	Infrastructure	Deteil		Provisional Priority		Estimated secured or		Delivery Timeframe				
Ref	Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding		2018/19 – 2022/23	2023/24 – 2027/28	2028/29 – 2032/33	2033/34 – 2037/38	
	IDP Chapter 4 - Transpo											
	Sustainable Transport M											
	Mitigating the impa				1	1	1					
11	School Clear Zone	Create School Clear Zone to restrict all vehicles from stopping, parking for drop off during AM/PM peaks from a specific area(s). Parking allowed in legally designated car parks and spaces on the High St within the zone. Should reduce congestion at AM peak. Additional benefit of improving air quality at Wilson Corner. Public Transport exempt. Headline estimate only on cost.	BBC / ECC	1	£750,000	£500,000	S.106 / CIL/ ECC					
T2	Park and Ride / Stride Facilities	Deliver Park, Ride or Stride facilities for workers within Brentwood T.C. or drop/pick up off points for parents to drop off their children. Impact on local traffic patterns would need to be understood. Work needed with schools to re-educate parents. Consider an electric and ordinary bicycle hire scheme hub. Additional option to include bus service for schools from these hubs. Headline estimate only on cost.	BBC / ECC	2	£2,000,000	£500,000	s.106 / CIL / ECC / Other					
Т3	Travel Plan Promotion and Resourcing	Travel plans – support / promote personalised travel planning and smarter travel choice options. Deliver a set of focused smarter travel programmes and supporting literature / web resources. Headline cost only.	BBC / ECC / Developers	1	£500,000	£100,000	S.106					
	Reduce vehicle emis	ssion levels and future-proof infrastructure		I		L						
Τ4	New E-charging Infrastructure	Introduce electrical parking points to encourage use of such vehicles and plan and deliver other IT infrastructure redundancy to allow future implementation of emerging SMART systems. All new residential and commercial developments should include e-charging spaces for car clubs using e-vehicles and charging hubs for e-bikes. Important to facilitate sustainable north/south movements from DHGV to Central Brentwood.		1	£150,000	£75,000	s.106 / CIL					
Τ5	Central Brentwood Restricted Freight Zone	Ban all large freight vehicle from stopping deliveries within the Central Brentwood zone and A128 corridor during AM/PM peaks. New developments sites won't compete with Central Brentwood as the retail centre. The larger population could lead to more large vehicles stopping for extended periods to service new developments and a busier High Street. Headline cost only.		2	£500,000	£100,000	CIL					
Т6	AQMA Action Plan Updates	Review of air quality management area (AQMA) action plan. Focused review of existing action plan with updates on forward strategy.		1	£50,000	£50,000	Other					
	Public Realm Impro	vements		1		1						
Τ7	Legible Brentwood	Introduce a pedestrian wayfinding system like Legible London. Residents and employees of new developments and the existing population should be encouraged to walk more.	BBC / ECC	2	£100,000	£50,000	CIL / Private / Other					
Τ8	Brentwood Public Realm Enhancement	Prioritise public realm improvements within Brentwood Town Centre linked to site development opportunities. There are opportunities for significant enhancement of the public realm linked to key brownfield development sites including William Hunter Way.	ECC / BBC / Private	1	£8,000,000	£4,000,000	S.106 / CIL / Private / Other					

	l. f			Provisional Priority		Estimated secured or			Deliver	y Timeframe)
Ref	Infrastructure Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding	Provisional Funding Sources	2018/19 – 2022/23	2023/24 - 2027/28	2028/29 – 2032/33	2033/34 – 2037/38
Т9	Shenfield Railway Station Public Realm Projects	Support major improvements to public realm at Shenfield and Brentwood Railway Stations. Building upon the stakeholder endorsed masterplanning work to introduce a series of public realm, accessibility and connected infrastructure improvements.	Network Rail / Crossrail / TfL / ECC / BBC	1	£9,000,000	£3,000,000	CIL / Private / Other				
	Walking / Cycling				•						•
	Infastructure -	Introduce new walking and cycling infrastructure within new developments – particularly strategic sites. Site by site analysis required of options to introduce new walking and cycling infrastructure linked to new development and wider green infrastructure.		1	£1,000,000	£1,000,000	s.106 / other				
	Cycle Infrastructur			,	1			1			
T11	Route Infastructure	Plan and deliver in phases cycle routes in Brentwood UA initially connecting Transfer Hubs to Town Centre schools. Feasibility analysis into wider network development options. Segregated routes where possible. Where not consider contra-flow cycling routes by creating new one-way streets. Consider 20mph in the zone.	ECC		£4,000,000	£1,000,000	CIL /s.106 / Other				
T12		Undertake feasibility / business case analysis into widening cycle networks across the Borough and beyond. Work by the local cycle group identified a wide range of cycle network enhancement which require further analysis as part of cycle action planning.		3	£2,500,000	£500,000	CIL / Other				
T13		Introduce high quality cycle parking and supporting facilities at the Borough's railway stations. Many of Brentwood's key rail stations suffer from poor cycle infrastructure, which requires upgrading.		1	£200,000	£100,000	CIL / Private				
	Bus Infrastructure										
T14	Improvements	Feasibility study into bus service improvements – particularly linked to new developments and major transport hubs. Some evidence that service improvements could be made to bus services to support transport hubs such as Shenfield Station. Revenue costs headline only.		3	£300,000	£150,000	CIL / Private / Other				
	Community Transpo										
T15	Transport Initiatives	Create and/or promote a multiple service App making access to smart car hire/ car clubs / community buses/ booking bikes (including e-bikes) etc. easier. Partner with software organisation that creates community-based apps. Pays for itself through advertising.		1	£300,000	£50,000	CIL / Private / Other				
	Southern Growth Co	rridor					·				
T16	Realm Improvements	Public Realm - New village centres / civic square at West Horndon industrial estate redevelopment. Subject to detailed masterplanning there will be a need to provide high quality public realm or civic square associated with the redevelopment.	BBC / ECC /	1	£1,500,000	£1,500,000	s.106				
T17	Strategic Cycle Route	Strategic Cycle Route – Connecting major development sites along the southern growth corridor. Mixed environment cycle route with supporting infrastructure connecting DHGV, West Horndon, Childerditch Industrial Estate and Brentwood Enterprise Park.	ECC	1	£7,000,000	£7,000,000	s.106 / CIL				

	Infrastructure			Provisional Priority		Estimated secured or likely funding Provisional Funding Sources 2018/19 - 202	Delivery	/ Timeframe			
Ref	Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding	-		2023/24 – 2027/28	2028/29 – 2032/33	2033/34 – 2037/38
T18	Infrastructure	New Bus Route Infrastructure – new linked bus route serving key new developments within the southern growth corridor. Early adoption of bus infrastructure within DHGV and other key extension / development sites supported with appropriate infrastructure with connection via West Horndon Transport Interchange. Also review changes to NHS hospital services and transport implications.	ECC / Bus Operators / Private Operators	1	£8,000,000	£8,000,000	s.106				
T19	- New Transport Interchange	West Horndon New Transport Interchange - Create through phases a new multi-modal interchange at West Horndon Station. This interchange will serve the DHGV, Childerditch, West Horndon and Enterprise Development sites, plus any future Northern Thurrock developments.	ECC / BBC / Rail Operators / NR	1	£12,500,000	£10,500,000	s.106 / private				
	Dunton Hills Garden	Village			·						
T20	Connectivity	Feasibility studies into green bridge (A127) and pedestrian underpass (A128). Options to be explored looking at feasibility of providing additional connectivity to surrounding areas. Capital costs headline estimate only.	BBC / ECC	3	£12,500,000	£20,000,000	s.106 / CIL / Other				
T21	Cycleways	Walkways / Cycleways - Network of new walkways / cycleways across the development potentially linked to rights of ways and key ecology corridors. Significantly opportunities at an early stage in the development to engrain a series of strategic walkways / cycleways across the scheme.	Developer / BBC / ECC / Other	1	£1,800,000	£1,800,000	s.106 / private				
T22	Transport Hub	Cycle Hub and Charging Points - Dunton Hills e-bike / cycle hub – integrated cycle hub with supporting facilities. Opportunity to engrain enhanced cycle facilities within the scheme to promote and support the uptake of e-cycles and conventional bikes / possible link to e-charging infrastructure.	Developer / BBC / ECC / Other	1	£300,000	£300,000	s.106				
T23	and Village Square	Public Realm - New pedestrian focused village centres / civic square at DHGV. Subject to detailed masterplanning there will be a need to provide high quality public realm or civic square associated with the garden village.	Developer	1	£5,000,000	£5,000,000	s.106 / private				
	Highways Measures										
T24		Various junction improvement measures - junction widening / prioritised lanes / road realignments. Headline estimate only.	ECC	1	£4,000,000	£4,000,000	s.106				
T25	M25 J.29 Improvements	Costs / exact project unknown at this stage	HE	1	tbc	tbc	tbc				
	Total – Transport & M				£81,950,000	£69,275,000					
	IDP CHAPTER 4 - EN Electricity Infrastruct										
EN1		Further technical analysis required. No costs detailed at this stage.	UKPN	1	tbc	tbc	Developers				
	Substation			1			Developers				
EN2		Assessment and potential removal of pylon infrastructure. No costs available at this stage.		1	tbc	tbc	UKPN / Developers				

KerRequRenRenEN3DunEN4BrenEN5OfficEN5OfficEN6WesInduIDPFlocVD1WD1SWUWD2DunMarStraWD3OfficWD4BrenConWatWD5SuE	Infrastructure			Provisional Priority		Estimated secured or			Deliver	y Timeframe	•
Ref	Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding	Provisional Funding Sources	2018/19 – 2022/23	2023/24 – 2027/28	2028/29 – 2032/33	2033/34 – 2037/38
	Renewable Energy										
EN3		District Heating with CHP Plant / multiple-plants. Headline estimates Only.		1	£16,500,000	£16,500,000	s.106 / onsite				
EN4	Brentwood Enterprise Park – Localised Heating Scheme	District Heating with CHP Plant / multiple-plants. Headline estimates only.		2	£5,000,000	£5,000,000	s.106 / onsite				
EN5	Officer's Meadow – District Heating	District Heating with CHP Plant / multiple-plants		2	£4,500,000	£4,500,000	s.106 / onsite				
EN6	West Horndon Industrial Estate	District Heating with CHP Plant / multiple-plants		2	£3,300,000	£3,300,000	s.106 / onsite				
EN7	Depot and Ford Site – District Heating	District Heating with CHP Plant / multiple-plants		2	£2,500,000	£2,500,000	s.106 / onsite				
	TOTAL - Energy	I			£31,800,000	£31,800,000					
	IDP CHAPTER 5 – W	ATER AND DRAINAGE									
	Flood Risk			1			1	-			1
WD1	Water Flood Risk	Mixed portfolio of current flood risk mitigation measures linked to the Surface Water Management Plan priorities. Costs may be subject to significant variation.	ECC	1	£3,000,000	£1,500,000	s.106				
	SuDS and Drainage			·				7			1
	Management Strategy	Water management strategy, integrating hydrology modelling, site remodelling and SuDS and flood risk management. Headline costs only.	ECC / EA / Developers	1	£1,500,000	£1,500,000	s.106 / onsite				
WD3	Water Management	Water management strategy, integrating hydrology modelling, site remodelling and SuDS and flood risk management. Costs may be subject to significant variation.	ECC / EA / Developers	1	£600,000	£600,000	s.106 / onsite				
WD4	Comprehensive Water Management Drainage Strategy with Works	Ensure that sustainable drainage systems and appropriate levels of Green Infrastructure are integrated within identified large-scale brownfield regeneration sites. Significant assets run beneath the site. Brentwood Station – We would seek protection of these assets and may require several wayleaves / easements. Drainage hierarchy to be followed in addressing surface water. As this is a brownfield site, we expect significant reduction in surface water runoff. Costs may be subject to significant variation.	ECC	1	£800,000	£250,000	s.106 / CIL / onsite				
WD5		Ensure that sustainable drainage systems and appropriate levels of Green Infrastructure are integrated within site.	ECC / Developers	1	£500,000	£500,000	s.106 / onsite				
WD6		We would expect that a holistic drainage strategy will be prepared for sites 081 - Council Depot, The Drive, Warley and 117A and 117B -Ford Offices, Eagle Way, Warley, Brentwood. Drainage hierarchy to be followed in addressing surface water. As this is a brown field site, we expect significant reduction in surface water runoff. Costs may be subject to significant variation.	ECC / Developers	1	£750,000	£600,000	s.106 / onsite				
WD7	Extensions	Ensure that onsite surface water management is of high quality and links through to opportunities to maximise green infrastructure and connections, including river corridors. Costs may be subject to significant variation.	ECC / Developers	1	£500,000	£350,000	s.106 / onsite				

	Infrastructure			Provisional Priority		Estimated secured or			Delivery	[,] Timeframe	
Ref	Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding		2018/19 – 2022/23	2023/24 – 2027/28	2028/29 – 2032/33	2033/34 – 2037/38
WD8		Comprehensive Water Management Plan and works. Costs may be subject to significant variation.	Developers	1	£1,500,000	£1,500,000	s.106 / onsite				
WD9	Sewage Network Upgrade – Ingatestone High Street and surrounds	Potential need for sewerage network upgrade evidenced by modelled flooding of Ingatestone High Street. Costs may be subject to significant variation.	ECC / Water Companies	2	£5,000,000	£1,000,000	CIL / s.106				
	TOTAL – Water and		1		£14,150,000	£6,300,000					
14/4	IDP CHAPTER 6 - W			•	0400.000	050.000					
W1	Community composting projects	Community Composting facilities / pilot – there is no major specialist facility in the Borough.	BBC	3	£100,000	£50,000	CIL / other				
W2	Iceberg underground waste recycling infrastructure - Dunton Hills	Underground and semi-underground waste / recycling infrastructure. Unable to cost fully at this stage.	BBC / Developers	2	tbc	tbc	s.106 / other / public sector / onsite				
	TOTAL - Waste			·	£100,000	£50,000					
	IDP CHAPTER 7 - BI				1	I	I	1		T	
BT1	Fibre optics cable infrastructure - Dunton Hills Garden Village	Connection from proposed cable to run along railway line to the south of DH - Fibre to the home (FTTH), also called "fiber to the premises" (FTTP), is the installation and use of optical fiber from a central point directly to individual buildings such as residences, apartment buildings and businesses to provide unprecedented highspeed Internet access. FTTH dramatically increases the connection speeds available to computer users compared with technologies now used in most places.	Fibre Providers / Other	1	£3,000,000	£1,500,000	s.106 / onsite / other				
BT2	Fibre optics cable infrastructure – Other Strategic Housing Sites	Delivery of FTTH connection on sites - including key strategic housing allocations	Developers / Fibre Providers / Other	1	£1,750,000	£750,000	S106 / onsite / Other				
BT3	Fibre - Other Locations	Opportunity to delivery fibre cable to strategic locations within growth corridors. Feasibility analysis required. Unable to costs fully.	Developers / Fibre Providers / Other	1	tbc	tbc	CIL / onsite / Other				
BT4	Upgrade to mobile infrastructure	Investigate options to improve broadband and mobile phone coverage within the Borough. Unable to costs at this stage.	Network suppliers	1	tbc	tbc	Private				
	TOTAL - Broadband	·		·	£4,750,000	£2,250,000					
	IDP CHAPTER 8 - EI	DUCATION									
	Primary				07 -00 -00	A- - A- - - - - - - - - -					
ED1	Officer's Meadow Primary	New 2fe primary school with early years provision	ECC / Shenfield High		£7,500,000	£7,500,00	s.106 / other				
ED2	Additional primary capacity - Ingatestone / Mountnessing planning area	Ingatestone / Mountnessing planning group area - 0.5fe additional primary capacity	ECC / Schools	1	£1,600,000	£1,600,000	s.106 / other				

	Infrastructure			Provisional Priority		Estimated secured or			Deliver	y Timeframe	
Ref	Requirements	Detail	Project Leads	Ranking	Indicative Costs	likely funding	Provisional Funding Sources	2018/19 – 2022/23	2023/24 – 2027/28	2028/29 – 2032/33	2033/34 – 2037/38
ED3	Primary school extension - Blackmore Planning Group	Minor extension to primary school capacity	ECC / Schools	1	£535,000	£535,000	s.106 / other				
ED4	Dunton Hills - Primary Schools	New 3 x 2fe primary schools within Dunton Hills Garden Village	ECC / Schools	1	£22,500,000	£22,500,000	s.106 / other				
	Secondary			I		L					
ED5	Dunton Hills – Secondary School	New 6fe secondary school	ECC / Schools	1	£20,200,000	£20,200,000	s.106 / other				
ED6	Early Years Additional non-school located provision	Non co-located early years facilities (5 facilities / offers)	Private / Charitable	2	£5,000,000	£5,000,000	s.106 / other				
ED7		Employment site generated early years need linked to Brentwood Enterprise Park	Private / Charitable	1	£1,000,000	£1,000,000	s.106 / other / Private				
	SEN						-	_			
ED8		Expansion of the Endeavour special educational needs school to accommodate a sixth form function. Costs not known at this stage	School / ECC	1	tbc	tbc	Other				
	Travel to School				-						_ _
ED9		Dunton Hills early scheme costs for primary pupils. Dunton Hills and West Horndon scheme costs for early to mid scheme for secondary pupils	ECC	1	£750,000	£750,000	s.106				
	TOTAL - Education			I	£58,085,000	£59,085,000					
	IDP CHAPTER 9 – SC	DCIAL & COMMUNITY									
	Stewardship Fund /	Stewardship fund / community chest - may include monies for physical maintenance and improvement of the public realm, organising community activities / activities, events and community development / pilot projects	BBC	1	£10,000,000	£10,000,000	s.106				
	Dunton Hills Community Building / Hub	Multipurpose building with public facing services, as well as space for multi- faith activities, recreation, learning and estates services.	BBC / Developers	1	£3,000,000	£2,000,000	s.106 / other				
		Informal youth facilities and youth support services. Difficult to forecast costs at this stage.	ECC / BBC	2	tbc	tbc	s.106 / CIL / other				
		Fund to support innovation in older peoples housing and multigenerational projects plus special needs groups	BBC	2	£1,000,000	£250,000	CIL				
	TOTAL – Social & Co	ommunity			£13,000,000	£12,000,000					

	Infrastructure Requirements	Detail		Provisional Priority		Estimated secured or likely funding	Provisional Funding Sources		Deliver	y Timefram	3
ef			Project Leads	Ranking	Indicative Costs			2018/19 - 2022/23	2023/24 - 2027/28	2028/29 - 2032/33	- 2033/34 - 2037/38
	IDP CHAPTER 10 – H	IEALTH									
		Initial calculations show that the fully completed development will require a health facility of circa 658.29 m2 for GP services. NHS England is willing in principle to discuss co-location with other public services and potential temporary use of other public sector buildings (and vice versa). Any co-location would require the normal building and operational standards for NHS buildings to be met	Public Sector / NHS Estates	1	£1,500,000	£1,500,000	s.106 / other				
	Borough Wide primary care capacity improvements	Contribution towards increasing capacity for local Primary care facilities, by means of extension or possible relocation	NHS Estates / others	1	£1,500,000	£1,500,000	s.106 / other				
}	expansion	Due to the increase in population Basildon hospital will need to expand their specialist services across the acute footprint to accommodate this predicted growth.			£21,392,300	£5,000,000	CIL / other				
	TOTAL – Health			I	£24,392,300	£8,000,000					
	IDP Chapter 11 - SPC	DRT					-				
		Recommended improvements as detailed in PPS - costs subject to change shortly	School	3	£50,000	£25,000	CIL / Private / Other /				
		Wide range of improvements to cricket facilities across the Borough / costs subject to change shortly	Various	1	£1,500,000	£500,000	S.106 / CIL / Private / Other				
	Football pitches and facilities	Wide range of improvements to cricket facilities across the Borough / costs subject to change shortly	Various	1	£4,500,000	£2,000,000	s.106/ CIL / Private / Other				
	Rugby Pitches and Facilities	Wide range of improvements to cricket facilities across the Borough / costs subject to change shortly	Various	1	£1,500,000	£500,000	s.106/ CIL / Private / Other				
	Other sports improvements	Rugby Pitch Facility Improvements /costs subject to change shortly	Various	2	£200,000	£50,000	s.106/ CIL / Private / Other				
		New play pitch provision - southern growth corridor / costs subject to change shortly	Various	1	£4,000,000	£3,000,000	s.106 / onsite / other				
	3G pitches	New 3G pitch provision / costs subject to change shortly	Various	1	£3,000,000	£3,000,000	CIL / s.106 / onsite / other				
	King Georges Strategic Investments	tbc / costs subject to change shortly	Various	2	tbc	tbc	CIL / s.106 / onsite / other				
	Brentwood Centre Strategic Investments	tbc / costs subject to change shortly	Various	2	tbc	tbc	CIL / s.106 / onsite / other				
	TOTAL - Sport				£14,750,000	£9,075,000					
	IDP CHAPTER 12 - H	ERITAGE			~17,100,000	~0,010,000					
	Historic Sites Interpretation	Heritage interpretation and sign-posting, linked to wider projects on improving the public realm and legibility within the Brentwood Urban area	BBC / Private	2	£250,000	£125,000	CIL / s,106 / Other				
		Funding for the protection and redevelopment of heritage assets – particularly with wider community use options to support a growing population	BBC	1	£500,000	£250,000	CIL / Other				

	Infrastructure Requirements			Provisional Priority		Estimated secured or likely funding	Provisional Funding Sources	Delivery Timeframe					
		Detail	Project Leads	Ranking	Indicative Costs			2018/19 – 2022/23	2023/24 – 2027/28	2028/29 – 2032/33	2033/34 - 2037/38		
	Local Listings Programme	Programme support for local listings	BBC	1	£30,000	£30,000	Other						
ī	TOTAL - Heritage				£780,000	£405,000					<u> </u>		
I	IDP CHAPTER 13 – E	MERGENCY SERVICES											
		Space and potential special fit out within community building as part of DH development.	Essex Police / BBC	3	£500,000	£100,000	s.106 / other						
F	Policing Support	Working budget for policing support.	Essex Police / BBC	3	£500,000	£250,000	CIL / s.106 / other						
٦	TOTAL – Emergency	Services			£1,000,000	£350,000							
		REEN INFRASTRUCTURE			,,	,							
		Significant investment in new GI network through new Garden Village - providing connectivity to north and south	BBC / EA / Developers	1	£10,000,000	£10,000,000	S.106 / Other						
E		Mixture of works and new facilities at the Borough's large and medium sized parks and gardens	BBC / EWT	3	£1,150,000	£500,000	CIL / Other						
F	-	Programme of works including maintenance of local wildlife sites and other assets	BBC / EWT	1	£1,000,000	£400,000	CIL / Other / S.106						
0	Green and Blue Corridor Enhancements	Road, rail and river corridor enhancement programmes with partners	EWT / NR / Others	3	£1,000,000	£400,000	CIL / Other						
	Outdoor sports - see above												
ļ	Amenity Greenspace	Enhancemets to local neighbourhood level green spaces	BBC / EWT / Others	1	£750,000	£250,000	CIL / Other / S.106						
	Allotment - maintenance support	Revenue budget to support allotment upkeep	BBC / Others	2	£1,000,000	£500,000	CIL / Other / S.106						
(Cemeteries and Graveyards environmental enhancement	Enhancements to facilities and features	BBC / EWT / Others	3	£500,000	£100,000	CIL / Other						
Π	TOTAL – Green Infra	structure			£15,400,000	£12,150,000		L					
		RAMS – developments within zone of influence			£1,500,000	£1,500,000							
					TOTAL COSTS	TOTAL INCOME ESTIMATES							
					£262,657,300	£212,240,000							
					FUNDING GAP								
					£50,417,300								
					200,417,300								