

Reference No:

Plans Received:

Subdivision:

Stage:

Consultant:

Contact:

Checked by:

Date:

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ITEM	DESCRIPTION	COMMENTS
A.	PLANNING PERMIT REQUIREMENTS	EDCM (Section 3)
	Has Planning Permit been issued?	
	Have any elements of the Precinct Structure Plan and/or the Development Plan been modified?	# EDCM (Clause 3.1)
	Does the permit require any further plans to be submitted prior to construction plan approval? Such as:- <ul style="list-style-type: none"> • Development/Staging Plan; • Functional Layout Plan; • Building Envelope Plan; • Landscape Plan, etc. 	EDCM (Clause 4.1)
	Have all prescriptive planning permit conditions, which affect engineering designs, been addressed? Such as:- <ul style="list-style-type: none"> • Provision of WSUD in accordance with 'Clause 56' • Main road access upgrade/staging; • External outfall drain; • Major public utility alteration/upgrade, etc. 	# EDCM (Clause 4.1)
	Have all procedural planning permit conditions for engineering plan approval been met? Such as:- <ul style="list-style-type: none"> • Development/Staging Plan endorsed; • Functional Layout Plan approved; • Plan of Subdivision lodged; etc. 	EDCM (Clause 4.1)
	Do any proposed Section 173 Agreements impact upon this application or require specific engineering content (e.g. Access to rainwater tanks, criteria for traffic signals)?	#
	Do pre-existing agreements, bonds or permits impact upon this application (e.g. Works prior to this stage, results of a "trial" of non-standard work, etc.)?	#
	Do proposals for other authorities' infrastructure have any impact upon Council's interests? Such as:- <ul style="list-style-type: none"> • Open waterway cross section; • WSUD elements and/or major wetland area; • Trunk service location/alignment; • Above ground control cabinets/poles, etc. 	#
	Are typical cross sections consistent with objectives of the PSP and standard elements required of this submission?	# EDCM (Clause 4.7.1)
B	PLAN OF SUBDIVISION REQUIREMENTS	EDCM (Clause 4.2)
	Has subdivision been marked with enough pegs to enable meaningful site inspection for this application? Such as:- <ul style="list-style-type: none"> • Clearances from River Red Gums; • Location of dams and wells; • Pole relocations on main roads, etc. 	#
	Are road widths adequate to contain all elements? Check:- <ul style="list-style-type: none"> • Cut/fill clear of possible building footprints; • Main drains and trunk services; • Traffic management devices; • Designated Q₁₀₀ / gap overland drainage flows; and • WSUD bio-retention swales and rain gardens. 	# EDCM (Clause 4.7)
	Are splayed corners and/or radii adequate? Check:- <ul style="list-style-type: none"> • Intersections (3m x 3m min.) & lanes (2m x 2m min.) • Turning lanes and/or future pavement widening • Naturestrip width maintained at Roundabouts 	# EDCM (Clause 4.7.2)
4.	Are linear reserves adequate for intended use? Check:- <ul style="list-style-type: none"> • Minimum width connecting to courts as per guidelines; • Designated Q₁₀₀ overland flow paths; • Maintenance vehicle access; • Paths clear of embankments, obstructions, etc. 	# EDCM (Clause 4.8)
5.	Are lots with direct access onto Council reserves provided with a Paper Road? Check:- <ul style="list-style-type: none"> • Minimum width 4m; • Connectivity with street network. 	# EDCM (Clause 7.5.5)

ITEM	DESCRIPTION	COMMENTS
6.	Drainage easement shall be provided as necessary:- <ul style="list-style-type: none"> • For Council access to cut off drains; • For outfall drains, and be • Clear of all TPZ's and other obstructions. 	# EDCM (Clause 12.10.5) EDCM (Clause 5.5.5) EDCM (Clause 5.3.1)
7.	Restrictions on the Plan of Subdivision shall be consistent with engineering requirements. Such as:- <ul style="list-style-type: none"> • Access restrictions to main roads, • Minimum floor levels, and • Building envelopes. 	#
C.	NEIGHBOURHOOD DESIGN STRATEGY At design submission ensure elements approved during the FLP stage have been correctly applied.	EDCM (Section 5)
	Drainage Strategy <ul style="list-style-type: none"> • WSUD elements and their location. • Major storm flow paths. • Melbourne Water requirements. • Other authority requirements. (e.g. Parks Victoria) • Allowance for future upstream catchment. • Downstream property owners' approval to enter. • Easements for Council maintenance access 	# EDCM (Clause 12.3)
	Environmental Protection Requirements <ul style="list-style-type: none"> • Flora and fauna impacts. • Soil erosion prevention (Geotechnical Report). • Aboriginal and/or historic sites. • Special construction (e.g. boring for tree protection). 	# # EDCM (Clause 5.3.1)
	Road Network <ul style="list-style-type: none"> • Main road access requires FLP of both interim and ultimate intersections (at scale 1:200) to be provided concurrently with internal street designs. • Road and path network and hierarchy to be in accordance with approved PSP or Development Plan. • Traffic generation figures for designs to be supported by Sidra Analysis or Traffic Impact Assessment Report. • Traffic management installations as per approved FLP. 	# EDCM (Clause 7.5.13) EDCM (Clause 4.4) EDCM (Clause 5.2.1 / 5.5.4)
	Urban Design Features <ul style="list-style-type: none"> • Non Standard public lighting must remain consistent across designated neighbourhood. • Threshold treatments not allowed unless approved in advance and all Council Guidelines are satisfied. • Provision shall be made for proposed uses on abutting land (e.g. School, Town Centre, Wetland, etc.). 	# EDCM (Clause 10.15)
	Vehicle and Pedestrian Movement Modified T and Y intersections are not allowed . Typical street cross-sections contain all standard elements and clearances, including:- <ul style="list-style-type: none"> • Main drains, flow paths and treatment-train elements • Standard service space allocations for W, G, E & T. • Electrical & FTTP cabinet locations. Functional layouts to conform with AustRoads Design Guide for turning lane and taper lengths; clear zones and protection for fixed objects. Vehicle movements at intersections and other locations to be clear of nominated on-street residential parking spaces using the following turning templates: <ul style="list-style-type: none"> • <u>Arterial Roads</u> - Semi trailer and 12.5m radius when required to stop or 15.0m radius where no stopping. • <u>Connector to Connector</u> - 8.8m service vehicle and a 15.0m.radius. • <u>Bus routes</u> - 12.5m ULF bus and a 15.0m.radius. • <u>Connector into Access Street</u> - 8.8m service vehicle and a 15.0m radius. 	# EDCM (Clause 10.6.1) EDCM (Clause 10.1.3) EDCM Standard (Fig. 003) EDCM (Clause 10.2.2) EDCM (Clause 10.2.2)

ITEM	DESCRIPTION	COMMENTS
	<ul style="list-style-type: none"> • <u>Access Street into Connector</u> - 8.8m service vehicle and a 12.5m radius. • <u>Access Street to Access Street</u> - 8.8m service vehicle and 12.5m radius. • <u>Court heads and temporary 'dead ends'</u> - Three-point turn using an 8.8m service vehicle and a 10.5m radius. • <u>Mid-block traffic management</u> - Access and turning for applicable vehicles from list above. • <u>Splitter Islands</u> - Connector to Connector intersections shall comply without crossing the pavement centreline. • Splitter Islands shall not be used to modify or change priority at T-intersections between access streets. • B2 Barrier K&C is mandatory except when other types required for medians and traffic management devices. • Footpaths and kerb ramps shall be DDA compliant. • Vehicle crossings to be at least 7m apart. • Provision for on-street car parking in residential zones shall be one space per lot. • The extent of paving in T-headed courts must allow safe pedestrian access and landscape amenity. • Confirm AADT (vpd) for Access and Connector streets. 	<p>EDCM (Clause 7.5.15)</p> <p>EDCM (Clause 7.6.6)</p> <p>EDCM (Clause 7.6.3)</p> <p>EDCM (Clause 7.5.1)</p> <p>EDCM (Clause 4.4)</p>
D.	DOCUMENTATION [For design submission]	
	<p>The following supporting information is required to accompany engineering construction plans.</p> <p>Geotechnical Report</p> <ul style="list-style-type: none"> • Is Consultant pre-qualified on VicRoads Register? • Is sampling interval & scope of testing adequate? • Extent of existing filling to be investigated and shown? • Any remediation works or special engineering fill? 	<p>EDCM (Clause 11.3)</p> <p>EDCM (Clause 11.5.1)</p> <p>EDCM (Clause 10.2.1)</p> <p>EDCM (Clause 10.2.3)</p>
	<p>Pavement Design</p> <ul style="list-style-type: none"> • Consultant is pre-qualified on VicRoads Register. • Subgrade CBR and soil type details supported. • Minimum requirements for pavement materials met. • Calculated ESA's to be consistent with street type. • Pavement design satisfies minimum for street type. • Capping layer material is correctly specified. 	<p>EDCM (Clause 11.3)</p> <p>EDCM(Claude 11.5)</p> <p>EDCM (Clause 11.6)</p> <p>EDCM (Clause 11.7)</p> <p>EDCM (Clause 11.8)</p> <p>EDCM (Clause 11.5.5)</p>
	<p>Drainage Strategy & Computations</p> <p>Consultant to provide hard copy details of:-</p> <ul style="list-style-type: none"> • Drainage strategy plan and quality modelling • Computations complying with Council's Drainage Design Guidelines (incorporating EDCM Section 13); • Catchment plan with sub-catchment areas and inlet points which can be readily identified, by inspection, with the content of computation outputs provided; • External catchment boundaries shown to scale on a topographic plan; • Q₁₀₀ catchment plan, HGL for Gap Flows where applicable and flood level details; and • WSUD analysis of inflow and downstream treatment. 	<p>#</p> <p>EDCM (Clause 4.9)</p> <p>EDCM (Clause 12.3)</p> <p>EDCM (Clause 12.13)</p> <p>EDCM (Clause 12.7.1)</p> <p>EDCM (Clause 12.10.2)</p>
	<p>Engineering Construction Plans</p> <p>Provide one A1, two A3 and one electronic (PDF format) sets containing the following, as applicable:-</p> <ul style="list-style-type: none"> • Detail Engineering Plans, including works external to the subdivision required by the planning permit. • Reproduction of the applicable Plan of Subdivision. • Typical Details, including pavement details. • Signage and Line marking Plan. • Road Longitudinal and Cross Sections. • Intersection Details. • Drainage Longitudinal Sections and Pit Schedule. • Plan of existing vegetation to be protected or removed. • Details of "space allocations" for the provision of other 	<p>EDCM (Clause 6.2)</p>

ITEM	DESCRIPTION	COMMENTS
	<p>Site Inspection Confirm, on site, that the following are shown correctly:-</p> <ul style="list-style-type: none"> • Dams, wells, depressions, watercourses requiring fill. • Available evidence of existing filled areas. • Abnormal structures identified. • Instructions for preparation, backfilling and recording base levels prior to filling dams and watercourses etc. • Main road entrance, or temporary access, surveyed on both sides for obstructions and other safety issues. • Existing service locations, power poles, etc. Is there agreement by authorities to relocate problem services? • Existing trees (to be protected and to be removed). • Council open space in or adjacent to subdivision that requires, or would benefit from, filling? • Boundaries, adjacent to undeveloped land, requiring permanent protection from overland run-off. 	#
	<p>Footpaths</p> <ul style="list-style-type: none"> • Footpaths in streets to provide 'reasonable' continuous accessible path of travel. • Access Places, not providing any link to another street and having no more than 6 lots: • May have a 4m wide shared driveway zone. • Access Streets/Places providing a link to another street or with more than 6 lots: Shall have paths both sides. Connector Streets: • Shall have paths both sides (may include a shared path one side). • Footpath Widths: 1.5m in residential areas; 1.8m in industrial/commercial subdivisions; • Full width to kerb at shop/commercial/school precincts; 2.5m minimum for shared paths. • Shared paths are to be signed and line marked in accordance with AustRoads guidelines. • Kerb ramps shall be provided with TGSI's. • Bicycle paths in Open Space shall be of sufficient strength for designated maintenance vehicle loading. • Spoon drains are not permitted in new streets. • Changes in nature strip crossfall shall be introduced gradually or at intersections. • Provide drains under paths at low points in reserves. • Paths shall link up with existing Council footpaths. • Kerb ramps shall align with paths proposed within open space (as shown on Landscape Plans). 	EDCM (Clause 10.9.3) # # # EDCM (Clause 10.6) EDCM (Clause 10.9.1) EDCM (Clause 10.9.3) EDCM (Clause 10.9.3) EDCM (Clause 10.11.4) #
	<p>Vehicle Crossings</p> <ul style="list-style-type: none"> • Residential lots permitted only one single crossing. • Aligned parallel to and 0.75m clear of side boundary. • Minimum width 3.5m (Where appropriate, 4m width at 1.5m offset preferred to suit future double garages). • Minimum clear space between adjacent crossings 7m. • 1.0m clear of infrastructure (pits, poles, etc.) • For corner lots frontage location is preferred. All must be in accordance with AS/NZS 2890.1 (Cl. 3.2.3). • Provide Heavy Duty Vehicle Crossing, SD422B, for lane access and truck turning at temporary dead-ends. • Do locations suit restrictive building envelopes on the Plan of Subdivision or Permit Plan? • Provide grading and erosion protection detail for drives on steep lots, especially those with high retaining walls. • Generally, provision of vehicular crossings on industrial and commercial subdivisions is not required. 	EDCM (Clause 10.12) # EDCM (Figs. 010 & 011) # # EDCM (Clause 10.10.2) #

ITEM	DESCRIPTION	COMMENTS
	Kerbs and /Kerb & Channel <ul style="list-style-type: none"> B2 Barrier K&C is mandatory in the City of Whittlesea. All streets shall have standard Barrier Kerbs, except when other types are recommended for safe design. The transition from other existing kerb types to B2 shall be achieved within the shortest possible distance. 	EDCM (Clause 10.8) EDCM (Figure 008)
	Sub Surface Drainage <ul style="list-style-type: none"> Non-typical locations are to be shown on the plans. Provide temporary AG's at "end strips". Provide "flush out" risers at crests. Ensure all AG's have suitable (unsubmerged) outlets. Provide AG's below longitudinal pavement joints. 	EDCM (Clause 13.24)
	Allotment Filling <ul style="list-style-type: none"> Where lot filling, or re-grading, is required show finished surface levels at all corners and top of bank. The minimum slope shall be 1 in 150 (0.67%). Plans shall differentiate between minor/uncontrolled regulation ($\leq 200\text{mm}$) and filling to Level 1 standard. 	EDCM (Clause 12.3)
	Street Nameplates, Signs and Line Marking <ul style="list-style-type: none"> Main Road line marking to be approved by VicRoads. New numbers shall be affixed to existing nameplates. Use light poles for street nameplates where possible. 	
	Traffic Management Devices <ul style="list-style-type: none"> Detailed design shall be in accordance with the intent of the approved FLP and AustRoads - Guide to Road Design. 	# EDCM (Clause 10.1)
	Preservation of Trees and Significant Vegetation <ul style="list-style-type: none"> Has location and description been transferred from Flora Reports to Construction Plans accurately? All works to be clear of TPZ's, except "no dig" footpath. The boring of services beneath TPZ's is not permitted unless investigation indicates no rock or impediment. Temporary construction fencing must be shown on plan for all conservation reserves and other areas of significant vegetation. Include reference to Council standard tree protection fencing requirements. Can proposed protection methods achieve objectives? 	
	Fencing of Council Reserves <ul style="list-style-type: none"> Shared lot boundary fencing and other vehicle exclusion measures along boundaries of all Council reserves shall be shown on Engineering Plans. 	
	Abutting Roads <ul style="list-style-type: none"> Future road widening requirements to be incorporated. Existing street title lines shall be shown and matched. New cross sections shall match existing construction. 	#
	Existing Services <ul style="list-style-type: none"> Research and check for existing services. Depth and location shall be shown on drawings. Clearance to new works shall satisfy "asset manager". Old trenches crossing new pavements to be noted for reinstatement with FCR to the full depth of trench. 	
	General Notes - Engineering Plans <ul style="list-style-type: none"> Provide only job specific notes on plans. Do not replicate elements from standard drawings or the Standard VicRoads Specification. Bar Scales shall be provided on all plans. 	
E2.	STREET LONGITUDINAL AND CROSS SECTIONS	
	Information Required on Longitudinal Sections <ul style="list-style-type: none"> Natural surface levels along both building lines. Design levels for lip or top of kerb (not centreline) 	

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	<ul style="list-style-type: none"> Details at low points and all Cross Section locations. Grades to be shown as a percentage. Vertical curve lengths and I. P. levels. Scales, generally, to be 1:500 horizontal, 1:50 vertical. Levels and grades of existing work being matched. 	EDCM (Clause 6.3)																				
	<p>Longitudinal Grades</p> <ul style="list-style-type: none"> Minimum 0.5% (0.75% for kerb returns <10.0m radius) Desirable maximums in EDCM (Table 3) shall apply. The use of absolute maximum values requires specific justification and shall satisfy CFA access requirements. 	EDCM (Clause 10.5.1) EDCM (Clause 10.8.3)																				
	<p>Vertical Curves</p> <ul style="list-style-type: none"> Levels to be shown at not greater than 10m intervals. Minimum VC on a centreline grade change to be 15m. Provide satisfactory sight distance, particularly at intersections, complying with AustRoads standards. 	EDCM (Clause 10.5.2)																				
	<p>Vertical Alignment</p> <ul style="list-style-type: none"> Connector and Access streets shall be designed so that:- Footpath on low side suits lot grading. Driveways within lots match design floor level (or lot FSL) within 4.5m of boundary or 6m from front of footpath at 1 in 4 maximum slope. Steep vehicle entrances suit "Standard Car" clearance. Lot control OK for property drains provided at the front. 	EDCM (Clause 10.10.3) EDCM (Clause 10.10.2)																				
	<p>Matching Existing Works</p> <ul style="list-style-type: none"> For future works survey to establish existing conditions shall be shown for 100m beyond the limit of works. For existing K&C, locate and level 'dummy joints' over 20m and show how smooth transition/match achieved. 																					
	<p>Street Cross Section Design</p> <ul style="list-style-type: none"> Streets designed as overland flow paths shall contain the required "gap flows" with the following criteria:- TWL for Q_{100} to be contained within street reservation in accordance with Melbourne Water LDM. V/D_{av} ratio to satisfy Melbourne Water LDM. D_{max} to satisfy Melbourne Water LDM. Applicable freeboard may extend into lots up to 2m In "non-valley-floor" locations lots on the low side must be protected by "permanent works" to freeboard level. 	# EDCM (Clause 13.22.2) EDCM (Clause 13.22.3)																				
	<p>Information Required on Cross Sections</p> <ul style="list-style-type: none"> Finished levels for Limit of formation (top or toe of batters) Edge of footpath Kerb and/or channel lip Pavement crown Natural surface levels at Limit of formation (top or toe of batters) Title lines Changes in slope Offset from pegged datum to items in a) & b) above. Datum to be shown at every cross section. 300 mm berm behind title line before batter slope. Paths above NS level shall be on FCR into firm natural ground unless suitable fill to AS-3798 is approved. Design TWL for WSUD swales and rain gardens. 	EDCM (Clause 10.7.1)																				
	<p>Cross Fall Limits</p> <p>Street and footpath cross falls shall be within these limits:-</p> <table border="0"> <tr> <td>Footpath</td> <td>–</td> <td>Min. 1:50;</td> <td>Max. 1:40;</td> </tr> <tr> <td>Nature Strips</td> <td>–</td> <td>Min. 1:40;</td> <td>Max. 1:10;</td> </tr> <tr> <td>Pavements</td> <td>–</td> <td>Min. 1:40;</td> <td>Max. 1:30;</td> </tr> <tr> <td>Court Bowls</td> <td>–</td> <td>Min. 1:40;</td> <td>Max. 1:15;</td> </tr> <tr> <td>WSUD swales</td> <td>–</td> <td></td> <td>Max. 1: 6</td> </tr> </table>	Footpath	–	Min. 1:50;	Max. 1:40;	Nature Strips	–	Min. 1:40;	Max. 1:10;	Pavements	–	Min. 1:40;	Max. 1:30;	Court Bowls	–	Min. 1:40;	Max. 1:15;	WSUD swales	–		Max. 1: 6	EDCM (Clause 10.9.2) EDCM (Clause 10.9.2) EDCM (Clause 10.7.2) EDCM (Clause 10.7.3)
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WSUD swales	–		Max. 1: 6																			

ITEM	DESCRIPTION	COMMENTS
	Embankments Slope and extent of batters shall satisfy the following:- <ul style="list-style-type: none"> • Cut or fill shall be a maximum of 1 in 6 everywhere. • 1 in 4 is accepted on lots if slope ≥ 6 m horizontally. • In open space slopes may be steeper if "planted out". 	
	Retaining Walls Walls in subdivisions shall be grouted mass rock type:- <ul style="list-style-type: none"> • For heights ≤ 1m use Council Standard Drawing. • For heights of 1m to 2m use VicRoads Std. Drawing. • For heights >2m a structural certificates are required. • Show length & vertical limits on longitudinal sections. • Profile of top to be smooth and generally match NS. • Cut or fill not to exceed existing NS slope behind wall. 	
	Rural Roads <ul style="list-style-type: none"> • For rural and rural residential subdivisions special cross sections providing WSUD drainage and scour protection shall be determined at the FLP stage. 	#
E3	TYPICAL CROSS SECTIONS, SPECIAL DETAILS AND PAVEMENT DESIGN	
	<ul style="list-style-type: none"> • Typical cross sections shall be as submitted and approved on the Functional Layout Plan prior to design submission. 	# EDCM (Clause 10.6)
	Flexible Pavement Design <ul style="list-style-type: none"> • For Industrial Streets and Arterial Roads use VicRoads Codes of Practice and/or AustRoads Guide to Pavement Technology. • Subgrade assessment to include existing pavements. • Flexible pavement composition to satisfy all guidelines. • Roundabouts and signalised intersection designs to separately assess correct asphalt thickness and type. • Check correct use of pavement materials. • Flexible pavement for indented parking bays to satisfy minimum pavement composition. 	EDCM (Section 11) EDCM (Clauses 11.8.1 - 3) EDCM (Clause 11.8.3) EDCM (Clauses 11.6.1-3)
	Weak Subgrade <ul style="list-style-type: none"> • When unsuitable subgrade materials are identified (e.g. existing fill or saturated soils), proposed treatment shall be "approved in principal" prior to finalizing design solution. 	EDCM (Clause 10.5.4)
	Rigid pavements <ul style="list-style-type: none"> • Access Lanes/Places shall be in accordance with the 'Guide to Residential Streets and Paths, Cement and Concrete Association of Australia (C&CCA T51-2004). • All other streets shall be in accordance with VicRoads RC 500.22 and AustRoads Publication AGPT02. • Jointing as per C&CAA T51 to be shown on drawings. • Pouring sequence to be prescribed on the drawings. 	EDCM (11.2 & Table 13)
E4	INTERSECTION DETAILS, COURTS & PARKING BAYS	
	Design Details <ul style="list-style-type: none"> • Provide set out details and levels for radials and non-linear elements at not greater than 5m intervals, • Provide pavement contours at not more than 250mm intervals, including existing pavement to be matched, • All changes in pavement shape shall be "rounded" and "flat spots" $<1:40$ shall be avoided, • Show all parking bay dimensions, 	
	Kerb Ramps <ul style="list-style-type: none"> • Ramps/pram crossings shall enable a continuous path of travel at right angles to the primary traffic direction. • When (a) is not achieved provide directional TGS's. 	# EDCM (Clause 11.9.3)
	Threshold Treatments <ul style="list-style-type: none"> • Alternative pavement finishes are not allowed unless, prior to a design submission, the proposed treatment is given "approval in principal". 	EDCM (Clause 10.1.5)

ITEM	DESCRIPTION	COMMENTS
	<ul style="list-style-type: none"> Requirements of “WSUD - Growth Area Council Guidelines” and the “Whittlesea Addendum”; Construction arrangements shall make provision for maintenance of planting to be as for landscaping AND resetting rain gardens at end of maintenance period. Adequate space for all street elements shall be provided to avoid loss of vehicle parking spaces, and Life cycle maintenance details shall be documented. 	
	<p>Water Features</p> <ul style="list-style-type: none"> Wetlands, Lakes and Retarding Basins which are located on Council Reserves and contain elements maintained by Council shall be designed to satisfy a safety audit to Royal Lifesaving Society guidelines or Melbourne Water LDM standards as appropriate. Slopes requiring grass mowing shall not exceed 1 in 6 Pipelines discharging to wetlands, either directly or via grassed waterways, shall be fitted with a GPT. 	
E6	UTILITY SERVICES DETAILS	
	<p>Where spatial requirements for services vary within a street, offsets vary or above ground facilities are proposed, details shall be drawn at 1:500 scale which show, in addition to Council assets, the following information:-</p> <ul style="list-style-type: none"> Service alignment at points of change and/or conflict. Above ground items (lighting, pillars, service cabinets). Under pavement conduits. Provisions for maintenance access. 	#
	<ul style="list-style-type: none"> Likely service connections (ends of conduits and/or tapping points) must be clear of any paving. 	
	<ul style="list-style-type: none"> Details on road and drainage plans must agree with other authority design/installation drawings. 	
	<p>Gas and Water conduits:-</p> <ul style="list-style-type: none"> Show conduits crossing road pavement, footpaths and parking bays and extending to the property boundary. Common points of entry (CPE) to be provided where possible in accordance with common trenching code. Location for corner lots – frontage preferable. At right angles to main where possible and centrally located (unless CPE dictates otherwise). Conduits to be referenced on kerb face both sides. Provide water conduits to reserves and roundabouts. Conduit type & size – Provide 150mm dia. for fire services into Industrial, Commercial & Multi Unit Sites. 	EDCM (Clause 14.1)
	<p>Fibre To The Premise (FTTP) Has NBNC or another provider confirmed agreement to provide FTTP? If no contract with NBNC, ensure that:-</p> <ul style="list-style-type: none"> Optic fibre conduit network designs satisfy FTTP planning permit conditions as per guidelines; Plans show distribution network connection point; Multiple conduits installed in any abutting arterial road frontage as per guidelines. 	EDCM (Clause 14.2)
	<p>Sewer Reticulation</p> <ul style="list-style-type: none"> Services offset table on sewer plans is consistent with the table on road and drainage plans. No unnecessary maintenance access covers within paths or pavements. All Council drains to be shown with correct clearances. 	
	<p>Water Reticulation</p> <ul style="list-style-type: none"> Services offset table on watermain plans is consistent with the table on road and drainage plans. Council is responsible for checking that fire hydrants satisfy CFA requirements. 	

ITEM	DESCRIPTION	COMMENTS
	<p>Electricity and Public Lighting</p> <ul style="list-style-type: none"> • Is lighting provided for all roads including arterial roads, paper roads and principle pedestrian links. • Consistency of lantern and pole types with abutting developments/stages. • Appropriate lighting standard (AS 1158) and category for each road. • Non-standard lighting application attached. • Spacing of poles is according to AS 1158. • Conflict points are sufficiently lit (e.g. roundabouts, splitter islands, bends, footpath steps, etc.) • Are pole locations in accordance with Section 8.5 of the City of Whittlesea - Guidelines for Urban Development. (CoW GUD) • Is kiosk sub-station location in accordance to Section 8.5.1 of CoW GUD. 	EDCM (Clause 16.7)
<p>NOTES:</p> <p>EDCM Denotes the requirements of the Engineering Design and Construction Manual for Growth Areas are included here.</p> <p># This item usually addressed at FLP stage. If not, then check details for consistency with approved FLP.</p>		