, walkway and reserve pathway lighting wherever new roadways transition to the existing roadway where future traffic signals will be installed, all of which may be beyond the boundary of the Development Area;
 - (5) Street lights are required when a lane constitutes the primary vehicle access for a residential block/lot, specifically where the residence is addressed to the access lane. These primary access lanes for residential areas must meet the lighting criteria as set out in the Design Guidelines for Street Lighting. Lighting in alleyways and back alleys that are not the primary vehicle access for a residence are not considered warranted and are not required to be lit according to the Design Guidelines for Street Lighting. Street lights are required for named walkways as the front of the house facing the MR is the legal front entrance.
- 15.03 If the Developer requests the City, through EPSC to design and install the required street lighting, walkway or reserve pathway lighting within the Development Area, in

addition to the obligations contained in paragraphs 15.02(1) through (5) inclusive, it shall proceed in accordance with the following:

- (1) (a) EPSC will design all street, walkway and reserve pathway lighting to City Specifications and receive approval from the City that the design is satisfactory;
 - (b) EPSC will submit to the City's Roads Business Unit, in a form satisfactory to the Director, Roads copies of the approved tentative plan of subdivision (in the case of a Subdivision Approval), the sidewalk and water cover sheets, plans depicting the location of Shallow Utilities, building grade plan and any other documents determined relevant by the Director, Roads; and
 - (c) following receipt of these plans, the EPSC shall provide the Developer of Record and the City with a plan showing the proposed street, walkway and reserve pathway lighting system and estimated cost (including additional costs for non-standard street, walkway and reserve pathway lighting);
 - (2) work with representatives from EPSC, the City's Roads Business Unit and other utilities and agencies to coordinate the design and construction of all street, walkway and reserve pathway lighting in a cooperative, timely and efficient manner;
 - (3) notify EPSC to construct all street, walkway and reserve pathway lighting, in accordance with EPSC timelines, prior to the completion of eighty-five (85) percent of the sidewalks, curbs, gutters and pavement;
 - (4) before construction of all street, walkway and reserve pathway lighting is required on any Major Road / Arterial Standard, the Developer shall notify EPSC in writing, in accordance with EPSC timelines, in order that the street lighting can be designed and the installation scheduled;
 - (5) EPSC will erect the street light units, as soon as practicable, following the completion of eighty-five (85) percent of the sidewalks, curbs, gutters and pavement; and
 - (6) payment for street lighting is arranged directly between the Developer and EPSC, and the Developer is responsible for actual cost of the construction of all street, walkway and reserve pathway lighting.
- 15.04 The Developer shall pay the cost of the relocation of street light poles if the lots were re-subdivided by the Developer, which cost shall be determined in the sole discretion of the Director, Roads.

- 15.05 (1) Where street lighting that is non-standard within the Roads Standards and Specifications is requested by the Developer, the Developer shall select the lighting style from the City's Roads Business Unit approved list of non-standard street lighting types.
- (2) The costs for the non-standard street lighting include construction and material costs as well as incremental costs of energy and maintenance calculated over a fifteen (15) year period.

PART 16 - EASEMENTS

- 16.01 The Developer covenants with the City that it shall grant to the City, electric, natural gas, cable, telephone and any other utility company such easements as are necessary and required at the outline plan and tentative plan stages, for the supply of the respective utilities to the Development Area or any part thereof, and further covenants that it will execute and deliver registerable easements to the City to allow for their registration at the South Alberta Land Titles Office.
- 16.02 If the Developer does not own the lots over which the easements required by the Agreement are to be located, prior to providing the City with any registerable easements, the Developer covenants to obtain same from any subsequent owner of lots over which the easements are to be located prior to the Payment Date, or the acknowledgement of the last Final Acceptance Certificate, whichever is the earlier.

PART 17 - LAND PURCHASE

A. LAND PURCHASE OPTION AGREEMENT

- 17.01 (1) Concurrent with the Development Agreement, the Developer shall grant the City an "Option to Purchase" (in the form and conditions contained in the City's Land Purchase Option Agreement), or at the request of the City enter into an "Agreement for Purchase and Sale" with the City in accordance with the City's standard form of Agreement for Purchase and Sale, for the acquisition of additional land(s) the City may require for Municipal Purposes as defined in the Municipal Government Act.
- (2) It is hereby acknowledged that when the Developer and the City enter into a Land Purchase Option Agreement or Agreement for Purchase and Sale under this Part, the date associated therewith shall be indicated in the Development Agreement and evidence thereof shall be provided and referenced in the Development Agreement to the satisfaction of the Director, Calgary Approvals Coordination.

B. LAND PURCHASE – UNSERVICED LAND

- 17.02 (1) Where land, in excess of that which the City can compel the Developer to dedicate as a condition of Subdivision Approval, is required by the City for Municipal Purposes as defined in the Municipal Government Act and is determined in the sole discretion of the Director, Calgary Approvals Coordination to be un-serviced in nature and is identified at the Outline Plan stage, the

Developer agrees to sell and the City agrees to purchase subject to the approval of City Council in accordance with 17.02(2).

- (2) The market value of lands identified pursuant to 17.02 (1) shall be determined on the basis of what might be expected to be realized if the land were in an unsubdivided state and sold in the open market by a willing seller to a willing buyer on the date on which the appraisal is made. Such appraisal shall estimate the market value of the lands as at the date of approval of the tentative plan of subdivision. The annually approved sector rates shall form the basis for negotiations and if necessary, an independent appraisal may be obtained, as a shared expense by the Developer and The City and such appraisal shall be determinative.

C. LAND PURCHASE – SERVICED LAND

17.03 (1) Where land, in excess of that which the City can compel the Developer to dedicate as a condition of Subdivision Approval, is required by the City for Municipal Purposes as defined in the Municipal Government Act and is determined in the sole discretion of the Director, Calgary Approvals Coordination to require the availability of sanitary sewers, storm sewers, sewer and water service connections, water mains and hydrants, for the Municipal Purpose for which the land is required, and is identified at the Outline Plan stage, the Developer agrees to sell and the City agrees to purchase subject to the approval of City Council in accordance with 17.03(2).

- (2) The market value of the lands identified pursuant to 17.03 (1) shall be determined as at the date of approval of the tentative plan of Subdivision. An internal valuation for the lands approved by the Valuation Review Committee shall form the basis for negotiations and if necessary, an independent appraisal may be obtained, as a shared expense by the Development and The City and such appraisal shall be determinative.

D. LAND PURCHASE - RESERVE PURPOSES

17.04 (1) Where land, in excess of that which the City can compel the Developer to dedicate as a condition of Subdivision Approval, is required by the City as reserve, the Developer agrees to sell and the City agrees to purchase such land subject to the approval of City Council.

- (2) The market value of the land shall be based on a price per hectare/acre equal to that which would have been determined for the dedicated reserves, in accordance with the provisions of the Municipal Government Act, had the Developer been obligated to pay cash-in-lieu of reserves as a condition of Subdivision Approval.

PART 18 - SECURITY

- 18.01 (1) The Developer shall provide the City with Security in the amount of:
- (a) Tier A and B Developers: Eight Percent (8%) of all estimated construction costs of the Infrastructure contemplated herein with a minimum payable amount of One Hundred and Fifty Thousand Dollars (\$150,000.00);
 - (b) Tier C Developers: Twenty-five Percent (25%) of all estimated construction costs of the Infrastructure contemplated herein with a minimum payable amount of One Hundred and Fifty Thousand Dollars (\$150,000.00);
 - (c) Tier D Developers: Sixty-five Percent (65%) of all estimated construction costs of the Infrastructure contemplated herein with a minimum payable amount of One Hundred and Fifty Thousand Dollars (\$150,000.00); or
 - (d) Tier E Developers: as determined by the Director, Calgary Approvals Coordination.
- (2) If the Developer has obtained a Construction Completion Certificate for any Infrastructure that is outside the subject Subdivision Approval area ("Offsite Infrastructure"), upon request by the Developer the City may reduce the amount of Security held by the City to the percentage required for the Developer's tier, of all estimated construction costs as required in paragraph 18.01(1) excluding the construction costs of the Offsite Infrastructure that has received Construction Completion Certificate .
- (3) (a) Regardless of the adequacy of the Security, any deposits or other sums credited by or due from the City to the Developer and any securities or other property of the Developer in the possession of the City may be applied to or set off against the obligations of the Developer hereunder and any or all other liabilities, direct or indirect, absolute or contingent, due or to be come due, now existing or hereafter arising, of the Developer to the City at any time after the occurrence and during the continuance of any defect or default.
- (b) The City may cash in any or all of the Security to secure the payment and performance of all present and future debts and liabilities of the Developer to the City, whether such debts and liabilities were incurred alone or with another or others and whether as principal, surety or guarantor, and whether matured or not matured, and whether absolute or contingent.
- (4) The tiering of the Developer for the Agreement will be based on the tiering of the Developer of Record and the successful completion of the Agreement will count towards the track record of the Developer of Record and not the other parties to the Agreement. A default under the Agreement may negatively affect the tiering of any or all of the Developers.

18.02 The Security shall not be entirely released by the City until all of the Final Acceptance Certificates have been approved and all other requirements under the Agreement have been met by the Developer (excepting only the requirements secured by an irrevocable letter of credit, performance bond or other additional Security provided by the Developer pursuant to this Part).

18.03 (1) To secure its obligations to remove loam that was stockpiled in connection with the stripping and grading of the Development Area and rehabilitation of loam stockpile site(s) contained herein, the Developer may either:

- (a) increase the value of the Security if acceptable to the Director, Calgary Approvals Coordination; or
- (b) provide the City with a new form of Security to the satisfaction of the Director, Calgary Approvals Coordination;

all of which may be used by the City to specifically secure the performance of the Developer's obligations to remove the loam stockpile(s) and rehabilitate any loam stockpile site as contemplated herein.

(2) During the term of the Agreement, if in the sole opinion of the Director, Calgary Approvals Coordination the amount of Security required pursuant to paragraph 18.01(1) is insufficient, the Director, Calgary Approvals Coordination may require that the Developer provide additional security. Any such additional security ordered to be provided by the Director, Calgary Approvals Coordination, shall be in the form of and shall form part of the Security. Such additional Security shall be in an amount that does not exceed the original Security amount required under the Agreement.

(3) (a) The City, at its option, may hold the Security specific to the loam removal in addition to other securities held by the City from other Development Areas which have stockpiled loam on the said loam stockpile site.

(b) The total amount of Security held by the City pursuant to this paragraph shall not exceed the amount which is in the sole opinion of the Director, Calgary Approvals Coordination to be the estimated cost of removing the loam stockpile and rehabilitating the said loam stockpile site.

(c) The Security required under this paragraph shall not be released until the loam stockpile is removed and the site upon which the loam stockpile was located has been rehabilitated to the satisfaction of the Director, Parks or the Director, Calgary Approvals Coordination, as the case may be, or unless the City has sufficient Security, in the opinion of the Director, Calgary Approvals Coordination, from other lands within the Development Area for such purpose.

18.04 To secure its obligations to remove loam that was stockpiled on City owned land or lands to be transferred to the City, in connection with the stripping and grading of the Development Area and rehabilitation of the loam stockpiles, the Developer may be required to provide additional Security to the City for its use:

- (1) in an amount that is, in the sole opinion of the Director, Calgary Approvals Coordination, equal to the estimated cost of removing the loam stockpile(s) and rehabilitating any loam stockpile sites;
- (2) that shall not be released until the loam stockpile(s) is removed and the site upon which the loam stockpile was located has been rehabilitated to the satisfaction of the Director, Parks or the Director, Calgary Approvals Coordination, as the case may be, or unless the City has sufficient Security, in the opinion of the Director, Calgary Approvals Coordination, from other lands within the Development Area for such purpose.

18.05 To secure its obligation to maintain final top lift asphalt, the Developer shall provide additional Security to the City for its use:

- (1) in an amount that is, in the sole opinion of the Director, Calgary Approvals Coordination, equal to the estimated cost of removing and replacing all of the final top lift asphalt, referred to above, based on the Unit Rate Schedule in effect at the time the final top lift asphalt is placed; and
- (2) that shall not be released until a Final Acceptance Certificate has been issued in respect of the final top lift asphalt referred to above.

18.06 To secure the performance of its obligation to repair builder damage to sidewalks, curbs and gutters (when located adjacent to undeveloped lots requiring building, driveway, or landscape construction) that occurs after acknowledgement of the Final Acceptance Certificate for the same, the Developer may choose one of the following options:

- (1) where the Developer continues to maintain and repair the said sidewalks, curbs and gutters following the acknowledgement of the Final Acceptance Certificate, it shall provide Security to the City (that the City shall be entitled to use in the event of a default of the obligation to maintain and repair) in the amount of Five Hundred Dollars (\$500) per undeveloped lot prior to the City's acknowledgement of the said Final Acceptance Certificate, which Security shall not be released by the City until a joint inspection with the City and the Consulting Engineer reveals:
 - (a) development of the adjacent lots (as identified by the Director, Calgary Approvals Coordination) is complete; and
 - (b) the Developer has completed, to the satisfaction of the Director, Calgary Approvals Coordination, any and all repairs to the sidewalks, curbs and gutters damaged by actions of builders adjacent to the undeveloped lots; or
- (2) where the Developer ceases to maintain and repair the said sidewalks, curbs and gutters following the acknowledgement of the Final Acceptance Certificate, in which case the City will assume the maintenance for the said sidewalks, curbs and gutters following its acknowledgement of the Final Acceptance Certificate for the same, it shall pay to the City Four Thousand Dollars (\$4,000.00) per undeveloped lot, which amount the City will be entitled to keep regardless of whether any or all of it is expended by the City for said maintenance or repair.

- 18.07 (1) The Developer shall ensure the Security under the Agreement contains a condition for the auto-renewal of the Security to the satisfaction of the Director, Calgary Approvals Coordination.
- (2) The Developer shall provide the necessary renewal of the Security to the City at least sixty (60) days before the expiration date of the Security under the Agreement.
- (3) A failure to provide the renewal of the Security is deemed to be a default under the Agreement. Upon default, the City may, without any notice to the Developer, cash in or realize upon the Security.

PART 19 - INSURANCE

- 19.01 During the term of the Agreement, the Developer shall, at its own expense, maintain with insurers allowed by the laws of the province of Alberta to issue insurance policies in Alberta, and in forms satisfactory to the City, the following insurance policies;
- (1) Commercial General Liability (CGL) insurance policy for bodily injury (including death) and property damage in an amount not less than Five Million Dollars (\$5,000,000.00) inclusive limit for any one occurrence and shall include:
- (a) the City as an Additional Insured;
 - (b) a cross liability and severability of interests clause;
 - (c) blanket contractual liability coverage;
 - (d) products and completed operations coverage; and
 - (e) non-owned automobile liability.
- (2) An automobile third party liability insurance policy (Owner's form) for bodily injury (including death) and property damage in an amount of not less than Two Million Dollars (\$2,000,000.00) inclusive limit for any one occurrence insuring each and every automobile used in the performance of the Agreement, and such insurance policy shall include specific clauses or coverage as may be required by the City Solicitor. If automobiles are not used in connection with the Agreement, the requirement for automobile third party liability insurance may be waived if requested by the Developer in writing, and at the sole discretion of the City.
- (3) Any other insurance in amounts that a prudent developer acting reasonably would deem appropriate given the scope of work, with associated risks, to be carried out under the Agreement.
- 19.02 During the term of any construction done in connection with or in any way related to the Agreement (and until work is completed and accepted by the City), the Developer shall ensure that any contractor hired by it maintains a commercial general liability insurance policy for bodily injury (including death) and property damage in an amount of not less than FIVE MILLION DOLLARS (\$5,000,000.00) inclusive limit for any one occurrence,

including products and completed operations coverage, contractual liability coverage, and a cross liability clause naming the City as an Additional Insured.

- 19.03 The insurance policies mentioned within this Part shall include provision for the City to be given thirty (30) days written notice prior to cancellation or material change of said policies of insurance. The Developer shall immediately advise the City should said policies of insurance lapse or otherwise be discontinued.
- 19.04 If more than one entity constitutes the Developer, only one of the Developers is required to have the insurance policies set out in the Agreement, but the other Developers that are parties to the Agreement must be named insureds to such policies.
- 19.05 Prior to commencing any work or operation under the Agreement, the Developer shall provide a certificate of insurance indicating compliance with the insurance requirements listed above to the Director, Calgary Approvals Coordination, and furnish documentary evidence satisfactory to the Director, Calgary Approvals Coordination of the renewal or continuance of such insurance during the life of the Agreement within ten (10) business days of any expiry date(s) thereof.
- 19.06 If the Developer fails to provide the City with any of the documents mentioned in this Part, or otherwise failing to prove to the City the existence of any required insurance, the City may, at its option, purchase on behalf and at the expense of the Developer the required insurance coverage.
- 19.07 Nothing contained in this Part or in any policy of insurance required or provided under the Agreement shall in any way whatsoever limit the liability of the Developer under the Agreement or otherwise howsoever.
- 19.08 The Developer shall be responsible for the payments of every deductible amount provided in any policy of insurance furnished pursuant to the Agreement.
- 19.09 The City may require the Developer to increase the insurance otherwise required under the Agreement. The Developer shall make any changes to the insurance as may be required by the City within thirty (30) days of being notified. The City shall act reasonably in requesting any change to the form or amount of insurance required.

PART 20 - INDEMNIFICATION

- 20.01 From the commencement of any activity, work or construction undertaken in connection with or contemplated by the Agreement:
- (1) regardless of whether or not the activity, work or construction is:
 - (a) commenced prior to the execution of the Agreement;
 - (b) along the boundaries of, within or outside the Development Area; or
 - (c) commenced prior to the execution of the Development Agreement by the City and Developer with respect to the land upon which the activity, work or construction is occurring;

- (2) the Developer shall indemnify, defend and hold harmless the City, and all of its respective officials, officers, employees and authorized representatives from and against any and all suits, actions, payments, legal or administrative proceedings, claims, demands, damages, liabilities, losses, interest, legal fees, costs and expenses sustained by the City of every nature and description, whether arising before or after the completion of any activity, work, maintenance or construction and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part, by reason of any act, error, omission or fault whether active or passive of the Developer, its employees, contractors, sub-contractors, engineers, agents or anyone acting under the Developer's direction or control or on its behalf in connection with or incidental to the Work, including the maintenance thereof.
- 20.02 If any land owned by the City, including rights of way, are subject to any charge or claim arising from or related to the Work, the Developer agrees to immediately commence and pursue legal action to remove such charge.
- 20.03 The obligation of the Developer to indemnify the City will apply to all matters arising from or related to the Work excepting a bona fide action by the Developer against the City or an action arising from the negligence or misconduct of the City, its officials, officers, employees or authorized representatives.

PART 21 - RECOVERY OF COSTS, BOUNDARY ROADS, LANES AND SCHOOL LANDS

A. GENERAL

- 21.01 When the Developer is required to install Infrastructure in Boundary Roads and Lanes, it is agreed that:
- (1) if subdivision or development of the adjoining property to such Boundary Roads and Lanes takes place within two (2) years from the date of the acknowledgement of each Construction Completion Certificate for Boundary Roads and Lanes:
- (a) the Developer of Record shall be entitled to recover a portion of the costs (exclusive of Oversize) from the owner of adjoining property for the sidewalks, curbs and gutters, catch basins and leads, street lighting, paved roads and paved or gravelled lanes that are installed or constructed in the Boundary Roads and Lanes as outlined in paragraph 21.01(3); and
- (b) the amount of the recovery by the Developer of Record shall be computed using the Unit Rate Schedule or using the Unit Rates in effect in the year of recovery, whichever is the lesser.
- (2) If no subdivision or development of the adjoining property takes place within two (2) calendar years from the date of the acknowledgement of each Construction Completion Certificate:
- (a) the City shall pay to the Developer of Record a portion of the costs (exclusive of Oversize) of the sidewalks, curbs and gutters, catch basins

and leads, street lighting, paved roads and paved and/or gravelled lanes constructed in the Boundary Roads and Lanes as outlined in paragraph 21.01(3); and

- (b) the amount of the payment to be made by the City to the Developer of Record shall be computed using the Unit Rate Schedule or the Unit Rates in effect two (2) years from the year of the Agreement, whichever is the lesser.
- (3) (a) The Developer understands that any developer of the property immediately adjacent to a Boundary Road, by way of subsequent Development Agreement, shall be required to repay to the City the Boundary Costs paid by the City whether the surface improvements are used or not.
- (b) In the event that the Actual Cost to the City of the design and construction of the Boundary Roads and Lanes exceeds the Unit Rates in effect at the time the adjacent land is developed, the current Unit Rates will be used to calculate the cost recovery payable to the City.
- (c) If payment of the Boundary Costs referred to herein is delayed by the City beyond the two (2) year period, the amount of the payment to be made by the City to the Developer of Record shall be computed using the Unit Rate Schedule or using the Unit Rates in effect at the time the payment is made by the City, whichever amount is the lesser.
- (d) If the Developer fails to invoice the City for the Boundary Costs immediately when due, the amount of the payment to be made by the City to the Developer of Record shall be computed using the Unit Rate Schedule or using the Unit Rates in effect two (2) years from the Effective Date, whichever amount is the lesser.
- (4) Notwithstanding anything contained in the Agreement to the contrary, the Developer shall not be entitled to a Boundary Cost payment from the City in those cases where the surface improvements are constructed adjacent to land that is not developable at the Effective Date, in the opinion of the Director, Calgary Approvals Coordination, such as parks, Provincial parks, reserve parcels, railway rights-of-way, AltaLink corridors, lands outside the City limits, service roads, or roads that are a Major Road / Arterial Standard.

B. ENDEAVOURS TO ASSIST IN COST RECOVERY

- 21.02 (1) (a) The City shall endeavour to assist the Developer in the recovery of a portion of the costs incurred by it (being the proportionate share of costs based on length of frontage along Boundary Roads and Lanes, exclusive of Oversize) relating to any sanitary sewer, storm sewer, water main and hydrant installations in the Boundary Roads and Lanes, and extensions of these utilities to and from adjacent areas from the developer of the adjoining property before the City's Calgary Approvals Coordination business unit provides a clearance letter to the City's Community Planning business unit to facilitate the release of building permits to the

- developer(s) for the said adjoining property under a development agreement, provided that such underground utility will be utilized by the developer of the adjoining property.
- (b) The endeavour to assist with costs payable in accordance with subparagraph (a) will be calculated using the Unit Rates in effect in the year of the recovery ("**Year of Recovery**"). For the purposes of this subparagraph (b), the Year of Recovery shall be deemed to be the year of the Development Agreement executed by the developer of the adjoining property.
- (2) The City shall endeavour to assist the Developer in the recovery of a portion of the costs incurred by it for Storm Water Pond Facilities from other developers that benefit from such facilities, provided that such Storm Water Pond Facilities will be utilized by the benefiting developers, prior to the execution of the Development Agreement by such benefiting developers.
- (a) The endeavour to assist with costs payable in accordance with subparagraph 21.02(2) will be calculated based on actual itemized costs certified by an engineering consultant who is a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta and substantiated by paid invoices for such costs, if and as required. Cost sharing for the Storm Water Pond Facilities will be proportional and based on land area ownership within the pond catchment area as determined by the Pond Report approved by the City. Recoverable Storm Water Pond Facilities costs include the costs incurred or payments made in respect of the excess capacity together with interest as set out in Schedule "3" of this Agreement.
- (3) Subject to subparagraphs (4) and (5) the Developer is only entitled to recover the endeavours to assist payable herein within twenty (20) years from the date of this Agreement. Upon expiry of the endeavour to assist period, which for greater certainty is twenty (20) years from the date of this Agreement unless extended under subparagraph (5), the Developer thereafter shall make no demand or file any action or claim against the City for the payment thereof.
- (4) The City shall not endeavour to assist the Developer in the recovery of costs in accordance with the Agreement if the Developer ceases or appears to have ceased operations in the reasonable opinion of the City.
- (5) The Director, Calgary Approvals Coordination may extend the time period for recovery for an endeavour to assist for Storm Water Pond Facilities in writing if the Developer makes a written request to the Director, Calgary Approvals Coordination to extend the time period at least thirty (30) days before the expiration of the time period.
- (6) It is understood and agreed that if the parties with respect to endeavours to assist or Boundary Cost recoveries cannot agree on the costs payable to the Developer, all parties acting reasonably and in good faith, then any party may request that the City mediate the dispute and the decision of the Director,

Calgary Approvals Coordination, acting reasonably, resulting from the mediation of a dispute shall be final and binding amongst the disputing parties.

- (7) The City may recover from the disputing parties the direct costs it incurs to resolve any dispute under subparagraph (6), for which the disputing parties shall be jointly and severally liable.
- (8) Nothing in the Agreement requires the City to endeavour to assist the Developer in the recovery of costs that the City or the Developer is prevented by law from recovering.

C. SCHOOL SITES

- 21.03 (1) If the School Boards are able to indicate School Site servicing requirements prior to the approval of the Construction Drawings, the Developer shall:
- (a) provide underground utilities, at no cost to the City or the School Boards, in the line assignment approved by the City in a street or lane immediately adjoining the School Site;
 - (b) provide sanitary sewer, storm sewer and water service connections from the mains in the adjacent street or lane to the property line of the School Site, and the Developer shall be entitled to recover the full cost thereof from the School Board at the Developer's tendered contract prices when the work has been certified as complete; and
 - (c) provide pre-servicing of the School Site with the electrical conduits required for the provision of three phase electrical power to the School Site, and the Developer of Record shall be entitled to recover from the School Board the full cost of the installation of the said electrical conduits.
- (2) If the School Boards are unable to indicate School Site servicing requirements prior to the approval of the Construction Drawings, the School Boards, in addition to the cost of the service connections, shall pay the full cost of all the sanitary sewer, storm sewer and water main extensions that may be required to service the School Site.
- 21.04 After the work referred to in paragraph 21.03(1) has been certified by the City as complete, the Developer of Record shall submit calculations to the Director, Calgary Approvals Coordination for approval for the costs of the service connections, main extensions and electrical conduits referred to therein. Following approval of the calculations by the Director, Calgary Approvals Coordination, the Developer of Record may submit an invoice to the School Board concerned for repayment. The Developer shall make its own arrangements directly with the School Board concerned for repayment.

PART 22 - CONSTRUCTION COMPLETION CERTIFICATES**A. CONSTRUCTION COMPLETION**

22.01 The following items shall be considered "complete" or "completed" when all written instructions or directions given to the Developer of Record by the Director, Calgary Approvals Coordination have been resolved to the satisfaction of the Director, Calgary Approvals Coordination, the following items have been constructed in accordance with the Construction Drawings and the following conditions have been met:

(1) Sanitary Sewers and Storm Sewers

- (a) All pipes are of the size and laid to the grades as approved on the Construction Drawings, all manholes are completed with properly formed inverts, are undamaged and are free from obstructions and foreign matter such as rocks, silt, and gravel.
- (b) The manhole rims and covers shall be finished to the approved design grade of the lane or road in which they are installed.

(2) Storm Water Pond Facilities

- (a) All piping, subdrainage system and associated pond structures, including but not limited to inlets/outlets, control structures, and catch basins, have been laid to approved grades and are free of accumulated sediment and gravel and other obstructions such as rocks, construction material, and leaves.
- (b) Final grading and pond design volume requirements have been constructed to approved grades, including but not limited to side slopes, bottom slopes and spillway elevation and must not show signs of erosion or areas of standing water (dry ponds).
- (c) Vegetation must be installed and approved by the City's Parks Business Unit, including but not limited to seeding, sodding, plants and trees, and the irrigation must be approved by the Director, Parks;
- (d) Monitoring equipment and other specialized structures, including but not limited to automatic gates, have been installed and are operating as per approved drawings, unless the time period for installation and operation has been extended by the City's Water Resources Business Unit, and operating manuals have been supplied as requested.
- (e) Where required, all water quality monitoring requirements have been established with the Water Quality Group within the City's Water Resources Business Unit.
- (f) As-built Drawings for items (a) and (b) above have been submitted to and approved by the City's Water Resources Business Unit.

- (g) The storm water reuse system shall be listed and administered on a separate Construction Completion Certificate.
- (3) Water Mains and Hydrants
- (a) The water mains have been installed to the approved grades, tested, inspected, backfilled and sterilized to the satisfaction of the Director, Calgary Approvals Coordination, and are ready for the supply of water to the public.
 - (b) All the main and service connection valves and curb boxes, fire hydrants, pressure reducing valve chambers and other appurtenances are operable and undamaged and at elevations which are satisfactory to the Director, Calgary Approvals Coordination.
- (4) Sewer and Water Service Connections
- (a) The sewer and water service connections have been installed to the approved grades, tested, cleaned, inspected and backfilled and all appurtenances are operable and undamaged, all to the satisfaction of the Director, Calgary Approvals Coordination.
 - (b) The water mains and hydrants are deemed to be complete.
- (5) Sidewalks, Curbs, Gutters and Catch Basins
- (a) All sidewalks, curbs, gutters, concrete pedestrian bus stop aprons, catch basins, hard surfaced medians, traffic islands and Boulevards shall be fully constructed to the approved design grade and free of damage, except:
 - (i) at lane crossings and easements/rights of way wherein utilities are to be installed; however, not included as exceptions are underground wiring, service connections and sidewalks on fill; and
 - (ii) where the installation of the electric power, gas, telephone and cable utilities has caused the omission of construction of portions of the sidewalks, where the total length of the omitted sections do not exceed fifteen percent (15%) of the total length of the sidewalks being constructed.
 - (b) All work shall be free from conditions deemed to be hazardous by the Director, Calgary Approvals Coordination.
 - (c) Those portions omitted shall be completed within one (1) year from the acknowledgement of the Construction Completion Certificate for adjacent sidewalks, curbs and gutters, which shall be a condition of the acknowledgement of the Construction Completion Certificate.
 - (d) Should the omitted items not be completed within one (1) year from the date of the acknowledgement of the Construction Completion Certificate,

then the maintenance period for the entire piece of Infrastructure shall be extended one (1) year from the date of the completion of the omitted items.

(6) Paved Roads, Paved Lanes and Paved Walkways

- (a) All catch basin leads, manhole frames and covers, water main valves, hydrant valves and valve operating mechanisms shall have been completed in the paved roads, paved lanes and paved walkways, prior to the acknowledgement of the Construction Completion Certificate for paved roads, paved lanes and paved walkways.
- (b) The paved road, paved lane and paved walkway surfaces shall be constructed except where:
 - (i) the installation of the electric power, gas, telephone and cable utilities has caused the omission of construction of portions of the asphalt surface but the gravel base is in place, and in any event the total length of the omitted sections shall not exceed fifteen percent (15%) of the total length of the paved roads, paved lanes and paved walkways being constructed; or
 - (ii) when the Director, Calgary Approvals Coordination deems it necessary to construct portions of any paved walkways at a later date to facilitate the landscaping with adjoining lots.
- (c) The construction of the said omitted sections of asphalt surface shall be constructed within one (1) year from the acknowledgement of the Construction Completion Certificate for the adjacent paved roads, paved lanes and paved walkways.
- (d) Should the omitted sections not be completed within one (1) year of the date from the acknowledgement of the Construction Completion Certificate, the maintenance period shall be extended one (1) year from the date of the completion of the omitted sections.
- (e)
 - (i) Notwithstanding the foregoing, the placement of the final top lift asphalt may be omitted upon approval being given by the Director, Calgary Approvals Coordination.
 - (ii) The omitted final top lift asphalt must be placed at least thirty (30) days prior to the City issuing the Final Acceptance Certificate for paved roads, paved lanes and paved walkways as required under PART 24 (Final Acceptance Certificates) herein.
 - (iii) In addition, the final top lift asphalt shall also be subject to the requirements under PART 18 (Security) and PART 23 (Maintenance) herein.

- (7) Gravelled Lanes
- (a) A Construction Completion Certificate will be issued for gravelled lanes after the first spring thaw, being that time period between March 1st and June 1st inclusive of the previous year, if the Construction Completion Certificates for all the underground utilities have been issued prior to the commencement of the first spring thaw.
 - (b) The lanes shall be graded and gravelled to proper grade and cross-sectioned and backsloped in accordance with the Roads Standards and Specifications.
 - (c) All underground distribution facilities (electric power, gas, telephone and cable) in the lanes have been installed as required by the subdivision or development permit approval.
- (8) Surface Drainage Facilities – When all Surface Drainage Facilities have been constructed to the satisfaction of the Director, Calgary Approvals Coordination.
- (9) Sound Attenuation Fencing – When all of the work identified on the Construction Drawings has been constructed and completed to the satisfaction of the Director, Calgary Approvals Coordination.
- (10) Fence
- (a) A Construction Completion Certificate is required if a fence is constructed pursuant to PART 11 (Fencing) herein on City owned property.
 - (b) The design, specifications and maintenance period of the said fence must first be approved by the Director, Calgary Approvals Coordination before commencing construction of the fence.
- (11) Landscaping for Reserve Parcels, Public Utility Lots, soft landscaping of medians, boulevards, traffic islands and underground irrigation
- (a) All underground irrigation and water services, water meter boxes, and water meters required for:
 - (i) Sub-neighbourhood Parks;
 - (ii) Linear Parks;
 - (iii) those portions of the Neighbourhood Park, Community Park, and District Parks which are designated as decorative parks, ornamental parks and tot lots; and
 - (iv) only water services for reserve parcels other than environmental reserves have been installed, tested and inspected;
 - (b) the “as constructed” drawings for the parcels described in subparagraph (a) are in compliance with the City’s Community Services

and Protective Services Business Unit's requirements, showing the actual location of the underground irrigation as installed by the Developer;

- (c) the "as constructed" drawings referred to in subparagraph (b) have been submitted to and approved by the Director, Parks; and
 - (d) the Sub-neighbourhood Parks, Linear Parks, decorative parks, ornamental parks, tot lots and public utility lots and the soft landscaping of the medians, Boulevards and traffic islands have been graded, loamed, and seeded, the trees have been planted and, if applicable, the paved reserve pathways have been constructed in accordance with the Park Specifications.
 - (e) The following landscaping components shall be listed and administered on separate Construction Completion Certificates in accordance with the following groupings:
 - (i) all reserve parcels (Sub-neighbourhood Parks, Linear Parks and those portions of the Neighbourhood Park, Community Park, and District Parks designated as decorative parks, ornamental parks and tot lots) public utility lots and rights-of-way;
 - (ii) all medians, Boulevards and traffic islands;
 - (iii) all Environmental Reserves; and
 - (iv) all Storm Water Pond Facilities.
- (12) Optional Subdivision Amenities – All Optional Subdivision Amenities have been constructed, inspected and approved by the Director, Calgary Approvals Coordination.
- (13) Street Lighting, Walkway Lighting, Reserve Pathway Lighting – All street lighting, walkway lighting and reserve pathway lighting that is installed within the Development Area through the Developer's private arrangement and independently of the City is fully constructed in accordance with City Specifications, the approved design and construction standards and drawings, and free of damage.

B. PROCEDURE FOR OBTAINING CONSTRUCTION COMPLETION CERTIFICATES

- 22.02 (1) Upon completion of the Infrastructure, or portion thereof, excluding Optional Subdivision Amenities and landscaping of reserve parcels, public utility lots and underground irrigation, the Consulting Engineer shall arrange a joint inspection(s) with the appropriate City business unit to determine whether or not the Infrastructure, or portion thereof, is acceptable to the City.
- (2) If the infrastructure or portion thereof is acceptable to the City, the Consulting Engineer or Landscape Architect, and the City shall execute a Joint Inspection Certificate, which shall include any outstanding deficiencies.

- 22.03 The Consulting Engineer shall cause to be prepared and issued, four (4) copies of a Construction Completion Certificate for the Infrastructure completed, duly signed, sealed and certified by the signing officer of the Consulting Engineer for each utility and improvement completed or by the Landscape Architect for landscaping of reserve parcels, public utility lots, soft landscaping of medians, traffic islands and Boulevards, and underground irrigation, including the projected earliest maintenance expiry date.
- 22.04 Where applicable, the Developer shall submit a separate certificate duly signed, and sealed, by a Professional Engineer registered in the Province of Alberta who is a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta certifying that all the backfilling operations, carried out by the Developer, have been carried out in accordance with the backfilling specifications and Parks Specifications of the City.
- 22.05 In addition to all other requirements contained herein, prior to the acknowledgement of the Construction Completion Certificate for water mains and hydrants, the Developer shall obtain from the Director, Water Resources, certification of the pressure testing, chlorination and water sampling of the said water mains.
- 22.06 The Developer, within thirty (30) days of the acknowledgement of each Construction Completion Certificate shall forward to the Director, Calgary Approvals Coordination:
- (1) four (4) copies of the said Construction Completion Certificate for acknowledgement of receipt;
 - (2) four (4) copies of the Joint Inspection Certificate;
 - (3) four (4) copies of the compaction testing report; and
 - (4) four (4) copies of an 8 ½ inch by 11 inch map indicating that the Infrastructure has been completed.
- 22.07 Within thirty (30) days of receipt of each Construction Completion Certificate, the City shall acknowledge the receipt of or reject the Construction Completion Certificate, whichever the case may be.
- 22.08 Notwithstanding paragraph 22.07 or anything to the contrary herein, upon receipt of a Construction Completion Certificate for sidewalks, curbs, gutters, concrete pedestrian bus stop aprons and catch basins or for paved roads, paved lanes and paved walkways, which may include omissions as specifically authorized by the Agreement, the City shall within thirty (30) days acknowledge receipt of the said Construction Completion Certificate.
- 22.09 (1) Notwithstanding paragraphs 22.07, 22.08 or anything to the contrary contained herein, the Director, Calgary Approvals Coordination may withhold acknowledgement of receipt of the said Construction Completion Certificate and return it to the Consulting Engineer if in his or her opinion the Infrastructure, or portion thereof, is not complete.

- (2) The Developer shall correct the defects or deficiencies and subsequently resubmit the said Construction Completion Certificate with a revised projected earliest maintenance period expiry date.
- 22.10 (1) The Developer, upon acknowledgement of the Construction Completion Certificate for water mains and hydrants shall cause to be issued to the City's Fire Department a letter and plan certifying the completed and operable hydrants constructed and located within the area covered by the water mains and hydrants Construction Completion Certificate.
- (2) The letter and plans shall be sent to:
- Strategic Services Division Attention: Assistant Fire Marshall
 City of Calgary Fire Department
 4124 – 11 Street SE
 Calgary AB T2G 3H3
- and
- Strategic Services Division Attention: Response Mapping
 City of Calgary Fire Department
 4124 – 11 Street SE
 Calgary AB T2G 3H3
- 22.11 The Construction Completion Certificate may be issued if sanitary sewer, storm sewer, and water service connections are not completed to church sites, School Sites and commercial areas where the final layout is unknown.
- 22.12 (1) The Developer shall complete all outstanding deficiencies noted on the Joint Inspection Certificate within the time frames specified on the Joint Inspection Certificate.
- (2) If the Construction Completion Certificates have been issued and any outstanding deficiencies have not been corrected within the time frames specified on the Joint Inspection Certificate, the Director, Calgary Approvals Coordination may, in his or her sole discretion, either reject the Construction Completion Certificate or extend the maintenance period for the length of time calculated from the first identification of the deficiencies until the deficiencies are corrected to the satisfaction of the appropriate City Business Unit and the Director, Calgary Approvals Coordination.

C. PROCEDURES – PARKS

- 22.13 Notwithstanding paragraphs 22.02 through 22.12 inclusive, the following procedures shall apply to the Construction Completion Certificates for Optional Subdivision Amenities and landscaping of reserve parcels, public utility lots and underground irrigation:
- (1) The Landscape Architect or Consulting Engineer, upon completion of the landscaping requirements contained in paragraph 22.02 and as required by the Director, Calgary Approvals Coordination, shall arrange a joint inspection(s) with

the City's Parks Business Unit to determine whether or not landscaping is acceptable to the City;

- (2) If the landscaping is acceptable to the City, the Landscape Architect or Consulting Engineer and the City shall execute a Joint Inspection Certificate, which shall include any outstanding deficiencies;
- (3) The Developer shall submit to the Director, Calgary Approvals Coordination:
 - (a) four (4) copies of the Construction Completion Certificate for acknowledgement of receipt;
 - (b) four (4) copies of the Joint Inspection Certificate; and
 - (c) four (4) copies of an 8 ½ inch by 11 inch map indicating that the Infrastructure has been completed;
- (4) Where applicable, the Developer shall submit a separate certificate duly signed, and sealed by a Professional Engineer registered in the Province of Alberta who is a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta certifying that all the backfilling operations carried out by the Developer, have been carried out in accordance with the backfilling specifications and Parks Specifications of the City;
- (5) Upon receipt of the Construction Completion Certificates and Joint Inspection Certificates, the Director, Calgary Approvals Coordination shall sign the Construction Completion Certificate and shall indicate thereon the projected earliest maintenance period expiry date.
- (6) If the Construction Completion Certificate(s) have been issued and any outstanding deficiencies have not been corrected within the time frames specified on the Joint Inspection Certificate, the Director, Calgary Approvals Coordination may, in his or her sole discretion, either reject the Construction Completion Certificate(s) or extend the maintenance period for the length of time calculated from the first identification of the deficiencies until the deficiencies are corrected to the satisfaction of the Parks Business Unit and the Director, Calgary Approvals Coordination.

PART 23 - MAINTENANCE

A. GENERAL

- 23.01 (1) After the acknowledgement of each Construction Completion Certificate, the Developer shall be responsible for any and all repairs, cleaning and replacements to the Infrastructure that may, in the Director, Calgary Approvals Coordination's sole opinion, become necessary from any cause whatsoever, up until the acknowledgment of the Final Acceptance Certificate.
- (2) Notwithstanding subparagraph (1), the Developer shall be responsible for any and all repairs and replacements necessitated by builder damage to sidewalks,

curbs and gutters after the acknowledgement of the Final Acceptance Certificate as outlined in paragraph 18.06.

- 23.02 (1) If during the construction and maintenance period any defects become apparent in any portion of the Infrastructure installed or constructed under the Agreement and the Director, Calgary Approvals Coordination requires repairs or replacements to be done, the Developer, within thirty (30) days after the delivery of notice in writing to the Developer, or within such other time as is agreed to or specified by the Director, Calgary Approvals Coordination acting reasonably, shall cause such repairs or replacements to be done.
- (2) If, in the sole opinion of the Director, Calgary Approvals Coordination, any emergency arises, the City may carry out the repairs or replacement and the Developer shall reimburse the City for the full cost of such repairs or replacements, failing which the City may recover full cost of such repairs or replacement in the manner provided in paragraph 25.01.
- 23.03 The Developer shall be responsible for the maintenance of all Infrastructure installed and constructed by it, which maintenance includes, but is not limited to:
- (1) remedying the failure of or damage to underground utilities resulting from defective materials, or improper installation;
 - (2) settlement of ditches;
 - (3) grading;
 - (4) gravelling;
 - (5) street sweeping must occur when required, and at a minimum of every seven days, in areas that are impacted by offsite tracking of mud and debris;
 - (6) repairs to cleaning, and/or replacement of road and lane surfaces including any access roads specified herein, sidewalks, curbs and gutters, bridges, culverts, Surface Drainage Facilities, catch basins and catch basin leads;
 - (7) adjustment and repairs to watermains, main valves, water hydrants, hydrant valves, pressure reducing valve chambers, water service connections and valves and valve operating mechanisms including the casings enclosing these mechanisms;
 - (8) repairs, replacements and adjustments to sewer mains, sewer service connections, manholes, manhole frames and covers, repairs or replacement of trees, landscaping and underground irrigation;
 - (9) street lighting, walkway lighting and reserve pathway lighting that is installed within the Development Area through the Developer's private arrangement and independently of the City; and
 - (10) such other repairs as may be required by and to the satisfaction of the Director, Calgary Approvals Coordination.

- 23.04 (1) The Developer agrees that maintenance is a continuous operation and obligation that must be carried on until the date of acknowledgement of the Final Acceptance Certificate for each portion of the Infrastructure.
- (2) The City shall not release the Developer from liability of any kind until all repairs or replacements required by the Director, Calgary Approvals Coordination as noted in the City's Final Inspection Reports have been made.
- (3) The City will only provide snow and ice removal for road and paved lanes where a Construction Completion Certificate has been issued, the road or lane is paved, all signage and lights have been installed, and the road or lane is open to the public.

B. SANITARY SEWER, STORM SEWER AND STORM WATER POND FACILITIES MAINTENANCE

- 23.05 (1) (a) The City, from the date of the Construction Completion Certificate, will flush and clean out the sanitary and storm sewers as required in ordinary maintenance procedures.
- (b) The cost of removing obstructions caused by gravel, rocks or silt which is other than that deposited from sewage, may be charged to the Developer.
- (2) Until the respective Final Acceptance Certificate is issued for each portion of the Infrastructure, the Developer shall be responsible for:
- (a) inspecting and maintaining on a regular basis, all piping, subdrainage and associated structures (inlets/outlets, control structures, catch basins, etc.) and shall keep them free from operational problems (which includes but is not limited to accumulated sediment and gravel and other obstructions such as rocks and leaves, that can impact operations and function);
- (b) ensuring all monitoring equipment is and remains operational including any repairs or maintenance that may be required;
- (c) maintaining and repairing all grading as required;
- (d) maintaining and/or replacing all vegetation as required; and
- (e) submitting water quality monitoring reports to the City's Water Resources Business Unit as required.

C. WATER HYDRANTS, MAIN AND SERVICE VALVE BOXES

- 23.06 The Developer shall be responsible for adjusting all hydrants, hydrant and main valve boxes and all service valve boxes to the established grades as they are developed, and maintaining the valves and appurtenances in operating condition until such time as the City assumes the responsibility for the maintenance of streets and lanes as provided in the Agreement.

D. MAINTENANCE PERIODS

23.07 The Developer, at its sole cost and expense, shall maintain the following Infrastructure for the following minimum time periods following the acknowledgement of the relevant Construction Completion Certificate, or until the acknowledgement of the relevant Final Acceptance Certificate, whichever is later:

- (1) Sanitary Sewers: one (1) year;
- (2) Storm Sewers: one (1) year;
- (3) Storm Water Pond Facilities: subject to subsection (h), three (3) years:
 - (a) All piping, subdrainage systems and associated pond structures (inlets/outlets, control structures, catch basins, etc.) shall be free of accumulated sediment and gravel and other obstructions such as rocks and leaves;
 - (b) Storm Water Ponds – The Developer shall remove all accumulated sediment and gravel such that the original contours/grades (pond bottom) are met;
 - (c) Wetlands – The Developer, in the sole discretion of the City, shall either clean the pond (including the removal of accumulated sediment and gravel such that the original contours/grades (pond bottom) are met) or shall deposit the sum of Fifty Thousand Dollars (\$50,000.00) with the City for future cleaning;
 - (d) All pond staging must be completed (a Final Acceptance Certificate will not be issued for an individual stage of a pond);
 - (e) Vegetation and landscaping (grass, trees, plants, etc.) must be established and approved by the City's Water Resources and Parks Business Units. Irrigation systems must be approved by the City's Parks Business Unit;
 - (f) Where required, water quality monitoring requirements must be met; and
 - (g) Where an extension has been granted by the City's Water Resources Business Unit, monitoring equipment and other specialized structures have been installed and operating properly for a minimum of one summer.
 - (h) Stormwater reuse system – The maintenance period will be as directed by the Director, Calgary Approvals Coordination. The storm water reuse system must be approved by the City's Water Resources Business Unit. The storm water reuse pumps, pumphouse, treatment distribution piping and irrigation equipment within the adequate park space(s) must be run continuously at the design capacity set in the approved plans for one (1) year and approved by the City's Water Resources and Parks Business Units.

- (4) Water Mains & Hydrants: One (1) Year;
- (5) Sewer & Water Service Connections: One (1) Year;
- (6) Sidewalks, Curbs and Gutters, Concrete Pedestrian Bus Stop Aprons and Catch Basins: Two (2) Winter Seasons, provided that:
 - (a) Final Acceptance Certificates for all the underground utilities have been issued;
 - (b) in addition, the Developer shall be responsible for any and all repairs and replacements necessitated by builder damage to sidewalks, curbs and gutters after the acknowledgement of the Final Acceptance Certificate as outlined in paragraphs 18.06 and 23.01.
- (7) Paved Roads, Paved Lanes and Paved Walkways, including but not limited to manhole frames and covers, water main and hydrant valves and valve operating mechanisms, cathodic protection test points, water service connection valves and valve operating mechanisms, and catch basin leads installed in paved road, paved lanes or paved walkways: Two (2) Winter Seasons, provided that:
 - (a) the underground utilities have in the opinion of the Director, Calgary Approvals Coordination been installed and compacted in other than winter conditions;
 - (b) if installed in winter conditions, the backfilling has been properly compacted with granular material; or
 - (c) Final Acceptance Certificates for all underground utilities have been issued.
- (8) (a) Gravelled Lanes, including but not limited to manhole frames and covers, water main and hydrant valves and valve operating mechanisms, cathodic protection test points, water service connection valves and valve operating mechanisms installed in these lanes: One (1) year;
- (b) If the Developer fails to obtain the Final Acceptance Certificate for gravelled lanes prior to the onset of the second Winter Season for the installation of the Infrastructure located underground, the Developer shall reshape the lanes to design grades and slopes, gravel where considered necessary by the Director, Calgary Approvals Coordination, repair and adjust manholes, hydrants and all valves, cathodic protection test points, catch basins and catch basin leads provided that:
 - (i) at least seventy five percent (75%) of the lots in the Development Area that are lane serviced all have the underground house services installed by the Developer, natural gas provider, telephone and cable services providers; and
 - (ii) no single lane has less than fifty percent (50%) of the house services installed.

- (9) Surface Drainage Facilities, which shall include all overland drainage control facilities except concrete swales: One (1) year.
- (10) Sound Attenuation Fence:
- (a) if the sound attenuation fence is constructed in accordance with the Roads Standards and Specifications: two (2) years; or
 - (b) if the sound attenuation fence is constructed to a specification other than the Roads Standards and Specifications, then:
 - (i) the fence design and specification must be approved by the Director, Calgary Approvals Coordination prior to the construction of the sound attenuation fence; and
 - (ii) the Director, Calgary Approvals Coordination shall establish the maintenance period for the sound attenuation fence in his or her sole discretion.
- (11) Screening Fence:
- (a) if the screening fence is constructed in accordance with the Roads Standards and Specifications: two (2) years; or
 - (b) if the screening fence is constructed to a specification other than the Roads Standards and Specifications, then:
 - (i) the fence design and specification must be approved by the Director, Calgary Approvals Coordination prior to the construction of the screening fence; and
 - (ii) the Director, Calgary Approvals Coordination shall establish the maintenance period for the screening fence in his or her sole discretion.
- (12) Landscaping for reserve parcels, public utility lots, soft landscaping of medians, Boulevards, traffic islands and underground irrigation: One (1) Growing Season, provided that:
- (a) all Sub-neighbourhood Parks, Linear Parks and those portions of the Neighbourhood Park, Community Park, and District Parks designated as decorative parks, ornamental parks, tot lots, and public utility lots shall have been graded, loamed and seeded in accordance with Park Specifications;
 - (b) there is a satisfactory catch of grass in the opinion of the Director, Parks;
 - (c) if applicable, the paved reserve pathway has been constructed; and
 - (d) all other reserve parcels have been graded and loamed and the construction of all the necessary underground irrigation and fencing

required under the Agreement have been completed to the satisfaction of the Director, Parks.

- (13) Optional Subdivision Amenities shall be maintained in accordance with the time period to be determined by the Director, Calgary Approvals Coordination in the Development Agreement or as otherwise agreed to in writing between the Parties;
- (14) Street lighting, walkway lighting and reserve pathway lighting that is installed within the Development Area through the Developer's private arrangement and independently of the City, the Developer shall maintain all components of the street lighting, walkway lighting and reserve pathway lighting for two (2) years;
- (15) (a) Final top lift asphalt on paved roads, prior to the placement of which the Developer shall obtain the approval of the Director, Calgary Approvals Coordination, placed on any:
 - (i) Major Road / Arterial Standard at any time, in addition to the Security requirements contained herein: two (2) years; or
 - (ii) road, other than a Major Road / Arterial Standard, after September 15 in any year, in addition to the Security requirements contained herein: one (1) year.
- (b) The maintenance obligation pertaining to final top lift asphalt is limited to installation work and performance of materials, excluding third party damage or settlements.

PART 24 - FINAL ACCEPTANCE CERTIFICATES

- 24.01 (1) (a) Not less than 3 months prior to the earliest maintenance expiry date as specified in the relevant Construction Completion Certificates for the Infrastructure or portion thereof noted in paragraphs 23.07(1), (2), (3), (4), (5), (8), (9), (10), (11) and (14), the Consulting Engineer, Contractor and the City, and for the infrastructure or portion thereof noted in paragraph 23.07(12), the landscape architect and the City, shall inspect the Infrastructure or portion thereof and the Consulting Engineer shall ensure that the Contractor corrects all damage, defects and deficiencies howsoever caused, except that caused by the negligence of the City or its agents, employees or servants in the performance of their duties on behalf of the City.
- (b) Subsequent to the correction of the said damage, defects and deficiencies, the Consulting Engineer and the City, or landscape architect and the City, as the case may be, shall execute a Joint Inspection Certificate.
- (c) Following the execution of the Joint Inspection Certificate referred to in subsection (b), the Consulting Engineer, or the landscape architect, as the case may be, shall submit to the City for the Infrastructure or portion thereof, four (4) copies of the Final Acceptance Certificate, duly signed

and sealed by a signing officer of the Consulting Engineer or the landscape architect, as the case may be, together with the Joint Inspection Certificate.

- (2) (a) Notwithstanding paragraph 24.01(1), following the end of the second winter for the Infrastructure or portions thereof referenced in paragraphs 23.07(6) and (7), and not less than three (3) months prior to the earliest maintenance period expiry date as specified in the relevant Construction Completion Certificates, or earlier if weather conditions permit, the City, Consulting Engineer and Contractor shall make a complete joint inspection of the same constructed pursuant to the Agreement.
- (b) The City and the Consulting Engineer shall prepare a joint report of any damage, defects and deficiencies discovered and shall forward a copy thereof to the Developer and his or her Consulting Engineer.
- (c) Following the correction of all damage, defects and deficiencies by the Contractor, the Consulting Engineer and the City, shall execute a Joint Inspection Certificate.
- (d) Following the execution of the Joint Inspection Certificate, the Consulting Engineer shall submit to the City, for that portion of the Infrastructure referenced in paragraphs 23.07(6) and (7), four (4) copies of the Final Acceptance Certificate, duly signed and sealed by a signing officer of the Consulting Engineer, together with the Joint Inspection Certificate.
- (3) (a) Within thirty (30) days of the City's receipt of the Final Acceptance Certificate, the Director, Calgary Approvals Coordination shall acknowledge the Final Acceptance Certificate provided that if the inspection shows, to his or her satisfaction, that the Infrastructure or portion thereof is complete and in accordance with the requirements of the Agreement, and that all top lift asphalt has been placed for at least thirty (30) days from the date of the said Director, Calgary Approvals Coordination's approval.
- (b) In the event the conditions of subparagraph (3)(a) are not met, the Director, Calgary Approvals Coordination may reject the Final Acceptance Certificate and return to the Consulting Engineer the unsigned Final Acceptance Certificate and a written report of the defects and deficiencies to be corrected.
- (c) The Developer shall correct the defects and deficiencies in accordance with the said written report and shall resubmit the Final Acceptance Certificate to the City for acknowledgement.

24.02 The Developer also agrees, that until all of its obligations to supply final plans, easements and pay all monies owing to the City under the Agreement have been fulfilled, the City may create an FAC requirement for the unfulfilled obligation, refuse to accept the Development Area, and/or retain the Security as contemplated herein.

PART 25 - GENERAL PROVISIONS

A. DEFECT OR DEFAULT BY DEVELOPER

25.01 (1) Default occurs under the Agreement if:

- (a) the Developer ceases or appears to have ceased operations, or, in the reasonable opinion of the City, is insolvent, or is adjudged bankrupt, or seeks a protection order under any bankruptcy, creditor protection, or insolvency legislation, or makes a general assignment for the benefit of its creditors, or a receiver is appointed by a court of competent jurisdiction on account of the Developer's insolvency,
- (b) the Developer fails to comply with the terms of any relevant Wetland Compensation Agreement; or
- (c) the Developer fails, neglects, or refuses to complete all design, installation, construction or satisfy any other obligations contemplated in the Agreement before the Construction Completion Date.

(2) If the Developer fails, neglects or refuses to comply with any notice of defect or default in connection with the Agreement, given in writing to the Developer by the Director, Calgary Approvals Coordination, within thirty (30) days of the delivery notice to the Developer, the City shall have the right, and is hereby entitled but not obligated to take all or any of the following actions:

- (a) to remedy or cause to be remedied the defect or default;
- (b) to terminate the Agreement upon 15 days notice in writing to the Developer;
- (c) to complete or cause to be completed the development or portions thereof; and
- (d) to recover the costs of any action taken by the City pursuant to (a), (b), or (c) above, and any other monies owing to the City by the Developer by taking any or all of the following actions: drawing upon the Security, any methods of recovery available to the City pursuant to the Municipal Government Act, collecting Oversize or Endeavours to Assist that the Developer is entitled to, and any other legal action authorized by law.

(3) If the Security provided by the Developer under the Agreement has been provided in the form of a bond, the City shall, concurrently with notice to the Developer of the default, notify the issuing surety company of the default by the Developer under the Agreement.

B. MAINTENANCE OF ACCESS ROUTE

25.02 (1) The Developer, at all times shall, to the satisfaction of the Director, Calgary Approvals Coordination provide and continuously maintain access to the Development Area for the provision of emergency services.

- (2) The Developer, at all times after any premises are occupied as dwellings within the Development Area, shall, to the satisfaction of the Director, Calgary Approvals Coordination provide and continuously maintain access to occupied premises for garbage removal and the provision of emergency services.

C. DUST, DIRT AND CONSTRUCTION MATERIAL DEBRIS CONTROL

- 25.03 (1) (a) The Developer is solely responsible for ensuring dust and dirt control within the Development Area to the satisfaction of the Team Lead, Stormwater Pollution Prevention.
- (b) The Developer shall take effective measures to reasonably control dust and dirt in the Development Area to the satisfaction of the Team Lead, Stormwater Pollution Prevention, and without limiting the generality of the foregoing, in any loam stockpile site so that dust and dirt originating therein shall not be conveyed by any means whatsoever or cause annoyance or become a nuisance to property owners and others within or adjacent to the Development Area.
- (c) (i) If the Developer's actions to control dust and dirt within the Development Area are not to the satisfaction of the Team Lead, Stormwater Pollution Prevention, they shall attempt to notify the Developer of the problem by telephoning the Developer or its Consulting Engineer.
- (ii) Notwithstanding any provision contained herein to the contrary, if the Team Lead, Stormwater Pollution Prevention, is unable to contact the Developer of Record or its Consulting Engineer, or if after notification the actions of the Developer or its Consulting Engineer to control dust and dirt within the Development Area are not to their satisfaction, then the City may take such steps as are necessary to eliminate the dust or dirt problem without further notice to and at the expense of the Developer, and shall within seventy-two (72) hours notify the Developer of Record in writing of the action taken by the Team Lead, Stormwater Pollution Prevention.
- (2) (a) The Developer shall take effective measures, at no cost to the City, to reasonably control construction material debris arising in connection with activity within or related to the Development Area.
- (b) (i) The Developer shall remove any construction material debris that is maintained or stored in such a way that it could result in the transfer and deposition of material into the storm drainage system that could impair the integrity of the system or the quality of storm drainage to the satisfaction of the Team Lead, Stormwater Pollution Prevention
- (ii) The Developer shall remove any construction material debris deposited on any reserve lands located within and in proximity to the Development Area, which are being maintained by the City,

within five (5) working days from the date of receiving written notice from the Director, Parks to remove the said debris.

- (iii) Notwithstanding anything to the contrary contained in the Agreement, if the Developer fails to remove the debris from the reserve lands within the time prescribed in the notice, the City may remove the construction material debris without further notice to and at the expense of the Developer.

D. LAND USE CLASSIFICATION SIGN

- 25.04 (1) The Developer shall be responsible for informing and keeping the public informed of all land use classifications, bus zones, community mail boxes, NEF zones, truck routes, overhead power feeder mains, sewage treatment plants, arterial roads, the location of School Sites (and when specified by the School Board the school building sites), reserve parcels, storm water ponds and other amenities within the Development Area, and the said information shall be shown in all brochures and billboards and other advertising where maps are used in connection with promotion and sale of lots in the Development Area.
- (2) The Developer shall make available to all prospective purchasers, in sales centres, information which includes the contact information pertaining to; the relevant Area Structure Plan, approved outline plan, Land Use Sign, the Community or Phase boundary, the Developer's land holdings within the community, location of future development areas. The information shall include a statement indicating that development of land within the city is such that information may not be relevant in the future as landowners at any time may approach the City for a change of land use, subdivision or development permit, regardless of the information displayed or otherwise obtained by a prospective purchaser. The Developer shall also provide a list of questions for consideration by a prospective homeowner to consider when making their housing decision in relation to the information above.
 - (3) The Developer shall erect the land use classification sign, as approved by the Director, Calgary Building Services, in the Development Area showing the above mentioned amenities prior to issuance of building permits by the City.
 - (4) If the Developer proposes to erect the land use classification sign on publicly owned lands, the Developer shall submit, for approval by the Director, Calgary Approvals Coordination, a plan showing the size and location of the said sign.
 - (5) If the said sign is located on publicly owned lands, the Developer upon the removal of the said sign, shall rehabilitate, to the satisfaction of the Director, Calgary Approvals Coordination, the area disturbed as a result of the removal of the said sign.
 - (6) Any sign located on publicly owned lands is an improvement and the City is indemnified therefore pursuant to the provisions of Part 20 - (Indemnification) herein.

- (7) The Developer shall maintain the said sign until the acknowledgement of the last Final Acceptance Certificate for the lands shown on the said sign, following which the Developer shall remove the said sign.

E. SURVEY CONTROL AND MAPPING

- 25.05 (1) (a) The Developer shall pay to the City a fee to replace any or all HPN survey control markers (within road allowances, surveyed roads or on private land) that have been removed or damaged due to the development of the area.
- (b) The replacement charges for any such HPN survey control markers shall be Five Thousand Dollars (\$5,000.00) for each HPN survey control marker.
- (2) The Developer, prior to the City's release of the linen for registration of the Development Area, shall pay to the City a fee of \$491.00 per hectare for each and every hectare or part thereof contained within the area outlined on the linen for the costs set out under Section 7 of the Surveys Act.

F. TRAFFIC DETOUR CONTROL

- 25.06 (1) Until the Construction Completion Certificate for paved roads, paved lanes and paved walkways is issued, the Developer shall make arrangements, at its sole cost and expense, satisfactory to the Director, Roads, for payment of the installation and maintenance by the City, of all traffic detour signs that may be required to control traffic on the streets within and along the boundaries of the Development Area; and
- (2) Until the Development Area has been accepted by the City, the Developer shall make satisfactory arrangements with the Director, Roads, for the installation and maintenance of traffic detour signs, as required, during the maintenance period.

G. RECREATIONAL VEHICLE PARKING

- 25.07 Using its best efforts, the Developer shall provide to the purchaser(s) of each lot located within the Development Area notice of restrictions on the parking of recreational vehicles by way of written notice (information package) or by inclusion in any architectural controls for the lots located in the Development Area:

"City of Calgary Land Use Bylaw 1P2007, as amended, and the Calgary Traffic Bylaw 26M96 restrict the parking of recreational vehicles, other vehicles, trailers, etc. either in front of or in the front yard of residential properties. Owners of lots in laneless residential subdivisions are advised to familiarize themselves with these restrictions if they own or intend to own vehicles, trailers, etc. other than passenger vehicles."

H. CESSATION OF RIGHT TO INSTALL OR CONSTRUCT

- 25.08 At any time after the Payment Date, the City may provide the Developer of Record with thirty (30) days written notice that the Developer's right to install and construct the Infrastructure, or any portion thereof, shall cease thirty (30) days after receiving the notice, and thirty (30) days after the receiving such notice, the Developer's right to install and construct the Infrastructure or portion thereof shall cease.
- 25.09 On the first day of January following the Payment Date:
- (1) all Off-site Levies, charges, fees, and other sums of money to be paid by the Developer to the City under the Agreement shall be deemed to have been adjusted in accordance with the rates that are approved for the then current year regardless of whether or not such rates are established prior to, on or after the Payment Date;
 - (2) any reference in the Agreement to all City Specifications shall, in respect of work performed after the Payment Date, be deemed to be a reference to the City Specifications approved for the then current year; and
 - (3) notwithstanding the foregoing paragraphs, the Park Specifications shall apply for one (1) additional year following the Payment Date.
- 25.10 (1) In the event of any dispute as to the applicable rate or the City Specifications applicable for any year, the decision of the Director, Calgary Approvals Coordination shall be final and binding upon the parties.

I. INVOICING AND PAYMENT

- 25.11 (1) The Developer shall pay to the City all amounts owing, excluding deposits, for work to be done or materials to be supplied by the City on or before the Payment Date, unless otherwise specified in writing by the Director, Calgary Approvals Coordination.
- (2) Notwithstanding paragraph 25.11(1), the Developer shall pay to the City all deposits to cover work or materials which the City may be required to do or supply under the Agreement including but not limited to street lighting, walkway lighting and reserve pathway lighting deposits within thirty (30) days from the date of billing thereof, unless otherwise specified in writing by the Director, Calgary Approvals Coordination. If the Developer fails to pay to the City the amounts due and owing under the Agreement, the City may collect the monies as set out in paragraph 25.01 of the Agreement.
- (3) (a) The Developer shall comply with and abide by all laws and the lawful directions of any authority or person regarding the imposition, collection or payment of any federal or provincial taxes, rates, levies, duties or assessments (hereinafter called the "**Taxes**").
- (b) All sums of money set out herein (or to be calculated or determined as provided herein) are expressed exclusive of any Taxes which may be

imposed in respect of the Agreement or any work, matter or thing contemplated herein.

- (c) The Developer shall pay and be solely responsible for all Taxes arising out of the Agreement or any work, matter or thing contemplated herein.
 - (d) The Developer shall indemnify and save harmless the City, its officers, agents, employees and contractors from and against all Taxes arising in connection with the Agreement or any work, matter or thing contemplated herein.
- (4) Notwithstanding anything to the contrary contained herein, all amounts that are due and payable by either of the parties herein, shall be paid within thirty (30) days from the date of the invoice.
- 25.12 (1) If payment for an approved invoice has not been made within thirty (30) days from the date of billing thereof, then the party requesting payment shall be entitled to receive an additional payment for interest, at the rate of one and one half (1.5%) percent per month (18% per annum) or as otherwise provided by City Bylaw Number 104/75, as amended and replaced from time to time.
- (2) In the event of the Developer's default in payment, the City may without further notice recover the amount outstanding in accordance with paragraph 25.01.

J. PENALTIES

- 25.13 (1) The Developer shall not install the Infrastructure, or any portion thereof, without first obtaining from the Development Engineer, written permission to construct the Infrastructure or portion thereof.
- (2) In the event the Developer proceeds with the installation of the Infrastructure, or any portion thereof prior to obtaining the permission to construct referenced in subparagraph (1), the City may impose a penalty of up to a maximum of \$10,000 for each and every day the Developer proceeds without the required permission to construct.
- (3) (a) The amount of the penalty shall be solely determined by the Director, Calgary Approvals Coordination and shall be paid by the Developer within thirty (30) days of the mailing of an invoice by the City, which shall immediately become a debt due and owing the City.
- (b) If payment of the invoice referred to in subparagraph (a) has not been received by the City within thirty (30) days of mailing the invoice, the City shall be entitled to recover the amount in accordance with paragraph 25.01.

[Schedules "1", "2", and "3" attached]

SCHEDULE "1"

**APPROVED RATES FOR SANITARY SEWERS AND STORM SEWERS
PIPE SUPPLY COSTS**

- NOTE:**
- 1) Concrete Pipe costs are based on 2019 market prices.
RG – Rubber gasket pipe or equivalent, including gaskets, etc.
SRC – Sulphate resistant concrete pipe
 - 2) PVC pipe costs are based on 2019 market prices as 2010 market prices were not available prior to preparation of these unit rates
 - 3) Ultra Ribbed pipe costs are based on 2019 market prices as 2020 market prices were not available prior to preparation of these unit rates
 - 4) Pipe supply costs do not included G.S.T.

A. SDR 35 PVC PIPE & PVC PROFILE PIPE

Note: Pipe Joints are bell and spigot

| PIPE SIZE (mm) | PVC | ULTRA-RIBBED |
|----------------|----------|--------------|
| 150 | \$ 17.00 | NA |
| 200 | \$ 31.00 | \$ 25.00 |
| 250 | \$ 50.00 | \$ 29.00 |
| 300 | \$ 71.00 | \$ 47.00 |
| 375 | \$102.00 | \$ 65.00 |
| 450 | \$157.00 | \$103.00 |
| 525 | \$219.00 | \$150.00 |
| 600 | \$283.00 | \$189.00 |
| 675 | \$353.00 | NA |
| 750 | \$470.00 | \$294.00 |
| 900 | \$670.00 | \$509.00 |
| 1050 | \$870.00 | NA |

B. REINFORCED CONCRETE PIPE – C76

Note: Pipe Joints are tongue and groove

| PIPE SIZE | CLASS II SRC | CLASS III SRC | CLASS IV SRC | CLASS V SRC |
|-----------|--------------|---------------|--------------|-------------|
| | RG | RG | RG | RG |
| 300 | - | - | - | \$ 86.00 |
| 375 | - | - | - | \$ 107.00 |
| 450 | - | - | - | \$ 136.00 |
| 525 | - | - | - | \$ 176.00 |
| 600 | - | - | \$ 232.00 | \$ 241.00 |
| 675 | - | - | \$ 306.00 | \$ 348.00 |
| 750 | - | - | \$ 386.00 | \$ 433.00 |
| 900 | - | \$ 490.00 | \$ 534.00 | \$ 616.00 |
| 1050 | \$ 604.00 | \$ 632.00 | \$ 721.00 | \$ 855.00 |
| 1200 | \$ 744.00 | \$ 790.00 | \$ 946.00 | \$1,142.00 |
| 1350 | \$ 953.00 | \$ 1,011.00 | \$ 1,188.00 | \$1,351.00 |
| 1500 | \$ 1,096.00 | \$ 1,188.00 | \$ 1,423.00 | \$1,656.00 |
| 1650 | \$ 1,318.00 | \$ 1,423.00 | \$ 1,650.00 | \$1,963.00 |
| 1800 | \$ 1,514.00 | \$ 1,722.00 | \$ 1,969.00 | \$2,276.00 |

**C. SDR 35 PVC PIPE , PVC PROFILE PIPE AND REINFORCED CONCRETE (C76) PIPE
PLACING COSTS**

| PIPE SIZE | DEPTH RANGES IN METRES | | | | | | | | | |
|-----------|--|----------|----------|------------|------------|------------|------------|------------|------------|------------|
| | 0-2.5 | 2.5-3.0 | 3.0-3.5 | 3.5-4.0 | 4.0-4.5 | 4.5-5.0 | 5.0-5.5 | 5.5-6.0 | 6.0-6.5 | 6.5-7.0 |
| 150 | \$140.00 | \$147.00 | \$159.00 | \$171.00 | \$185.00 | \$200.00 | \$216.00 | \$233.00 | \$290.00 | \$360.00 |
| 200 | \$140.00 | \$147.00 | \$159.00 | \$171.00 | \$185.00 | \$200.00 | \$216.00 | \$233.00 | \$290.00 | \$360.00 |
| 250 | \$147.00 | \$159.00 | \$171.00 | \$185.00 | \$200.00 | \$216.00 | \$233.00 | \$252.00 | \$313.00 | \$389.00 |
| 250 | \$140.00 CATCH BASINS – ALL DEPTH RANGES | | | | | | | | | |
| 300 | \$154.00 | \$167.00 | \$180.00 | \$194.00 | \$210.00 | \$227.00 | \$245.00 | \$265.00 | \$329.00 | \$408.00 |
| 300 | \$140.00 CATCH BASINS – ALL DEPTH RANGES | | | | | | | | | |
| 375 | \$178.00 | \$192.00 | \$207.00 | \$224.00 | \$241.00 | \$261.00 | \$282.00 | \$304.00 | \$378.00 | \$469.00 |
| 450 | \$186.00 | \$201.00 | \$217.00 | \$235.00 | \$254.00 | \$274.00 | \$296.00 | \$319.00 | \$397.00 | \$493.00 |
| 525 | \$196.00 | \$211.00 | \$228.00 | \$247.00 | \$266.00 | \$288.00 | \$311.00 | \$335.00 | \$417.00 | \$517.00 |
| 600 | \$205.00 | \$222.00 | \$240.00 | \$259.00 | \$280.00 | \$302.00 | \$326.00 | \$352.00 | \$437.00 | \$543.00 |
| 675 | \$216.00 | \$233.00 | \$252.00 | \$272.00 | \$294.00 | \$317.00 | \$342.00 | \$370.00 | \$459.00 | \$570.00 |
| 750 | \$237.00 | \$256.00 | \$277.00 | \$299.00 | \$323.00 | \$349.00 | \$377.00 | \$407.00 | \$505.00 | \$627.00 |
| 900 | \$274.00 | \$311.00 | \$353.00 | \$400.00 | \$453.00 | \$514.00 | \$583.00 | \$661.00 | \$821.00 | \$1,020.00 |
| 1050 | \$317.00 | \$366.00 | \$422.00 | \$488.00 | \$563.00 | \$651.00 | \$752.00 | \$868.00 | \$1,098.00 | \$1,389.00 |
| 1200 | \$366.00 | \$422.00 | \$488.00 | \$563.00 | \$651.00 | \$752.00 | \$868.00 | \$1,003.00 | \$1,268.00 | \$1,605.00 |
| 1350 | \$422.00 | \$488.00 | \$563.00 | \$651.00 | \$752.00 | \$868.00 | \$1,003.00 | \$1,158.00 | \$1,465.00 | \$1,853.00 |
| 1500 | \$488.00 | \$563.00 | \$651.00 | \$752.00 | \$868.00 | \$1,003.00 | \$1,158.00 | \$1,338.00 | \$1,692.00 | \$2,141.00 |
| 1650 | \$563.00 | \$651.00 | \$752.00 | \$868.00 | \$1,003.00 | \$1,158.00 | \$1,338.00 | \$1,545.00 | \$1,954.00 | \$2,472.00 |
| 1800 | \$651.00 | \$752.00 | \$868.00 | \$1,003.00 | \$1,158.00 | \$1,338.00 | \$1,545.00 | \$1,784.00 | \$2,257.00 | \$2,856.00 |

NOTE: Sewer prices for all sewers over 1800 mm in size and/or deeper than 7.0 m to be established by a public tender with concrete duct or equivalent capacity as an alternative.
Pipe supply costs in the schedules are F.O.B. plant. Delivery from the plant is included in the pipe placing costs.

**APPROVED RATES FOR SANITARY SEWER AND STORM SEWER MANHOLES
MATERIALS AND PLACING COSTS**

| TYPE & SIZE | DEPTH RANGES IN METRES | | | | | | | | | |
|----------------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 0 - 2.5 | 2.5 - 3.0 | 3.0 - 3.5 | 3.5 - 4.0 | 4.0 - 4.5 | 4.5 - 5.0 | 5.0 - 5.5 | 5.5 - 6.0 | 6.0 - 6.5 | 6.5 - 7.0 |
| 5A | 3,420.00 | 4,103.00 | 4,788.00 | 5,472.00 | 6,155.00 | 6,839.00 | 7,523.00 | 8,207.00 | 9,101.00 | 9,606.00 |
| 1 - S 1220 X 1220 | 6,424.00 | 7,140.00 | 7,856.00 | 8,575.00 | 9,291.00 | 10,007.00 | 10,723.00 | 11,439.00 | 12,156.00 | 12,872.00 |
| 1 - S 1500 X 1500 | 8,614.00 | 9,330.00 | 10,046.00 | 10,764.00 | 11,481.00 | 12,197.00 | 12,913.00 | 13,629.00 | 14,346.00 | 15,063.00 |
| 1 - S 1800 X 1800 | 11,237.00 | 11,953.00 | 12,669.00 | 13,385.00 | 14,103.00 | 14,819.00 | 15,535.00 | 16,251.00 | 16,968.00 | 17,685.00 |
| 1 - S 2100 x 2100 | 15,307.00 | 15,959.00 | 16,610.00 | 17,261.00 | 18,075.00 | 18,889.00 | 19,703.00 | 20,518.00 | 21,332.00 | 22,146.00 |
| 1 - S 2400 X 2400 | 22,488.00 | 23,205.00 | 23,922.00 | 24,638.00 | 25,354.00 | 26,071.00 | 26,787.00 | 27,503.00 | 28,221.00 | 28,938.00 |
| T - RISER 1200 | 9,601.00 | 10,341.00 | 11,057.00 | 11,773.00 | 12,489.00 | 13,206.00 | 13,923.00 | 14,640.00 | 15,356.00 | 14,862.00 |
| T - RISER 1350 | 10,756.00 | 11,472.00 | 12,188.00 | 12,905.00 | 13,622.00 | 14,339.00 | 13,427.00 | 14,143.00 | 16,488.00 | 17,204.00 |

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| TYPE & SIZE | DEPTH RANGES IN METRES | | | | | | | | | |
|----------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 0 - 2.5 | 2.5 - 3.0 | 3.0 - 3.5 | 3.5 - 4.0 | 4.0 - 4.5 | 4.5 - 5.0 | 5.0 - 5.5 | 5.5 - 6.0 | 6.0 - 6.5 | 6.5 - 7.0 |
| T - RISER 1500 | 11,791.00 | 12,507.00 | 13,223.00 | 13,939.00 | 15,645.00 | 15,371.00 | 16,089.00 | 16,806.00 | 17,522.00 | 18,238.00 |
| T - RISER 1650 | 12,653.00 | 13,369.00 | 14,086.00 | 14,802.00 | 15,519.00 | 16,236.00 | 16,952.00 | 17,688.00 | 18,384.00 | 19,036.00 |
| T - RISER 1800 | 13,712.00 | 14,428.00 | 15,145.00 | 15,861.00 | 16,577.00 | 17,293.00 | 18,009.00 | 18,728.00 | 19,445.00 | 20,160.00 |
| NOTE: | <p>T-Riser manhole prices include the cost of one length of pipe, 2400 mm. Manhole prices are sulphate resistant concrete.</p> <p>2100 X 2100 Type 1-S is not regular supply. Price shown is based on 2400 X 2400 as supplied by Lafarge Construction Materials</p> | | | | | | | | | |

**APPROVED RATES FOR SANITARY SEWERS AND STORM SEWERS
MISCELLANEOUS COSTS**

| ITEM | DESCRIPTION | UNIT PRICE PER CUBIC METRE |
|-------|---|----------------------------|
| 1 | Rock excavation - Type A - Type B | \$7.00 \$27.00 |
| 2 | Concrete bedding | \$350.00 |
| 3 | Washed gravel | \$28.00 |
| 4 | Bulk concrete in place | \$200.00 |
| 5 | Reinforced concrete in place | \$300.00 |
| 6 | Ordinary gravel backfill | \$25.00 |
| 7 | Reinforced concrete outfall | \$450.00 |
| 8 | Screened gravel | \$40.00 |
| 9 | Crushed gravel for surface restoration | \$40.00 |
| 10 | Compaction To be paid only on boundary conditions or where the City pays for full cost of the installation. Using the formula: Amount of compaction (m3) = length x (depth - 0.61m) x 1.07m Depth = Centre Line Depth to Pipe Invert (meters) Length - Length of Trench (meters) Trench Width - 1.07 meters for all pipe sizes | \$6.25 |
| NOTE: | Any claim for any items noted above must be in excess of \$250.00 and all items must be authorized as provided in paragraph 2.07 of the 2017 Development Agreement. | |

**APPROVED RATES FOR WATERWORKS
SUPPLY AND PLACING COSTS**

| ITEM | DESCRIPTION | UNIT PRICE PER LINEAR METRE |
|------|--|--|
| 1 | Trenching, laying, jointing, backfilling and supply of the water distribution pipe including cathodic protection for fittings. | |
| A. | 400 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$400.00 \$410.00 \$420.00 \$430.00 |
| B. | 300 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$265.00 \$273.00 \$283.00 \$293.00 |
| C. | 250 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$260.00 \$270.00 \$280.00 \$290.00 |
| D. | 200 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$225.00 \$235.00 \$245.00 \$255.00 |
| E. | 150 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$185.00 \$195.00 \$205.00 \$215.00 |
| F. | 100 mm Mains 0 m 3 m Cover 3 m 3.6 m Cover 3.6 m 4.2 m Cover 4.2 m 4.9 m Cover | \$165.00 \$175.00 \$185.00 \$195.00 |

**APPROVED RATES FOR WATERWORKS
TRANSPORTATION AND UTILITY CORRIDOR CROSSINGS
AND EXPRESSWAY AND FREEWAY CROSSINGS**

| ITEM | DESCRIPTION | UNIT PRICE PER LINEAR METRE | |
|--|--|--------------------------------|------------|
| 2 | Encased Water Main – Open Cut Method Material, equipment and labour to install encased water main by an open cut method in conformity to the Standard Specifications Waterworks Construction (rehabilitation is not included and is not recoverable). | | |
| | A. 400 mm Carrier Pipe c/w Encasement Pipe | | |
| | 0 m | 3 m Cover | \$934.00 |
| | 3 m | 3.6 m Cover | \$980.00 |
| | 3.6 m | 4.2 m Cover | \$1,001.00 |
| | 4.2 m | 4.9 m Cover | \$1,068.00 |
| | B. 300 mm Carrier Pipe c/w Encasement Pipe | | |
| | 0 m | 3 m Cover | \$627.00 |
| | 3 m | 3.6 m Cover | \$661.00 |
| | 3.6 m | 4.2 m Cover | \$705.00 |
| | 4.2 m | 4.9 m Cover | \$750.00 |
| | C. 250 mm Carrier Pipe c/w Encasement Pipe | | |
| | 0 m | 3 m Cover | \$517.00 |
| | 3 m | 3.6 m Cover | \$561.00 |
| | 3.6 m | 4.2 m Cover | \$584.00 |
| | 4.2 m | 4.9 m Cover | \$640.00 |
| | D. 200 mm Carrier Pipe c/w Encasement Pipe | | |
| | 0 m | 3 m Cover | \$431.00 |
| | 3 m | 3.6 m Cover | \$475.00 |
| | 3.6 m | 4.2 m Cover | \$498.00 |
| 4.2 m | 4.9 m Cover | \$553.00 | |
| E. 150 mm Carrier Pipe c/w Encasement Pipe | | | |
| 0 m | 3 m Cover | \$369.00 | |
| 3 m | 3.6 m Cover | \$392.00 | |
| 3.6 m | 4.2 m Cover | \$426.00 | |
| 4.2 m | 4.9 m Cover | \$482.00 | |

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| ITEM | DESCRIPTION | UNIT PRICE PER LINEAR METRE |
|------|---|---|
| 3 | <p>Encased Water Main – Augering Method Material, equipment and labour to install encased water main by an augering method in conformity to the Standard Specifications Waterworks Construction.</p> <p>150 mm Carrier Pipe c/w Encasement Pipe</p> <p>200 mm Carrier Pipe c/w Encasement Pipe</p> <p>250 mm Carrier Pipe c/w Encasement Pipe</p> <p>300 mm Carrier Pipe c/w Encasement Pipe</p> <p>400 mm Carrier Pipe c/w Encasement Pipe</p> | <p></p> <p>\$394.00</p> <p>\$553.00</p> <p>\$713.00</p> <p>\$872.00</p> <p>\$1,020.00</p> |
| 4 | Supply, setting and jointing of hydrants including seat and anchor blocks and all fittings, coating, cathodic protection (hydrant lead and valve extra at unit price for pipe and valve). | <p>UNIT PRICE PER EACH</p> <p>\$8,600.00</p> |
| 5 | <p>Supply, setting and joint valves, including box and rod, coating and cathodic protection.</p> <p>A 400 mm Valves</p> <p>B 300 mm Valves</p> <p>C 250 mm Valves</p> <p>D 200 mm Valves</p> <p>E 150 mm Valves</p> | <p>\$9,000.00</p> <p>\$4,000.00</p> <p>\$3,300.00</p> <p>\$2,400.00</p> <p>\$1,700.00</p> |
| 6 | <p>Supply and installation of Pressure Reducing Valve(s) and Chamber(s) including excavating backfilling, compacting, mechanical piping, and appurtenances. The depth range is 0 – 4.2 m as measured from the pipe invert to finished grade.</p> <p>Single PRV installation per Std. Dwg. 453-1039-001</p> <p>A 150 mm</p> <p>B 200 mm</p> <p>C 250 mm</p> <p>Dual PRV installation per Std. Dwg. 453-1038-001</p> <p>A 150 mm</p> <p>B 200 mm</p> <p>C 250 mm</p> <p>All materials and installations shall conform to the 2017 Standard Specifications, Waterworks Construction.</p> | <p>\$26,642.00</p> <p>\$33,406.00</p> <p>\$41,789.00</p> <p>\$38,918.00</p> <p>\$47,200.00</p> <p>\$56,396.00</p> |
| 7 | Rock excavation - Type A - Type B | <p>UNIT PRICE PER CUBIC METRE</p> <p>\$7.00</p> <p>\$27.00</p> |

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| ITEM | DESCRIPTION | | UNIT PRICE PER LINEAR METRE |
|---|----------------------------------|---|-----------------------------|
| 8 | Sand bedding material | | \$15.00 |
| 9 | 20 mm crushed gravel in trenches | | \$25.00 |
| 10 | Pit run gravel in trenches | | \$20.00 |
| 11 | Compaction | To be paid only on boundary conditions or where the City pays for full cost of the installation. Using the formula: Amount of compaction (m3) = length x (depth – 0.61m) x 1.07m Depth = Centre Line Depth to Pipe Invert (meters) Length – Length of Trench (meters) Trench Width – 1.07 meters for all pipe sizes | \$6.25 |
| NOTE: Any claim for any items noted above must be in excess of \$250.00 and all items must be authorized as provided in paragraph 2.07 of the 2017 Development Agreement. | | | |

APPROVED RATES FOR SIDEWALK, CURB AND GUTTER

| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|------|---|------|------------|
| 1a | 1.4 m Separate Sidewalk (includes lane aprons with wire mesh or reinforcing bars) | m2 | \$85.00 |
| 1b | 2.0 m Separate Sidewalk (includes lane aprons with wire mesh or reinforcing bars) | m2 | \$96.00 |
| 2 | Median (concrete) infill | m2 | \$83.00 |
| 3 | Curb and Gutter | | |
| | A Standard or Low Profile – 250 mm – Class “A” concrete | m | \$83.20 |
| | B Standard or Low Profile – 250 mm – Class “B” concrete | m | \$83.20 |
| | C Standard (on asphalt base) – 250 mm – Class “A” concrete | m | \$83.20 |
| | D Low Profile (on asphalt base) – 250 mm – Class “A” concrete | m | \$90.00 |
| | E Standard (on asphalt base) – 500 mm – Class “A” concrete | m | \$90.00 |
| | F Low Profile (on asphalt base) – 500 mm – Class “A” concrete | m | \$90.00 |
| 4 | Combined Sidewalk, Curb and Gutter | | |
| | A Standard Curb – 1100 mm walk – Class “A” concrete | m | \$130.00 |
| | B Standard Curb – 1100 mm walk – Class “B” concrete | m | \$130.00 |
| | C Low Profile Curb – 1100 mm walk – Class “A” concrete | m | \$130.00 |
| | D Low Profile Curb – 1100 mm walk – Class “B” concrete | m | \$130.00 |
| | E Standard Curb – 1500 mm walk – Class “A” concrete | m | \$152.00 |
| | F Standard Curb – 1500 mm walk – Class “B” concrete | m | \$152.00 |
| | G Low Profile Curb – 1500 mm walk – Class “A” concrete | m | \$152.00 |
| | H Low Profile Curb – 1500 mm walk – Class “B” concrete | m | \$152.00 |
| | I Low Profile Curb – 2000 mm walk – Class “A” concrete | m | \$211.00 |
| 5 | Catch Basins and Inlet Control Devices | | |
| | A Single Type C | ea. | \$3,480.00 |
| | B Twin Type C | ea. | \$5,000.00 |
| | C Type K-2 Single | ea. | \$3,900.00 |
| | D Type K-2 Twin | ea. | \$5,470.00 |
| | E Plug Inlet Control Device 200 mm | ea. | \$310.00 |
| | F Plug Inlet Control Device 250 mm | ea. | \$310.00 |
| | G Plug Inlet Control Device 300 mm | ea. | \$310.00 |

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| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|-------|---|-----------------------------|--|
| 6 | Concrete Invert Crossing A Overland concrete drainage | m | \$103.25 |
| 7 | Breakout and Replace (Residential) A Sidewalk only B Curb and Gutter only C 1.5 Mono Sidewalk D Asphalt Rehab 250 mm width E Boulevard Rehab 250 mm width F 2.0 Mono sidewalk | m2 m m m m m | \$152.00 \$168.00 \$240.00 \$42.00 \$24.00 \$340.00 |
| 8 | Breakout and Replacement (Majors) A Curb and Gutter (standard or low profile) 250 mm Class "A" Concrete on Asphalt Base B Curb and Gutter (standard or low profile) 500 mm Class "A" Concrete on Asphalt Base C Asphalt Rehab 250 mm width D Boulevard Rehab 250 mm width | m m m m | \$168.00 \$184.00 \$42.00 \$24.00 |
| NOTE: | The above prices include unstable material costs. | | |

APPROVED RATES FOR PAVING AND LANES

| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|------------------------|--|---|--|
| 1 | Conventional Construction A Excavation and Disposal (in place measurements) B Subgrade preparation C 80mm gravel (placed and compacted) D 25 mm crushed gravel E Prime on 25 mm crushed gravel F Tack coat on asphalt G Asphaltic Mix "A" H Asphaltic Mix "B" I Asphaltic Mix "C" | m3 m2 Tonne Tonne m2 m2 Tonne Tonne Tonne | \$4.75 \$2.10 \$24.00 \$32.00 \$0.80 \$0.65 \$100.00 \$118.00 \$124.00 |
| 2 | Full Depth Construction A Excavation and Disposal B Subgrade preparation C Tack Coat D Asphaltic Mix "A" E Asphaltic Mix "B" F Asphaltic Mix "C" | m3 m2 m2 Tonne Tonne Tonne | \$4.75 \$2.10 \$0.65 \$100.00 \$118.00 \$124.00 |
| Continued on next page | | | |

| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|--------|---|---------------------------|----------------|
| 3 (i) | Residential Roads | | |
| | A Excavation and Disposal | m2 | \$1.55 |
| | B Subgrade preparation | m2 | \$2.10 |
| | C 200mm Granular Sub Base(80mm) | m2 | \$11.30 |
| | D 100mm Granular Base(25mm) | m2 | \$7.00 |
| | E Prime coat | m2 | \$0.80 |
| | F Asphaltic Mix "B" 50 mm lift | m2 | \$14.50 |
| | G Tack Coat | m2 | \$0.65 |
| | H Asphaltic Mix "B" 30 mm | m2 | <u>\$10.00</u> |
| | | | \$47.75 |
| | | TOTAL USE RATE | \$48.00 |
| 3 (ii) | Conventional Construction - The following rates shall be used to determine the cost per square metre for non-standard pavement construction | | |
| | A Excavation and Disposal (50 mm depth) | m2 | \$0.80 |
| | B Subgrade preparation (do not pro-rate) | m2 | \$2.10 |
| | C 50 mm Granular base Gravel | m2 | \$2.75 |
| | D 100mm Granular Base(25mm) | m2 | \$7.00 |
| | E Prime on 25 mm crushed gravel (do not pro-rate) | m2 | \$0.80 |
| | F Asphaltic Mix "A" – 50 mm lift | m2 | \$11.60 |
| | G Tack Coat (per application) | m2 | \$0.65 |
| | H Asphaltic Mix "B" – 50 mm lift | m2 | \$14.50 |
| 4 (i) | Residential Collector & Industrial | | |
| | A Excavation and Disposal | m2 | \$1.55 |
| | B Subgrade preparation | m2 | \$2.10 |
| | C 200mm Granular Sub Base(80mm) | m2 | \$11.20 |
| | D 100mm Granular Base(25mm) | m2 | \$7.00 |
| | E Prime coat | m2 | \$0.80 |
| | F Asphaltic Mix "A" 100 mm – 2 lifts | m2 | \$24.00 |
| | G Tack Coat (2 applications) | m2 | \$1.30 |
| | H Asphaltic Mix "B" 40 mm | m2 | <u>\$12.00</u> |
| | | | \$59.85 |
| | | TOTAL USE RATE | \$60.00 |
| 4(ii) | Major (Arterial Street) | | |
| | A Excavation and Disposal | m2 | \$1.85 |
| | B Subgrade preparation | m2 | \$2.10 |
| | C 300mm Granular Sub Base(80mm) | m2 | \$15.50 |
| | D 100mm Granular Base(25mm) | m2 | \$7.00 |
| | E Prime coat | m2 | \$0.80 |
| | F Asphaltic Mix "A" 160 mm – 2 lifts | m2 | \$38.00 |
| | G Tack Coat (2 applications) | m2 | \$1.30 |
| | H Asphaltic Mix "C" 40 mm | m2 | <u>\$13.00</u> |
| | | | \$79.45 |
| | | TOTAL USE RATE | \$79.50 |

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| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|--------|--|-------|----------------|
| 5 (i) | Asphalt under 500 mm Curb and Gutter | M2 | \$14.70 |
| 5 (ii) | Asphalt under 250 mm Curb and Gutter | M2 | \$14.70 |
| 6 | Asphalt Median Strips | | |
| | A Excavation and subgrade compaction | m2 | \$9.60 |
| | B 25 mm crushed gravel (placed) | m2 | \$4.50 |
| | C Asphaltic Mix "B" – 50 mm | m2 | \$14.50 |
| | TOTAL USE RATE | | \$28.60 |
| | | | \$29.00 |
| 7 (i) | Gravelled Lanes | | |
| | A Excavation and Disposal | m2 | \$4.80 |
| | B 25 mm crushed gravel | Tonne | \$32.25 |
| 7 (ii) | Lane Construction | | |
| | A Excavation and Disposal | m2 | \$4.80 |
| | B Subgrade preparation | m2 | \$2.75 |
| | C 100mm Granular Base(25mm) | m2 | \$8.30 |
| | TOTAL USE RATE | | \$15.85 |
| | | | \$16.00 |
| 8 | Asphalt Walkway and Pedestrian / Bicycle Paths | | |
| | A Excavation | m2 | \$6.20 |
| | B Subgrade preparation | m2 | \$3.40 |
| | C Root barrier | m2 | \$3.20 |
| | D 100mm Granular Base(25mm) | m2 | \$8.30 |
| | E Asphaltic Mix "B" 100 mm lift | m2 | \$26.00 |
| | TOTAL USE RATE | | \$47.10 |
| | | | \$47.00 |
| 9 | Miscellaneous Asphalt Works | | |
| | A Asphalt planing – less than 100 m2 | m2 | \$37.00 |
| | B Asphalt planing – more than 100 m2 | m2 | \$7.90 |
| | C Asphalt Removal and Disposal over 100 m2 | m2 | \$18.00 |

APPROVED RATES FOR PAVING

| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|------------------------|--|--------------|------------|
| 1 | Major Standard Roads | | |
| | A Divided – 16.0 metre wide carriageway on 36 metre R.O.W. | | |
| | (i) Half Cost (with no Traffic Signals) | Lineal Metre | \$2,020.00 |
| | (ii) Full Cost (with no Traffic Signals) | Lineal Metre | \$4,040.00 |
| | (iii) Top Lift Holdback Half Cost | Lineal Metre | \$141.00 |
| | (iv) Top Lift Holdback Full Cost | Lineal Metre | \$282.00 |
| Continued on next page | | | |

| ITEM | DESCRIPTION | UNIT | UNIT RATE | |
|---|--|--|------------|--|
| 2 | B Undivided – 16.0 Industrial metre carriageway on 30 metre R.O.W. | | | |
| | (i) Half Cost (with no Traffic Signals) | Lineal Metre | \$1,765.00 | |
| | (ii) Full Cost (with no Traffic Signals) | Lineal Metre | \$3,530.00 | |
| | (iii) Top Lift Holdback Half Cost | Lineal Metre | \$141.00 | |
| | (iv) Top Lift Holdback Full Cost | Lineal Metre | \$282.00 | |
| | C Divided Local Major 27 metre R.O.W. | | | |
| | (i) Half Cost (with no Traffic Signals) | Lineal Metre | \$1,860.00 | |
| | (ii) Full Cost (with no Traffic Signals) | Lineal Metre | \$3,720.00 | |
| | (iii) Top Lift Holdback Half Cost | Lineal Metre | \$123.00 | |
| | (iv) Top Lift Holdback Full Cost | Lineal Metre | \$246.00 | |
| | Collector Standard Road – 12.0 metre wide carriageway on 21 metre R.O.W. | | | |
| | D (i) Half Cost | Lineal Metre | \$1,100.00 | |
| | (ii) Full Cost | Lineal Metre | \$2,200.00 | |
| | | <u>Complete Streets Arterials</u> | | |
| | A (i) Arterial Street (19.0 carriageway) 36.0 m R.O.W. | Lineal Metre | \$2,245.00 | |
| | (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$4,490.00 | |
| | (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$168.00 | |
| | (iv) Top Lift Holdback Half Cost | Lineal Metre | \$336.00 | |
| | Top Lift Holdback Full Cost | | | |
| | B (i) Arterial Street (14.0 carriageway) 36.0 m R.O.W. | Lineal Metre | \$1,930.00 | |
| (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$3,860.00 | | |
| (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$123.00 | | |
| (iv) Top Lift Holdback Half Cost | Lineal Metre | \$246.00 | | |
| Top Lift Holdback Full Cost | | | | |
| C (i) Arterial Street (26.0 carriageway) 46.0 m R.O.W. | Lineal Metre | \$2,670.00 | | |
| (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$5,340.00 | | |
| (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$229.00 | | |
| (iv) Top Lift Holdback Half Cost | Lineal Metre | \$458.00 | | |
| Top Lift Holdback Full Cost | | | | |
| D (i) Arterial Street (21.0 carriageway) 46.0 m R.O.W. | Lineal Metre | \$2,335.00 | | |
| (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$4,670.00 | | |
| (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$185.00 | | |
| (iv) Top Lift Holdback Half Cost | Lineal Metre | \$370.00 | | |
| Top Lift Holdback Full Cost | | | | |
| E (i) Industrial Arterial Street (14.4 carriageway) 30.0 m R.O.W. | Lineal Metre | \$1,860.00 | | |
| (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$3,720.00 | | |
| (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$127.00 | | |
| (iv) Top Lift Holdback Half Cost | Lineal Metre | \$254.00 | | |
| Top Lift Holdback Full Cost | | | | |
| F (i) Local Arterial Street (18.6 carriageway) 32 m R.O.W. | Lineal Metre | \$2,200.00 | | |
| (ii) Half Cost (with no Traffic Signals) | Lineal Metre | \$4,400.00 | | |
| (iii) Full Cost (with no Traffic Signals) | Lineal Metre | \$164.00 | | |
| (iv) Top Lift Holdback Half Cost | Lineal Metre | \$328.00 | | |
| Top Lift Holdback Full Cost | | | | |

Continued on next page

| ITEM | DESCRIPTION | UNIT | UNIT RATE |
|-------|--|--------------|------------|
| G | Collector Street(15.0 carriageway) 25.2 m R.O.W | | |
| | (i) Half Cost | Lineal Metre | \$1,240.00 |
| | (ii) Full Cost | Lineal Metre | \$2,480.00 |
| NOTE: | The Rates for Items 1 and 2 are to be used in calculating oversize payments and deposits for 2020 Development Agreements. Unit rates are based on Conventional pavement structures. The above rates include 5% for Engineering, 5% for Administration and 2.5% for Material testing. | | |

APPROVED RATES FOR BUS LAYBY COST RECOVERY

| DESCRIPTION | UNIT | UNIT RATE |
|---|----------|-------------|
| Concrete Bus Layby cost recovery | | |
| 20 Metre Length – lump sum | Lump Sum | \$23,050.00 |
| 25 Metre Length – lump sum | Lump Sum | \$26,210.00 |
| 37 Metre Length – lump sum | Lump Sum | \$34,000.00 |
| NOTE: | | |

APPROVED RATES FOR FENCING

| DESCRIPTION | UNIT | UNIT RATE |
|--|--------------|-----------|
| 1.80 metre high chain link fence | | |
| Includes wire mesh, poles and installation | Lineal Metre | \$68.00 |
| NOTE: | | |

APPROVED 2020 RATES FOR STREET LIGHTING

| | DESCRIPTION | UNIT | UNIT RATE |
|---|---|---|---------------------------------|
| 1 | <p>Local Roads</p> <p>Walkway and Reserve Pathway Residential Street M, M-L, SW_L (9.0 / 16.0) Collector Street (10.8 / 21.0) Collector Street (12.3 / 22.5) Collector Street (15.0 / 25.2) Industrial Street (9.0 / 19.0)</p> | Linear metre | \$195.00 |
| 2 | <p>Intermediate Roads</p> <p>Residential Street Entrance (2 x 6.0 / 22.5) Residential Street Entrance (2 x 6.5 / 23.5) Primary Collector Street (2 x 7.7 / 29.0) Primary Collector Street (2x 8.3 / 30.0) Activity Centre Street (15.4 / 26.0) Neighborhood Boulevard (15.4 / 30.0)</p> | Linear metre | \$230.00 |
| 3 | <p>Arterial Streets</p> <p>Single Carriageway Dual Carriageway Arterial Street (2 x 9.5 / 36.0) Arterial Street (2 x 7.0 / 36.0) Arterial Street (2 x 13.0 / 46.0) Arterial Street (2 x 10.5 / 46.0) Industrial Arterial Street (14.4 /30.0) Local Arterial Street (2 x 9.3 / 32.0) Urban Boulevard (2 x 12.0 / 42.6) Urban Boulevard (2 x 9.1 / 36.0) Parkway (2 x 9.1 / 36.0)</p> <p>All above rates shall apply in all standard developments subject to the conditions outlined in Part 15 of the Development Agreement.</p> <p>Reserved pathway lighting rate will only apply to all Reserve Pathways that are required to be lit for the transit pedestrian movement.</p> <p>The formula for calculating linear metre is as follows:</p> <ol style="list-style-type: none"> a) Linear length of roadways to be lighted are calculated based on the City of Calgary's established "Road Net" road centre line mapping product. This replaces the previous complicated method of lot assessment involving measurement of both sides of the residential roads with allowance for MRs, ERs, sides of corner lots etc. b) Linear length for roadways with double centre lines will be the average length of two lines. c) At intersections, the end point for each roadway will be the point where the two centre lines meet. | <p>Linear metre</p> <p>Linear metre</p> | <p>\$210.00</p> <p>\$420.00</p> |

Schedule "1"
Off-Site Levies and Assessments

| FEES | RATE PER HECTARE |
|--|-------------------------|
| Inspection Fee | \$2,493.00 |
| Traffic Signage and Road Markings Charge | \$697.00 |

| OFFSITE LEVIES | | RATE PER HECTARE |
|------------------------------------|-----------------------|-------------------------|
| Storm Sewer Levy (by watershed) | Bow River Watershed | \$8,899.00 |
| | Elbow River Watershed | \$00.00 |
| | Fish Creek Watershed | \$22,954.00 |
| | Nose Creek Watershed | \$18,000.00 |
| | Pine Creek Watershed | \$20,214.00 |
| | Shepard Watershed | \$47,070.00 |
| Sanitary Sewer Levy | | \$53,490.00 |
| Water Levy | | \$46,326.00 |
| Treatment Plant Levy | | \$147,642.00 |
| Transportation Levy | | \$139,729.00 |
| Community Services Charge | | \$80,434.00 |

Schedule "3"
STORM WATER POND FACILITIES COST RECOVERIES

Storm Water Pond Facilities cost recoveries are for a proportionate share of the project costs incurred or payments made in respect of the excess capacity together with interest calculated as set out below. Such recoveries may include, but are not limited to the following:

1. The cost of the land on which the Storm Water Pond Facilities are located, usually a Public Utility Lot, calculated as the greater of (a) uninflated actual price paid for the land on which the Storm Water Pond Facilities are located; or (b) the market value assessment (assessed as raw land), by an independent third party, of the land on which the Storm Water Pond Facilities are located at the time the benefitting developer ties in.
2. Rough grading, including but not limited to:
 - a. Clearing and grubbing
 - b. Moving material by scraper or truck and hoe, if required,
 - c. On-site haul to the nearest on-site location, with cut-fill plan certified by the consultant,
 - d. Off-site haul if no on-site fill locations are available, with cut-fill plan certified by the consultant, and dump tickets and proof of fill location,
 - e. Pumping, and
 - f. Place and compaction for on-site hauls.

Rough grading does not include compaction in fill zone or spreading out of material for off-site hauls

3. Rock excavation
4. Sub-cut for liner installations
5. Manufactured liner and necessary bedding and warning barrier coverage or suitable imported clay and installation cost including warning barrier
6. All piping and manholes to the first upstream and downstream manhole from the pond that accepts surface drainage
7. Connection from the pond to a receiving water body if no downstream storm infrastructure is available
8. Oil/grit separator and/or sediment chamber
9. Irrigation system
10. Storm water re-use pumps, pumphouse, and treatment
11. Emergency overflow piping and manholes downstream of the pond if no overland escape route is possible
12. Slope retention and seepage control
13. Water level monitoring panel including electricity and telephone connections plus associated utilities

14. Pond monitoring costs
15. Permanent pumping (installation and operating costs) to FAC
16. Landscaping
17. Rip rap or slope protective matting
18. Erosion control
19. Maintenance road including turnaround and concrete driveway apron (does not include pathway if it is not required for a maintenance vehicle)
20. Facility maintenance costs to FAC
21. Consulting services including but not limited to storm water management report, pond report, engineering design and construction services, municipal approvals services, geotechnical services
22. Interest on the above costs calculated from the date of Construction Completion Certificate , except for land costs for which no interest is calculated, until the benefitting developer ties in and makes satisfactory cost arrangements with the Developer that constructed the Storm Water Pond Facilities. Interest is calculated as the Bank of Canada prime lending rate adjusted every year for the first three (3) years following Construction Completion Certificate after which interest adjusted every year and calculated as follows:

The latest Statistics Canada non-residential building construction price index for Calgary over the previous eight (8) quarters. The average index value for the most recent four (4) quarters is compared with the earlier four (4) quarters to obtain the most up-to-date non-residential building construction inflation rate which is used as the interest rate for the year.

Estimates and Reconciliation of Costs

If actual construction costs are not yet available because the facilities have not received FAC:

- a. Before Construction Completion Certificate , project costs shall be estimated based on contracts in place and quoted pricing.
- b. After Construction Completion Certificate and before FAC, project costs for maintenance to FAC will be estimated as 10% of total project costs to Construction Completion Certificate.

At FAC the total estimated project costs shall be reconciled to actual costs and the developer that constructed the Storm Water Pond Facilities will provide an invoice or refund, as appropriate to the developer tying into the Storm Water Pond Facilities. The developers may enter into an agreement to ensure that the reconciliation with actual costs are secured.