Table of Minimum Offsets

The following table of offsets gives the minimum required offsets for infrastructure across the major reviewing sections. Each tab is all-inclusive, meaning that all the offsets are self-contained in each tab. We have several tabs to facilitate ease of use, so if a surface drawing is being drafted or reviewed then the Complete Streets tab can be used easily, or if a landscaping drawing is being drafted or reviewed then the Landscaping tab can be used. These offsets are applicable to most cases. However, they may vary for infill or non-standard situations as existing conditions may require unique offsets, as determined by the City.

Version History

June 30, 2021 Version:
Added "DPS" tab for Distribution Piping Systems for capital projects only

April 28, 2021 Version:
Various changes to EPCOR Water offsets to update offsets per new updated EPOR Water Standards

Pre April 28, 2021 version:
Originally released Table of Offsets

Domain: Complete Streets (Volume 2)			
Subdomain: Complete Streets (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Intersection edge of pavement	Traffic control cabinet	Located outside the Clear Sight Triangles to allow for required sightlines	
Commercial/Industrial access edge of pavement	Traffic control cabinet	10.0m	
Curb Ramps	Commercial Crossing	1.0m	Flare to flare
Shared-use paths, walkways, and sidewalks	Property line	0.3m	Property line to edge of shared-use path, walkway, or sidewalk
Subdomain: EPCOR Drainage (Volume 3)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Face of Curb	Sanitary and storm mains	1.5m	
Curb Ramps	Catchbasins and catchbasin manholes	0.5m	
Bus stop pad	Storm and sanitary services	1.5m	1.5 m from the edge of the bus stop pad, Drainage prefers sewer services to not to be buried under the bus stop pad
Driveways	Catchbasins	1.5m	Edge of driveway.
Intersection	Catchbasins	Locate at End of Curve OR Beginning of Curve and not within the curb ramp and crosswalk	
Subdomain: EPCOR Water (Volume 4)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
PL	Curb cock	0.1m	0.3m from PL for side lot services
Face of Curb (FOC)	Watermain	1.5m (<= 400 mm mains)	
FOC	Watermain	2.0m (> 400 mm mains)	
PL	Watermain in alley, utility lot, walkway, or URW	1.2m (preferably 2.0m)	Mains in walkways are to be dimensioned to side PL.
PL	Water services	Extend service into lot 1.5m beyond the	If the water service enters a parcel where there isn't a
PL	Flushpoint	1.5m	Plug is 5.0m from PL
FOC	Hydrant	Preferred: 3.0m for any ROW with	If the
FOC	Hydrant	1.5m for any ROW with Separate Walk	boulevard or where no walk exists.
Edge of Walk	Hydrant	0.3m	
Edge of Bus Stop	Hydrant	6.0m	Hydrants located within 45 m of the approach side of the
Edge of Driveway	Hydrant	To be located on the opposite lot line	If unable, minimum 1.5m (preferably 2.0m)
Corner of intersection	Hydrant	To be installed at the beginning of the	Where not in conflict with item 4.2.14.
Alley	Valves	6.0m of the approach &	
Arterial road & collector road intersection	Valves	30m	
Property Line	Valves	To be located on the projection of PL,	
Utility lot, walkway or URW	Valves	0.5m from PL or its projection	
Subdomain: Landscaping (Volume 5)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
FOC (local)	Trees (centre of tree)	1.0m, 1.25m preferred	Trees to be placed in line with or further from Face of
FOC (Collector)	Trees (centre of tree)	1.25m / 1.65m	1.25 m ROW < 20m, 1.65 m ROW > 20m. Trees to
FOC (Arterial)	Trees (centre of tree)	2.0m	Trees to be placed in line with or further from Face of
Intersection	Trees (centre of tree)	15m	
Shared-Use Path	Trees (centre of tree)	1.0m, preferred 1.5m	
Edge of Sidewalk, Walkway and Shared-Use Path	Shrubs	0.5m	Shrubs at maturity
Edge of walk	Litter receptacle	0.6m	
Edge of commercial or industrial access	Trees (centre of tree)	1.5m	
Back of walkway	Benches	1.0m	
Back of walkway	Picnic Table	1.0m	
Boulevard curb	Mulched beds	2.5m	Within boulevard curb along arterial and collector
Stop signs and yield signs	Trees (centre of tree)	3.5m	
All other signs	Trees (centre of tree)	2.0m	
Transit zones/bus pads	Trees (centre of tree)	3.5m	not create sightline obstructions for vehicles
Property line	Trees (centre of tree, in walkway	1.0m	
Property line	Trees (centre of tree, in	1.0m	
Property Line	Deciduous trees (in open	2.5m	From centre of tree, in open parkland where there is
Property Line	Coniferous trees (in open	2.5m	From **edge of mature spread** of tree, in open
Subdomain: Streetlighting (Volume 6)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
FOC	Streetlight Pole (centre of pole)	Collectors; 2.0m along Arterials; 2.6m for	
FOC	Multiparty trench	2.5m	Centerline of trench
Intersection	Streetlight Pole (centre of pole)	0.9m	
Edge of sidewalk or walkway	Streetlight Pole (centre of pole)	0.5m / preferred 1.0m	
Edge of shared-use paths	Streetlight Pole (centre of pole)	0.5m / preferred 1.5m	
Driveway (Residential)	Streetlight Pole (centre of pole)	utility box	
Driveway/Access (Commerical or Industrial)	Streetlight Pole (centre of pole)	1.5m	
Subdomain: EPCOR Power (Volume 7)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
FOC	Multiparty trench	2.5m	Centerline of trench
FOC	Transformer	SEE NOTES	**Offset is required.** See the specific and applicable
Corner cut	Power crossings	3.0m	
Corner cut	Transformer	6.0m	
Corner cut	1-phase or 3-phase cubicle	30m	
Bus stop pad	Transformer/Switching cubicle	3.0m	From edge of bus pad to edge of base
Road crossing	Transformer/Switching cubicle	3.0m	From centre to closest duct in crossing
Transportation control devices and signs	Pad-mounted equipment	3.0m	From edge of pad
Bus stop pad	Power crossings	3.0m	From edge of bus pad to crossing
Residential driveways	Transformer	2.0m	From edge of equipment to driveway
Intersection edge of pavement	Transformer/Switching cubicle	15m	From centre of transformer/switching cubicle
Commercial/Industrial access edge of pavement	Transformer/Switching cubicle	10m	
Edge of walkway property line	Pad-mounted equipment	3.0m	From edge of equipment to edge of walkway property
PL	Main power/Multiparty trench	1.0m	Actual required minimum offset may change
Subdomain: Gas			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
FOC	Multiparty trench	2.5m	Centerline of trench
Subdomain: Telecommunications			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
FOC	Multiparty trench	2.5m	Centerline of trench
Subdomain: General			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
with underground utilities (including, but not	Infrastructure	use paths, walkways, crosswalks, and	

Domain: EPCOR Drainage (Volume 3)			
Subdomain: Complete Streets and Roadways (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Storm and sanitary mains	Face of Curb	1.5m	
Storm and sanitary services	Bus stop pad	1.5m	1.5 m from the edge of the bus stop pad, Drainage prefers sewer services are not to be buried under the bus stop pad
Catchbasins and catchbasin manholes	Curb Ramps	0.5m	
Catchbasins	Driveways	1.5m	Edge of driveway.
Catchbasins	Intersection	Locate at End of Curve OR Beginning of Curve and not within the curb ramp and crosswalk	
Subdomain: EPCOR Water (Volume 4)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Sanitary & Storm Main	Watermain	2.5m (preferably 3.0m)	Additional clearance may be required at the Engineer's (EWSI) discretion, including when pipe diameters are greater than 300 mm.
Sanitary Main, Storm Main and Catch Basin Leads Crossing	Watermain	0.3 m when crossing under water main 0.5 m when crossing over water main	Catch basin leads must be shown where they cross water mains.
MH	Watermain	2.5m	
Oversized MH (Ø1800 & larger)	Watermain	3.0m	From the centreline to centreline (watermains <= 600 mm)
Catch Basin	Watermain	1.5m	
Catch Basin lead	Watermain	2.5m (preferably 3.0m)	
Storm Sanitary service	Watermain	2.5m (preferably 3.0m)	When paralleling main
Storm and Sanitary service crossing	Watermain	0.15m	Vertical Crossing
Storm Sanitary service	Large water service, Ø100 & larger	3.0m	Provide dimension from PL to services. Large water service to be in own trench.
Storm Sanitary service	Water Services	0.3 m	For typical dual and single services for single family, duplex, and semi-detached lots. Services 50mm and smaller to be laid in same trench as storm and sanitary services, to the right of the sanitary service when facing lot to be served.
MH shaft	Water Services	2.0m	
Catch Basin	Water Services	2.5m	
Catch Basin lead	Water Services	2.5m	
Storm and Sanitary Main	Water Services	1.5m (2.5m preferred)	For small services only (50mm and smaller). When paralleling. Water service cannot be between a storm main and a sanitary main.
Storm and Sanitary joint	Water Services	1.5m	Clearance is from joint, not centre of fitting (tee, cross, bend, etc.)
Storm and Sanitary service	Hydrants	2.5m	
CB lead	Valve	3.0m	
Drainage Infrastructure or non-potable water infrastructure	Infrastructure with a thrust	1.5m	
Drainage Infrastructure or non-potable water infrastructure including storm and sanitary	Water Joint	1.5m	Clearance is from the joint not from the center of fitting (tee, cross, bend, etc.). Clearance also applies to tie in joints (i.e. plugs after
Storm inline tee/ sanitary core-bell insert and service line	Water mainstop	0.3m	
Subdomain: Landscaping (Volume 5)			
Domain Infrastructure	**Minimum Clearance**	**Minimum Clearance**	**Minimum Clearance**
Storm and sanitary services	Trees	1.8m	Centre of tree
Storm and sanitary manholes	Trees	1.8m	Centre of tree
Subdomain: Streetlighting (Volume 6)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Storm and sanitary services	Streetlights and power poles	2.0m	
Subdomain: EPCOR Power (Volume 7)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Drainage/Sanitary Main, Catch basin, manhole, vault other large drainage structure	Main power trench	2.0m	Troughed to 1.5 m either side of catch basin if less than 2.0 m
Manhole, catch basin, storm and sanitary services	1-phase pad-mounted	4.5m	3.0 m is required from the ground grid to the other utility
Manhole, catch basin, storm and sanitary services	3-phase pad-mounted	5.0m	3.0 m is required from the ground grid to the other utility
Catch basin, storm and sanitary services	Power crossings	3.0m	Crossings in roadways must be 3.0 m from catch basins
Subdomain: Gas			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Storm and sanitary mains	Gas crossings and line	Minimum 1.5m, preferred 3.0m	
Storm and sanitary services	Gas crossings and line	Minimum 1.5m, preferred 3.0m	
Catchbasins and catchbasin manholes	Gas crossings and line	Minimum 1.5m, preferred 3.0m	
Subdomain: Telecommunications			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Storm and sanitary mains	Telecommunications pedestal	Minimum 1.5m, preferred 3.0m	
Storm and sanitary services	Telecommunications pedestal	Minimum 1.5m, preferred 3.0m	

Item Number	Domain: EPCOR Water (Volume 4)			
	Subdomain: Complete Streets (Volume 2)			
4.2	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance *(Unless otherwise specified)**	**Notes**
4.2.1	Curb cock	PL	0.1m	0.3m from PL for side lot services
4.2.2	Watermain	Face of Curb (FOC)	1.5m (<= 400 mm mains)	
4.2.3	Watermain	FOC	2.0m (> 400 mm mains)	
4.2.4	Watermain in alley, utility lot, walkway, or URW	PL	1.2m (preferably 2.0m)	Mains in walkways are to be dimensioned to side PL.
4.2.5	Water services	PL	Extend service into lot 1.5m beyond the edge of the shallow utility easement	If the water service enters a parcel where there isn't a shallow utility easement, the water service shall extend into the lot a minimum of 1.5m beyond the property line.
4.2.6	Flushpoint	PL	1.5m	Plug is 5.0m from PL
4.2.7	Hydrant	FOC	Preferred: 3.0m for any ROW with Monowalk. Min 1.5 m - max 3.5 m offset acceptable.	If the monolithic walk is greater than 2.5 m wide, include a 90 degree bend in the hydrant lead and locate the hydrant and the control valve 0.3 m behind the back edge of the walk.
4.2.8	Hydrant	FOC	1.5m for any ROW with Separate Walk	Where the walk is greater than 2.0 m into the boulevard or where no walk exists.
4.2.9	Hydrant	Edge of Walk	0.3m	
4.2.10	Hydrant	Edge of Bus Stop	6.0m	Hydrants located within 45 m of the approach side of the bus stop or 15 m of the departure side must be labeled "To be white disked (Fire Dept. Use Only) at commissioning."
4.2.11	Hydrant	Edge of Driveway	To be located on the opposite lot line from	If unable, minimum 1.5m (preferably 2.0m)
4.2.12	Hydrant	Corner of intersection	To be installed at the beginning of the curve of	Where not in conflict with item 4.2.14.
4.2.13	Valves	Alley	6.0m of the approach &	
4.2.14	Valves	Arterial road & collector road	30m	
4.2.15	Valves	Property Line	To be located on the projection of PL, where	
4.2.16	Valves	Utility lot, walkway or URW	0.5m from PL or its projection	
	Subdomain: EPCOR Drainage (Volume 3)			
4.3	**Domain Infrastructure**	Subdomain Infrastructure	**Minimum Clearance *(Unless otherwise**	Notes
4.3.1	Watermain	Sanitary & Storm Main	2.5m (preferably 3.0m)	Additional clearance may be required at the Engineer's (EWSI)
4.3.2	Watermain	Sanitary Main, Storm Main and	0.3 m when crossing under water main	Catch basin leads must be shown where they cross water mains.
4.3.3	Watermain	MH	2.5m	
4.3.4	Watermain	Oversized MH (Ø1800 & larger)	3.0m	From the centreline to centreline (watermains <= 600 mm)
4.3.5	Watermain	Catch Basin	1.5m	
4.3.6	Watermain	Catch Basin lead	2.5m (preferably 3.0m)	
4.3.7	Watermain	Storm Sanitary service	2.5m (preferably 3.0m)	When paralleling main
4.3.8	Watermain	Storm and Sanitary service	0.15m	Vertical Crossing
4.3.9	Large water service, Ø100 & larger	Storm Sanitary service	3.0m	own trench.
4.3.10	Water Services	Storm Sanitary service	0.3 m	detached lots. Services 50mm and smaller to be laid in same trench as
4.3.11	Water Services	MH shaft	2.0m	
4.3.12	Water Services	Catch Basin	2.5m	
4.3.13	Water Services	Catch Basin lead	2.5m	
4.3.14	Water Services	Storm and Sanitary Main	1.5m (2.5m preferred)	service cannot be between a storm main and a sanitary main.
4.3.15	Water Services	Storm and Sanitary joint	1.5m	Clearance is from joint, not centre of fitting (tee, cross, bend, etc.)
4.3.16	Hydrants	Storm and Sanitary service	2.5m	
4.3.17	Valve	CB lead	3.0m	
4.3.18	Infrastructure with a thrust block (reducer,	Drainage Infrastructure or non-	1.5m	
4.3.19	Water Joint	Drainage Infrastructure or non-	1.5m	Clearance is from the joint not from the center of fitting (tee, cross, bend,
4.3.20	Water mainstop	Storm inline tee/ sanitary core-bell	0.3m	
	Subdomain: General / EPCOR Water (Volume 4)			
4.4	**Domain Infrastructure**	Subdomain Infrastructure	**Minimum Clearance *(Unless otherwise**	Notes
4.4.1	Watermain	Watermain	1.5m	If the carriageway allows for two water mains to be located within the
4.4.2	Watermain	Any other utility crossing the	1.0 m vertical	Does not include storm and sanitary sewer mains and DPS mains.
4.4.3	Tapping Valve Sleeve (TVS)	All pipe joints, including other	1.5m	
4.4.4	Water mainstop	To other mainstop including	0.6m	
4.4.5	Water mainstop	From any water joint i.e., bend,	0.6m	
4.4.6	Water mainstop	Storm inline tee/ sanitary core-bell	0.3m	
4.4.7	Water Main and Any Utility Crossing	Deflection or joint on either utility	1.5 m horizontal separation	be achieved, the crossing shall not be at an angle of less than 45 degrees.
	Subdomain: Landscaping (Volume 5)*			
4.5	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
4.5.1	All water infrastructure	Soil cells	See Volume 4 Section 1.15	
4.5.2	Valve, hydrant, curb cock (CC), or	Fence	1.2m	For fencing on private property, offset for fencing on public property will be
4.5.3	Watermains, services, manual air vents	Deciduous tree	1.8m	Ensure that these dimensions are measured from the actual service
4.5.4	Watermains, Services, manual air vents	Coniferous tree	3.5m	Ensure that these dimensions are measured from the actual service
4.5.5	Hydrant	Deciduous tree	3.5m	
4.5.6	Hydrant	Coniferous tree	7.0m	
4.5.7	Hydrant	Shrubs	1.0 m behind hydrant and 1.5 m on either side	
4.5.8	Valve, hydrant, curb cock (CC), or	Movable street and parks furniture	1.5m	
4.5.9	Valve, hydrant, curb cock (CC), or	Immovable street and parks	3.0m	
4.5.10	Provide a dimension from the landscaping element to the water appurtenance if:			
	Subdomain: Streetlighting (Volume 6)			
4.6	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
4.6.1	Hydrant	Streetlight pole (centre of pole)	1.8m	Edge to edge with pedestal, transformer, telecommunication cubicles &
4.6.2	Water services	Streetlight pole (centre of pole)	1.8m	
4.6.3	Watermain	Streetlight pole (centre of pole)	1.8m	
	Subdomain: EPCOR Power (Volume 7)			
4.7	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
4.7.1	Water services and hydrants/flush points/air	1-phase pad-mounted equipment	4.5m	
4.7.2	Water services and hydrants/flush points/air	3-phase pad-mounted equipment	5.0m	
4.7.3	Water services	Power services and Power Cables	1.8m	Clearance is from the actual water service location, not from the water
4.7.4	Valves and curb cocks	Power cables <= 40 kV	1.0m	Minimum distance between CC and any power cables.
4.7.5	Valve or water appurtenances is crossed on	Power cables <= 40 kV	1.8m	
4.7.6	Valve casings	Pad-mounted equipment	1.5m	Edge to edge
4.7.7	Hydrants with control valves more than 2m	Power cables <= 40 kV crossing	Hydrants: 3m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
4.7.8	Hydrants	Main power cable and duct bank	3.0m	See EDTI Standard for Trenching Around Hydrants for reduced
4.7.9	Hydrants	Power cables <= 40 kV	3.0m	1.0m is allowed if encased in wood, trough to 1.5m on each side of hydrant
4.7.10	Water Main	Secondary Power Cable (<=750	2 m from edge of pipe	
4.7.11	Water Main	Primary Power Cable (<=40 kV)	4 m from edge of pipe	Primary power to be located on opposite side of the road unless power is in
4.7.12	Water Main	High Voltage Power Cable (>40	See Notes	To be designed based on safe limits of approach and excavation
4.7.13	Watermain	Pad-mounted equipment	3.0m	
4.7.14	All water infrastructure	Grounding rods	1.8m	
	Subdomain: Gas			
4.8	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
4.8.1	Watermain	Gas main	1.8m	
4.8.2	Valve or curb cock (CC)	Gas mains or ductlines	1.0m	
4.8.3	Valve or water appurtenances is crossed on	Gas mains or ductlines	1.8m	
4.8.4	Hydrant	Gas mains or ductlines	1.5m	1.0m is allowed if encased in wood, trough to 1.5m on each side of hydrant
4.8.5	Hydrants with control valves more than 2m	Gas mains or ductlines crossing	Hydrants: 3m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
4.8.6	Water services	Gas services and gas crossings	1.8m	Clearance is from the actual water service location, not from the water
4.8.7	Water services	Gas mains or ductlines	1.8m	
	Subdomain: Telecommunications			
4.9	**Domain Infrastructure**	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
4.9.1	Watermain	Telecommmunication cable,	1.8m	
4.9.2	Valve or curb cock (CC)	Telecommmunication cable	1.0m	
4.9.3	Hydrant	Telecommmunication cable	1.5m	1.0m is allowed if encased in wood, trough to 1.5m on each side of hydrant
4.9.4	Valve or water appurtenances is crossed on	Telecommmunication cable	1.8m	
4.9.5	Hydrants with control valves more than 2m	Telecommunication cable	Hydrants: 3m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
4.9.6	Water services	Telecommunication cable,	1.8m	

* Dimension symbol and legend can be used instead of dimension line to avoid clutter.

Domain: DPS Systems (Volume 1)			
Subdomain: Complete Streets (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance *(Unless otherwise specified)**	**Notes**
Curb cock	PL	0.1m	0.3m from PL for side lot services
DPS Main/Branch	Face of Curb (FOC)	1.5m (<= 400 mm mains)	
DPS Main/Branch	FOC	2.0m (> 400 mm mains)	
DPS Main/Branch in alley, utility lot, walkway, or URW	PL	1.2m (preferably 2.0m)	Mains in walkways are to be dimensioned to side PL.
DPS Services	PL	Extend service into lot a minimum of 1.5m beyond the edge of the shallow utility easement	If the DPS service enters a parcel where there isn't a shallow utility easement, the DPS service shall extend into the lot a minimum of 1.5m beyond the property line.
Blow-off/Drain Manhole	PL	1.5m from centerline of blow-off air vent to PL	
Valves	Alley	6.0m of the approach & 3.0m of the departure	
Valves	Arterial road & collector road intersection	30m	
Valves	Property Line	To be located on the projection of PL, where possible or dimension to a PL	
Valves	Utility lot, walkway or URW	0.5m from PL or its projection	
Subdomain: EPCOR Drainage (Volume 3)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance *(Unless otherwise specified)**	Notes
DPS Main/Branch	Sanitary & Storm Main	2.5m (preferably 3.0m)	Additional clearance may be required at the Engineer's discretion, including when pipe diameters are greater than 300 mm.
DPS Main/Branch	Sanitary Main, Storm Main and Catch Basin Leads Crossing	0.3 m when crossing under DPS main/branch 0.5 m when crossing over DPS main/branch	Catch basin leads must be shown where they cross DPS main/branch.
DPS Main/Branch	MH	2.5m	
DPS Main/Branch	Oversized MH (Ø1800 & larger)	3.0m	From the centreline to centreline (DPS main/branch <= 600 mm)
DPS Main/Branch	Catch Basin	1.5m	
DPS Main/Branch	Catch Basin lead	2.5m (preferably 3.0m)	
DPS Main/Branch	Storm Sanitary service	2.5m (preferably 3.0m)	When paralleling main
DPS Main/Branch	Storm and Sanitary service	0.15m	Vertical Crossing
DPS service, Ø100 & larger	Storm Sanitary service	3.0m	trench.
DPS Services	Storm Sanitary service	0.3 m	detached lots. Services 50mm and smaller to be laid in same trench as
DPS Services	MH shaft	2.0m	
DPS Services	Catch Basin	2.5m	
DPS Services	Catch Basin lead	2.5m	
DPS Services	Storm and Sanitary Main	1.5m (2.5m preferred)	For small services only (50mm and smaller). When paralleling.
DPS Services	Storm and Sanitary joint	1.5m	Clearance is from joint, not centre of fitting (tee, cross, bend, etc.)
DPS MH	Sanitary & Storm Main	2.5m	
Valve	CB lead	3.0m	
Infrastructure with a thrust block (reducer,	Drainage Infrastructure or non-	1.5m	
Subdomain: General / EPCOR Water (Volume 4)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance *(Unless otherwise**	Notes
DPS Main/Branch	Watermain	2.5m (preferably 3.0m)	Additional clearance may be required at the Engineer's discretion,
DPS Main/Branch	Watermain	0.3 m when crossing under DPS main/branch	clearances:
DPS Main/Branch	Watermain service	2.5m (preferably 3.0m)	When paralleling main
DPS MH	Watermain	2.5m	
Oversized MH (Ø1800 & larger)	Watermain	3.0m	From the centreline to centreline (DPS mains or branch <= 600 mm)
DPS Service Crossing	Watermain	0.15m	Vertical Crossing
DPS Service	Large water service, Ø100 &	3.0m	in own trench.
DPS Service	Water Services	0.3m	detached lots. Services 50mm and smaller to be laid in same trench as
DPS MH Shaft	Water Services	2.0m	
DPS Main/Branch	Water Services	1.5m (2.5m preferred)	For small services only (50mm and smaller). When paralleling.
DPS joint	Water Services	1.5m	Clearance is from joint, not centre of fitting (tee, cross, bend, etc.)
DPS Service	Hydrants	2.5m	
DPS Service	Infrastructure with a thrust block	1.5m	
DPS Service	Water Joint	1.5m	bend, etc.). Clearance also applies to tie in joints (i.e. plugs after BVs).
DPS Service	Water mainstop	0.3m	
Subdomain: Landscaping (Volume 5)*			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
All DPS infrastructure	Soil cells	1.5m (2.5 preferred)	Soil cells not permitted above DPS Mains/Branches
DPS Main/Branch, Services, Manual air	Fence	1.2m	For fencing on private property, offset for fencing on public property will
DPS Main/Branch, Services, Manual air	Deciduous tree	1.8m	Ensure that these dimensions are measured from the actual service
DPS Main/Branch, Services, Manual air	Coniferous tree	3.5m	Ensure that these dimensions are measured from the actual service
Valve, curb cock (CC), DPS Main/Branch,	Movable street and parks furniture	1.5m	
DPS Valve, DPS curb cock (CC), DPS Main/Branch, manual air vents, MH	Immovable street and parks furniture including but not limited to signs, public art, and retaining walls	3.0m	
Subdomain: Streetlighting (Volume 6)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
DPS Main/Branch, Services, Manual air	Streetlight pole (centre of pole)	1.8m	Edge to edge with pedestal, transformer, telecommunication cubicles &
DPS services	Streetlight pole (centre of pole)	1.8m	
DPS Main/Branch	Streetlight pole (centre of pole)	1.8m	
Subdomain: EPCOR Power (Volume 7)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
DPS Services, blow-offs, MH, Manual air	1-phase pad-mounted equipment	4.5m	required at the discretion of EPCOR D&T and will be
DPS Services, blow-offs, MH, Manual air	3-phase pad-mounted equipment	5.0m	required at the discretion of EPCOR D&T and will be
DPS Services	Power services and Power Cables	1.8m	
DPS Valves and DPS curb cocks	Power cables <= 40 kV	1.0m	Minimum distance between CC and any power cables.
DPS Valve or DPS appurtenances is	Power cables <= 40 kV	1.8m	
DPS Valve casings	Pad-mounted equipment	1.5m	Edge to edge
DPS MH	Main power cable and duct bank	3.0m	See EDTI Standard for Trenching Around Hydrants for reduced
DPS MH	Power cables <= 40 kV	3.0m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
DPS Main/Branch	Secondary Power Cable (<=750	2 m from edge of pipe	
DPS Main/Branch	Primary Power Cable (<=40 kV)	4 m from edge of pipe	Primary power to be located on opposite side of the road unless power
DPS Main/Branch	High Voltage Power Cable (>40	See Notes	To be designed based on safe limits of approach and excavation
DPS Main/Branch	Pad-mounted equipment	3.0m	required at the discretion of EPCOR D&T and will be
All DPS infrastructure	Grounding rods	1.8m	
Subdomain: Gas			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
DPS Main/Branch	Gas main	1.8m	
DPS Valve or curb cock (CC)	Gas mains or ductlines	1.0m	
DPS Valve or DPS appurtenances is	Gas mains or ductlines	1.8m	
DPS MH	Gas mains or ductlines	1.5m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
DPS Services	Gas services and gas crossings	1.8m	
DPS Services	Gas mains or ductlines	1.8m	
Subdomain: Telecommunications			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
DPS Main/Branch	Telecommmunication cable,	1.8m	
Valve or curb cock (CC)	Telecommmunication cable	1.0m	
DPS MH	Telecommmunication cable	1.5m	1.0m is allowed if encased in wood, trough to 1.5m on each side of
DPS Valve or DPS appurtenances is	Telecommmunication cable	1.8m	
DPS Services	Telecommmunication cable,	1.8m	

Subdomain: General /DPS			
Domain Infrastructure	Subdomain Infrastructure	**Minimum Clearance *(Unless otherwise**	Notes
DPS Main/Branch	DPS Main/Branch	Refer to DPS Standard Detail C-15	Clearance between supply and return mains
DPS Service Connection at the Main/Branch	To other connects including	0.6m	

ADDITIONAL NOTES

Blatchford has unique offsets, the actual offsets will be determined and reviewed at the time of design review

Domain: Landscaping (Volume 5) (SEE ADDITIONAL NOTES AT THE BOTTOM)			
Subdomain: Complete Streets and Roadways (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Trees	Face of Curb (Local)	1.0m, 1.25m preferred	Trees to be placed in line with or further from Face of Curb than Streetlight Poles.
Trees	Edge of Sidewalk, Walkway, Driveway, and Shared-Use Path	1.0m, preferred 1.5m	
Trees	FOC (Collector)	1.25m / 1.65m	1.25 m ROW < 20m, 1.65 m ROW > 20m. Trees to be placed in line with or further from Face of Curb than Streetlight Poles.
Trees	FOC (Arterial)	2.0m	Trees to be placed in line with or further from Face of Curb than Streetlight Poles.
Trees	Edge of commercial or industrial access	1.5m	
Trees	Stop signs and yield signs	3.5m	
Trees	All other signs	2.0m	
Trees	Transit zones/bus pads	3.5m	In addition to the 3.5 m clearance, ensure trees do not create sightline obstructions for vehicles approaching transit zones.
Trees	Intersection	15m	
Trees (in walkway or shared-use path ROW)	Property line	1.0m	
Trees (in boulevard)	Property line	1.0m	
Deciduous trees (in open parkland)	Property line	2.5m	From centre of tree, in open parkland where there is turf between the fence and the tree rather than a bed.
Coniferous trees (in open parkland)	Property line	2.5m	From **edge of mature spread** of tree, in open parkland where there is turf between the fence and the tree rather than a bed.
Shrubs	Edge of Sidewalk, Walkway and Shared-Use Path	0.5m	Shrubs at maturity.
Mulched beds	Boulevard curb	2.5m	Within boulevard curb along arterial and collector roadways.
Benches	Back of walkway	1.0m	
Litter receptacle	Edge of Walk	0.6m	
Picnic Table	Back of walkway	1.0m	
Subdomain: EPCOR Drainage (Volume 3)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Trees	Storm and sanitary services	1.8m	
Trees	Storm and sanitary manholes	1.8m	
Subdomain: EPCOR Water (Volume 4)****			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Soil cells	All water infrastructure	See Volume 4 Section 1.15	
Fence	Valve, hydrant, curb cock (CC), or	1.2m	For fencing on private property, offset for fencing on public property will be at 1.2m or greater, at the discretion of the City
Deciduous tree	Watermains, services, manual air vents	1.8m	Ensure that these dimensions are measured from the actual service locations and not the property line.
Coniferous tree	Watermains, Services, manual air vents	3.5m	Ensure that these dimensions are measured from the actual service locations and not the property line.
Deciduous tree	Hydrant	3.5m	
Coniferous tree	Hydrant	7.0m	
Shrubs	Hydrant	1.0 m behind hydrant and	
Movable street and parks furniture including but not limited to benches, tables, and waste receptacles	Valve, hydrant, curb cock (CC), or	1.5m	
Immovable street and parks furniture including but not limited to signs, public art, and retaining walls	Valve, hydrant, curb cock (CC), or	3.0m	
Provide a dimension from the landscaping element to the water appurtenance if:			
Subdomain: Landscaping (Volume 5)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Shrub beds and planting beds	Shrub bed, fence, furniture, buildings,	2.5m	
Shrub beds, planting beds, and trees	Any play space envelope (playground	5m	
Shrub beds and planting beds	Edge of bed	0.5m	Must be 500 mm (0.5 m) of mulched space between the edge of the**mature** shrub and the edge of the bed
Coniferous Tree	Edge of bed	0.5m	Must be 500 mm (0.5 m) of mulched space between the edge of the**mature** confirerous tree and the edge of the bed
Litter receptacle	Bench	3.0m	
Subdomain: Landscaping Offleash Areas (Volume 5)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Offleash Area	Residential Areas and cemeteries	100m	Unless separated a berm, fencing, trees or other mitigation measures and at the discretion of the City.
Offleash Area	Arterial roads	50m	Unless separated by fencing or other mitigation methods and at the discretion of the City
Offleash Area	Golf Courses and public areas that	50m	Unless separated by fencing or other mitigation methods and at the discretion of the City
Offleash Area	Multi-use trails and equestrian trails	25m	Unless separated by fencing or other mitigation methods and at the discretion of the City
Offleash Area	School grounds or play areas and	25m	Unless separated by fencing or other mitigation methods and at the discretion of the City
Offleash Area	Pools, splash parks, sports fields, and	25m	Unless separated by fencing or other mitigation methods and at the discretion of the City
Offleash Area	Natural areas, wildlife corridors, and	Determine case by case	As determined on a case by case basis with the City
Subdomain: Streetlighting (Volume 6)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Trees	Streetlights and power poles	3.0m	
Trees	Streetlight cable	1.0m	For arterial road boulevards
Subdomain: EPCOR Power (Volume 7)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Trees	Main power trench	1.0m	Measured from the main power cable.
Trees and shrubs	3-phase switching cubicle	3.0m on each side where	From edge of base
Trees and shrubs	Transformer	2.0m on sides 3.0m in front o	Measured from edge of base Minimum 3.0 m clearance in front of doors required for hot stick operation Measured from edge of base
Trees and shrubs	Power crossings	1.0m	Measured horizontally offset from the power crossing alignment
Trees and shrubs	1-phase switching cubicle	3.0m front 4.0m sides 2.5m t	From edge of base
Landscaped road island	Power crossings	SEE NOTES	See Note 1 below
Landscaped road island	Pad-mounted equipment	SEE NOTES	See Note 1 below
Subdomain: Gas and Pipelines			
Trees	Contact the utility for setbacks		
Trees, shrubs, shrub and planting beds	Pipelines	Planting distances from low, intermediate and high-pressure pipelines are to be observed as dictated by the Pipeline Authority.	
Subdomain: Telecommunications			
Trees	Contact telecomm company for setbacks		

ADDITIONAL NOTES

*For deciduous tree(s), all measurements from centre of tree(s), for coniferous trees all measurements are from the edge of the mature spread, unless stated explicitly otherwise
** In general, setback distances apply to the majority of tree and tree form shrub species. However, certain species require different setbacks, such as those trees with suckering root systems or large hanging canopies (i.e. Poplars and Willows). Planting Populus spp. on parkland adjacent to private property is generally not recommended. However: - Should Northwest Poplar, Balsam Poplar and Cottonwood be referenced, the minimum setback distances from **private property lines** shall be 15m due to root encroachment concerns. - Should Northwest Popular, Balsam Popular and Cottonwood be referenced, the minimum setback distances from **hard surfaces** shall be 10m, unless special construction details are used. - All other Populus spp., including columnar varieties, shall have a minimum setback of 10m from private property lines and 5.0m from hard surface areas where sub surface compaction has occurred.
- Some allowances may be made at the discretion of Forestry at th City if there is special construction mitigation in place, such as a root barrier.
*** Some offsets related to constrution practices (not design offsets) are provided in Volume 5: Landscaping. These must be adhered to by the Developer, Contractor, and Consultant. See Volume 5: Landscaping "Trees and Shrub Planting Setbacks" for further information.
**** Dimension symbol and legend can be used instead of dimension line to avoid clutter.
Note 1: See the City of Edmonton Design and Construction Standards Volume 5 – Landscaping …shallow utilities shall not be placed in Landscaped Road Islands. Written permission for power crossings or pad mounted equipment in Landscaped Road Islands is the responsibility of the developer. Ducts must be continuous and cannot have trees within 1.0 m of the duct. Other plantings such as small shrubs or flowers would be allowed over top of the crossing.
Distances from overhead power utilities shall be as per the requirements established by the Utility Authority.

Domain: Streetlighting (Volume 6)*			
Subdomain: Complete Streets (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole	FOC	1.25m along Local Streets; 1.25m along Collectors; 2.0m along Arterials; 2.6m for monowalks along Local and Collector Streets 3.0m for monowalks adjacent to School Sites	
Streetlight Pole	Edge of sidewalk or walkway	0.5m , preferred 1.0m	
Streetlight Pole	Edge of shared-use path	0.5m, preferred 1.5m	
Streetlight Pole	Intersection	0.9m	
Streetlight Pole	Driveway (Residential)	0.5m with standard base and 0.75m with utility box	Edge of driveway
Streetlight Pole	Driveway/Access (Commerical or Industrial)	1.5m	Edge of access
Multiparty trench	FOC	2.5m	Centerline of trench
Subdomain: EPCOR Drainage (Volume 3)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlights and power poles	Storm and sanitary services	2.0m	
Subdomain: EPCOR Water (Volume 4)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole (centre of pole)	Hydrant	1.8m	Edge to edge with pedestal, transformer, telecommunication cubicles & streetlightlight poles
Streetlight Pole (centre of pole)	Water services	1.8m	
Streetlight Pole (centre of pole)	Watermain	1.8m	
Subdomain: Landscaping (Volume 5)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole	Trees	3.0m	
Streetlight Cable	Trees	1.0m	For arterial road boulevards
Subdomain: EPCOR Power (Volume 7)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole	Primary or secondary cables	1.0m / 0.3m	1.0 m clearance required if streetlighting is installed
Streetlight Pole	Power crossings	1.5m	To the closest power crossing duct
Main streetlight trench	Pad-mounted equipment	Common trench	See base standards and trough standards (Volume
Subdomain: Gas			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole	Gas crossings and lines	1.0m	
Subdomain: Telecommunications			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Streetlight Pole	pedestals	1.0m	

*All measurements from centre of pole

Domain: EPCOR Distribution and Transmission (Volume 7) (SEE ADDITIONAL NOTES AT THE BOTTOM)			
Subdomain: Complete Streets and Roadways (Volume 2)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Transformer	Corner cut	6.0m	
Transformer	FOC	SEE NOTES	**Offset is required.** See the specific and applicable cross-section(s) found in Complete Streets Design and Construction Standards.
Transformer	Residential driveways	2.0m	From edge of equipment to driveway
Transformer/Switching cubicle	Bus stop pad	3.0m	From edge of bus pad to edge of base
Transformer/Switching cubicle	Road crossing	3.0m	From centre to closest duct in crossing
Transformer/Switching cubicle	Intersection edge of pavement	15.0m	
Transformer/Switching cubicle	Commercial/Industrial access edge of pavement	10.0m	
Pad-mounted equipment	Edge of walkway property line	3.0m	From edge of equipment to edge of walkway property line
Pad-mounted equipment	Transportation control devices and signs	3.0m	From edge of pad
1-phase or 3-phase cubicle	Corner cut	30.0m	
Multiparty Trench	FOC	2.5m	Centerline of trench
Main power/multiparty trench	Property Line	1.0m	Actual required minimum offset may change depending on sidewalk type and alignment of shallow utilities.
Power crossings	Bus stop pad	3.0m	From edge of bus pad to crossing
Power crossings	Corner cut	3.0m	
Subdomain: EPCOR Drainage(Volume 3)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Main Power Trench	Drainage/Sanitary Main, Catch basin, manhole, vault other large drainage structure	2.0m	Troughed to 1.5 m either side of catch basin if less than 2.0 m
1-phase pad-mounted equipment	Manhole, catch basin, storm and sanitary	4.5m	3.0 m is required from the ground grid to the other utility
3-phase pad-mounted equipment	Manhole, catch basin, storm and sanitary	5.0m	3.0 m is required from the ground grid to the other utility
Power crossings	Catch basin, storm and sanitary services	3.0m	Crossings in roadways must be 3.0 m from catch basins
Subdomain: EPCOR Water (Volume 4)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
1-phase pad-mounted equipment (transformers)	Water services and hydrants/flush	4.5m	
3-phase pad-mounted equipment (transformers)	Water services and hydrants/flush	5.0m	
Power services and Power Cables Paralleling Water Service	Water services	1.8m	Clearance is from the actual water service location, not from the water service symbol
Power cables <= 40 kV	Valves and curb cocks	1.0m	Minimum distance between CC and any power cables. Telecommunication cables, gas
Power cables <= 40 kV	Valve or water appurtenances is crossed	1.8m	
Pad-mounted equipment	Valve casings	1.5m	Edge to edge
Power cables <= 40 kV crossing between control valve and	Hydrants with control valves more than	Hydrants: 3m	Hydrant:1.0m is allowed if encased in wood, trough to 1.5m on each side of hydrant
Main power cable and duct bank	Hydrants	3.0m	See EDTI Standard for Trenching Around Hydrants for reduced clearances (Volume 7:
Power cables <= 40 kV	Hydrants	3.0m	1.0m is allowed if encased in wood, trough to 1.5m on each side of hydrant
Secondary Power Cable (<=750 V)	Water Main	2 m from edge of pipe	
Primary Power Cable (<=40 kV)	Water Main	4 m from edge of pipe	Primary power to be located on opposite side of the road unless power is in a four party trench or
High Voltage Power Cable (>40 kV)	Water Main	See Notes	To be designed based on safe limits of approach and excavation allowance.
Pad-mounted equipment	Watermain	3.0m	
Grounding rods	All water infrastructure	1.8m	
Subdomain: Landscaping (Volume 5)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Main power trench	Trees	1.0m	Measured from the main power cable.
1-phase switching cubicle	Trees and shrubs	3.0m front	From edge of base
3-phase switching cubicle	Trees and shrubs	3.0m on each side where	From edge of base
Pad-mounted equipment	Landscaped road island	SEE NOTES	See Note 1 below
Transformer	Trees and shrubs	2.0m on sides	Measured from edge of base
Power crossings	Trees and shrubs	1.0m	Measured horizontally offset from the power crossing alignment
Power crossings	Landscaped road island	SEE NOTES	See Note 1 below
Subdomain: Street Lighting (Volume 6)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Pad-mounted equipment	Main streetlight trench	Common trench	See base standards and trough standards (Volume 7: EPCOR D&T)
Primary or secondary cables	Streetlight Davit Poles or Contactors	1.0m / 0.3m	1.0 m clearance required if streetlighting is installed after power is installed. 300 mm
Power crossings	Streetlight Davit Poles or Contactors	1.5m	To the closest power crossing duct
Subdomain: Gas			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Pad-mounted equipment	Gas crossing	3.5m	From centre of equipment (minimum 2.0 m grom ground grid)
Pad-mounted equipment ground grid	Main gas trench	1.0m	From ground grid to gas line trench
Main power trench	Main	1.0m	Parallel, see Note 2 below
Power crossings	Main	1.0m	Parallel
Power crossings	Main or service	300mm	Without mechanical separation, see Note 3 below
Subdomain: Telecommunications			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Pad-mounted equipment	Main communications trench	Common trench	See base standards and trough standards (Volume 7: EPCOR D&T)
Pad-mounted equipment	Communications pedestals	3.0m	Minimum 3.0 m from case of transformer or switching cubicle to case of pedestal, see
Primary or secondary cables	Communication vault	300mm	Minimum clearance between edge of communication vault and edge of primary or
Power crossings	To the closest power crossing duct	Power crossing	Communications equipment
Subdomain: Pipeline Rights-of-Ways (Other Than ATCO IP for Servicing the Subdivision)			
Domain Infrastructure	**Subdomain Infrastructure**	**Minimum Clearance**	**Notes**
Pad-mounted equipment	From edge of right-of-way	10.0m	From edge of pipeline right-of-way to edge of ground grid
Power crossings	From edge of right-of-way	5.0m	Power crossing ducts perpendicular to pipeline are to be extended a minimum of 5.0 m

ADDITIONAL NOTES

deviation to these approved clearances due to specific circumstances.
Clearances are from centre to centre of furniture, trench or duct unless otherwise noted.
in Landscaped Road Islands. Written permission for power crossings or pad mounted equipment in Landscaped Road Islands is the
6000070046001 for the typical roadway cross-section to use.
(i.e. 5 Party Trenching, using a sleeve, fastened to the I.P. gas line, as mechanical separation and 100 mm of sand between the
two pieces of equipment will be bonded. A detail drawing is required.
rights-of-way (URW) are as per the URW documents.