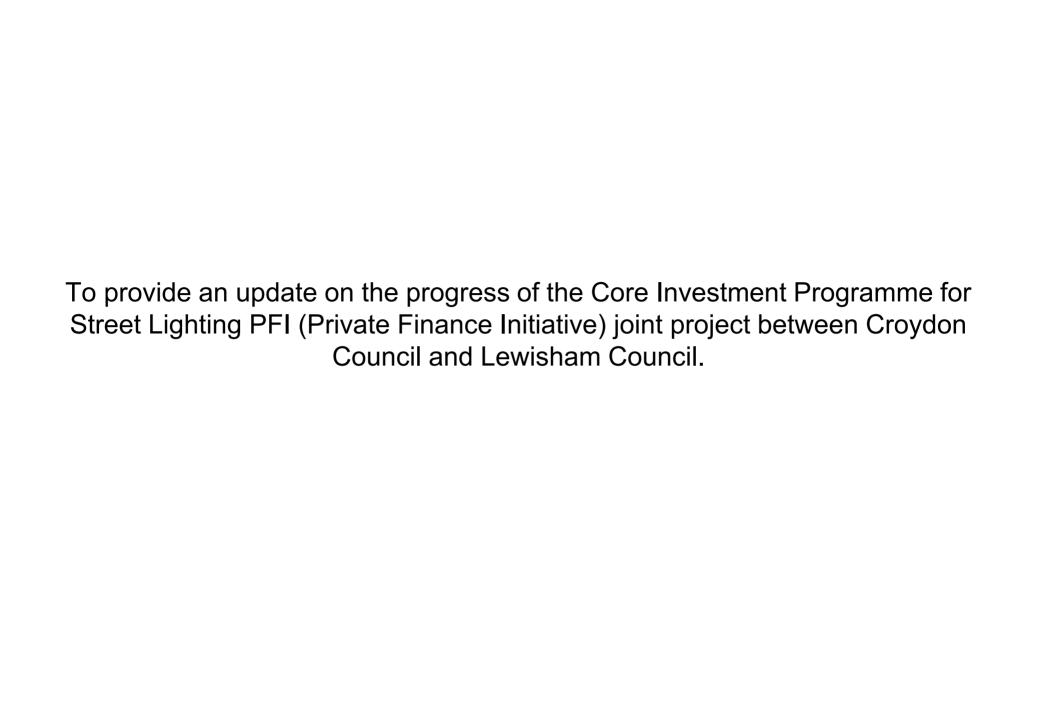
#### Streets & Environment Scrutiny Sub-Committee

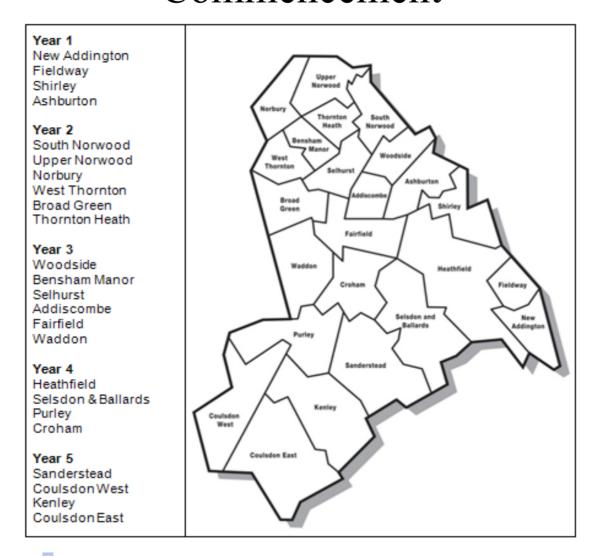
**Street Lighting PFI update** 

Presented by Steve Iles

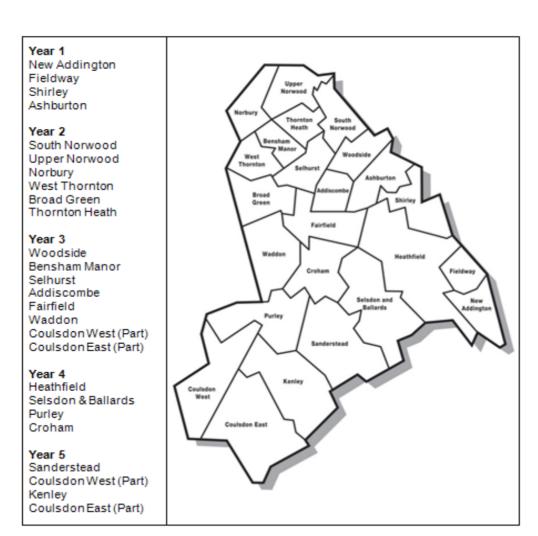




#### Core Investment Programme – at Service Commencement



#### Core Investment Programme – current



# Replacement Strategy

The Service Provider's replacement strategy is based upon the following key principles:

- Croydon Central System (CCS) abandonment from the "outside in" on a ward by ward basis
- Design bank based flexibility in the replacement programme
- Parallel delivery teams to reduce risk of delay
- Replacement within both Boroughs at any one time to ensure a sharing of the benefits of the Project and improved risk management.
- Replacement of illuminated signs and bollards in conjunction with lighting works
- Use of asset condition survey data to influence future years' programmes
- Operational efficiency and best value
- Early consultation as described in Method Statement 5 (Consultation) to solicit Authority input
- Consideration given to transportation schemes, improvement plans and Authority requests

#### Milestones

Milestone	Milestone Completion Date	Total Lighting Points removed	
1	6 months after planned service commencement date	207	
2	12 months after planned service commencement date	3,107	
3	18 months after planned service commencement date	7,148	
4	24 months after planned service commencement date	12,009	
5	30 months after planned service commencement date	16,885	
6 31 July 14	36 months after planned service commencement date	22,915	
7	42 months after planned service commencement date	28,940	
8	48 months after planned service commencement date	34,316	
9	54 months after planned service commencement date	39,683	
10	60 months after planned service commencement date	46,665	

# Where we are now

- the number of lighting points removed as detailed above was 14,207,
- it is important to note that the number of lighting points installed is 20,655 thus there are 6,448 that are still work in progress
- there are approximately 650 stumps and to date some 140 stumps have been removed with a further 53 over the next month.
- this reflects the CIP is currently behind schedule by approximately 8 months.

# Project challenges

- undertaking the connections, disconnections & transfers of services to and from lighting.
- approximately 70% of Croydon's street lighting is connected to a dedicated street lighting power supply. known locally as the Croydon Central System ("CCS"),
  - Embargo on the re-use of this network and once all the old lighting points are taken off it as they are intending to abandon it
  - The CCS is extremely complex and needs to be decommissioned limb by limb but still maintaining a network to serve remaining lights.
  - Stump columns these were always a necessity to maintain the integrity of the network
- Triple Concentric Main, as a restricting factor which has been found to be unique to this PFI contract
- It is important to note all lighting columns in Lewisham are connected to the DNO network and therefore are not affected by this issue

# Project challenges Cont'd

- Design initial challenges
- Jointing Resources Both Skanska and UKPN have been resourcing the programme but the number of jointers has been inconsistent and the outputs per jointing team vary
- Jointing Solution for new service connections on TCC Main UKPN & Skanska have been working to optimize the number of UKPN jointing on this network, the challenge is the restrictions on shutdowns are limited to customers in a road being off supply for 6 hours. (i.e. for not more than one meal time)
- To forward plan these works UKPN have Authorised Person (AP) resource to survey
- The condition of the existing UKPN network infrastructure, particularly the Link Boxes
- Extended duration of works on site, leaving barriers around trenches for longer than expected.
- Extended duration of each scheme from installing columns to physically completed.

Abingdon Rd (Norbury)

Plant of the party of the party

P.L. Remote Control Diagram

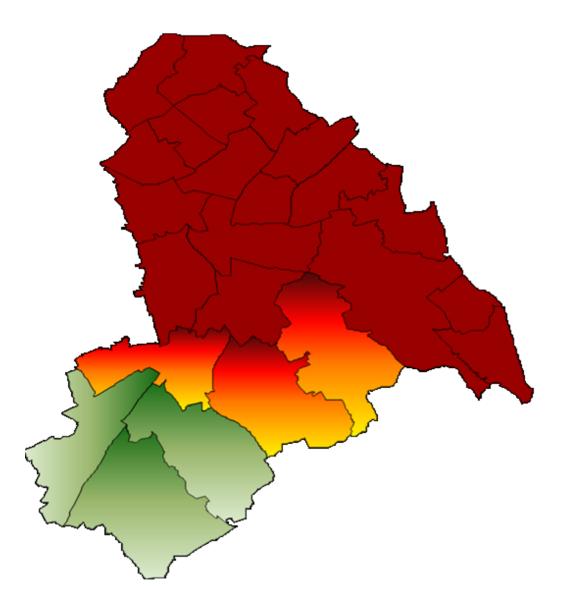
Croydon Flyover (Old Town)

Christchurch Rd (Purley) King Henry's Dr. (New Addington)

Stoney Ln

(Upper Norwood)

## TCC and CCS Location heat map



Ward	Year	Ward	Croydon Central Network	
	Y1	Ashburton	Above 60%	
9	Y1	Fieldway	Above 60%	
12	Y1	New Addington	Above 60%	
18	Y1	Shirley	Above 60%	
4	Y2	Broad Green	Above 60%	
13	Y2	Norbury	Above 60%	
19	Y2	South Norwood	Above 60%	
20	Y2	Thornton Heath	Above 60%	
21	Y2	Upper Norwood	Above 60%	
22	Y2	Waddon	Above 60%	
23	Y2	West Thornton	Above 60%	
1	Y3	Addiscombe	Above 60%	
3	Y3	Bensham Manor	Above 60%	
8	Y3	Fairfield	Above 60%	
16	Y3	Selhurst	Above 60%	
24	Y3	Woodside	Above 60%	
7	Y4	Croham	Above 60%	
10	Y4	Heathfield	Above 60%	
14	Y4	Purley	20%	
17	Y4	Selsdon and Ballards	20%	
5	Y5	Coulsdon East	10%	
6	Y5	Coulsdon West	10%	
11	Y5	Kenley	10%	
15	Y5	Sanderstead	20%	

# Programme Recovery to date

- Jointing Resource Increased jointing resources implemented over the past 12 months jointing teams have been increased from 8 teams to 18 teams now covering both boroughs.
- TCC Shutdown Planning Dedicated resource from UKPN to survey, plan and organise shutdowns
- Link Box conditions UKPN attempt to facilitate a replacement link box to be installed under its Link Box replacement programme.
- Survey of TCC Network and designing away from TCC network where possible
- Original 10,000 TCC new services currently reduced to 8,800 this review is ongoing.



#### **Current & Forward improvements**

The council, Skanska and UKPN continue to work on developing improved productivity on the Core investment programme, these measures include:-

- Pursue Asset Owner agreement with Client (this has been discounted due to authority legal advice) or Internally within Skanska as Asset Owner
- Additional jointing teams from UKPN
- Additional Skanska resource to liaise with UKPN, investigating new solutions that are within the market.
- Increase the number of shutdowns for TCC.
- Skanska Utilities implemented through Asset Owner Agreement to improve productivity



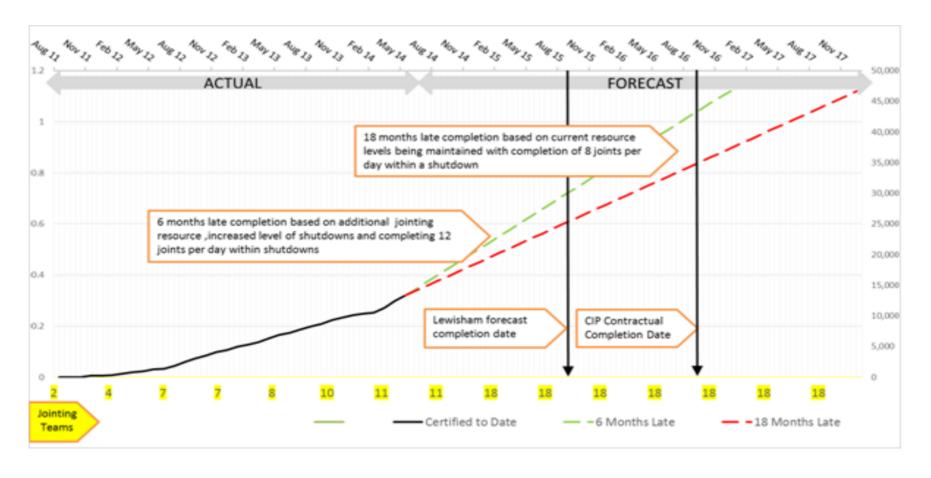
# Current & Forward improvements Cont'd

- Co-location of Jointing resource to project office driving improved communication and productivity with Jointing resource and its supervision
- A forward plan for year 4 and 5 program
- The plan moving forward within Croydon is to progress two working fronts in a logical manner
- Investigation alternative solutions with UKPN on jointing of TCC cable
- Planning on removals of stumps detailed from recently received information on the CCS network from UKPN – separate follow up resource teams removing the CCS stump
- Moving progression on Year 4 and 5 wards allows Skanska to improve productivity on standard LV cable networks which is detailed below as the more prominent TCC networks are within the northern wards of Croydon



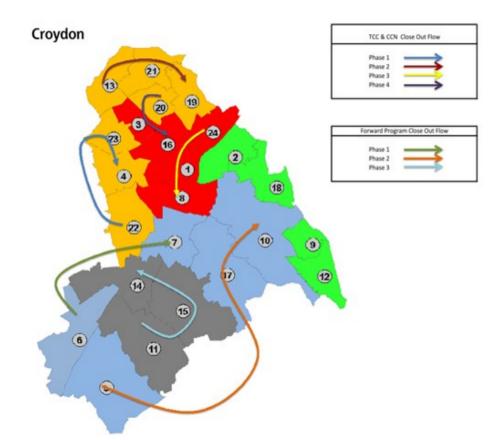
## What this is expected to deliver

The Service Provider was charged with the development of an improvement plan focusing on recovering the slippage to the programme





# Proposed forward improvement geographical sequence map detailing the two fronts and phasing.



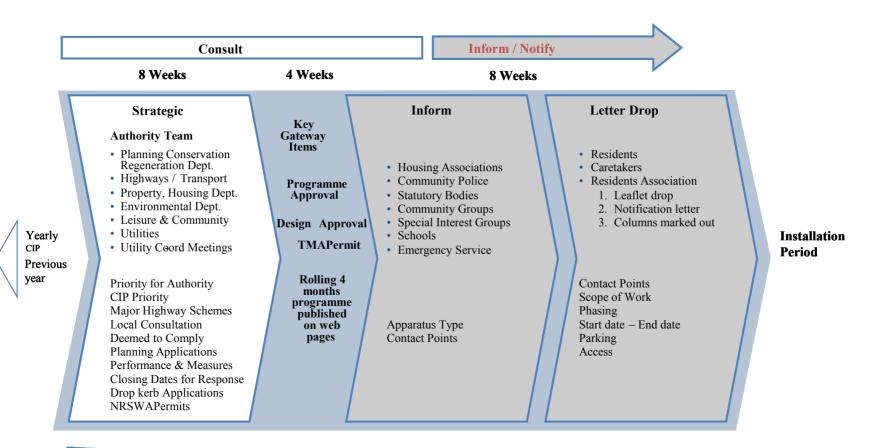
		lar	Waster I		Ph 1	10.00	ar ar water a
Ward	Year	Ward		Outstanding			% Certified
2	Y1	Ashburton	955	73	22	51	92%
9	Y1	Fieldway	639	3	3	0	100%
12	71	New Addington	662	19	17	2	97%
18	Y1	Shirley	1080	97	97	0	91%
- 4	Y2	Broad Green	1138	843	389	454	26%
13	Y2	Nortury	797	492	192	300	38%
19	12	South Norwood	989	795	492	303	20%
20	1/2	Thornton Heath	715	645	173	472	10%
21	72	Upper Norwood	964	502	306	196	48%
22	72	Waddon	1125	627	324	303	44%
23	Y2	West Thornton	709	339	140	199	52%
1	73	Addiscombe	710	710	334	376	0%
3	Y3	Bensham Manor	600	585	65	520	3%
8	Y3	Existed	1386	1321	880	441	5%
16	Y3	Selhund	832	819	224	595	2%
24	73	Woodside	721	721	408	313	0%
7	Y4	Croham	0	0	0	0	0%
10	Y4	Heathfield	0	0	0	0	0%
17	Y4	Selsdon and Ballar	0	0	0	0	0%
5	Y4 (Y5)	Coulsdon East	1358	1245	1245	0	894
6	Y4 (Y5)	Coulsdon West	1166	1166	1145	21	0%
11	YS	Kenley	0	0	0	0	0%
15	Y5	Sanderstead	0	0	0	0	096
14	Y5 (Y4)	Purley	0	0	0	0	0%



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Consultation & Information

## Consultation / Information

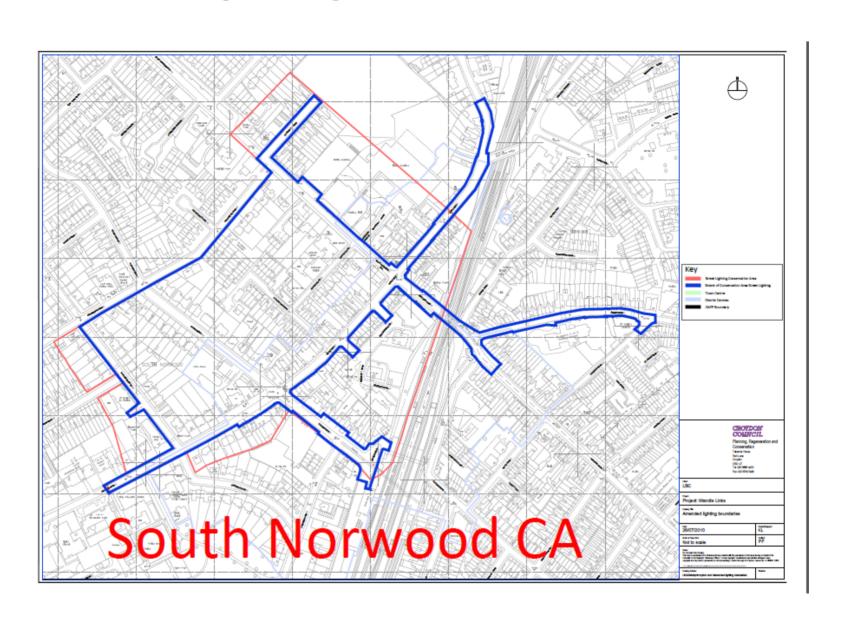


**Design Flexibility Diminishes** 

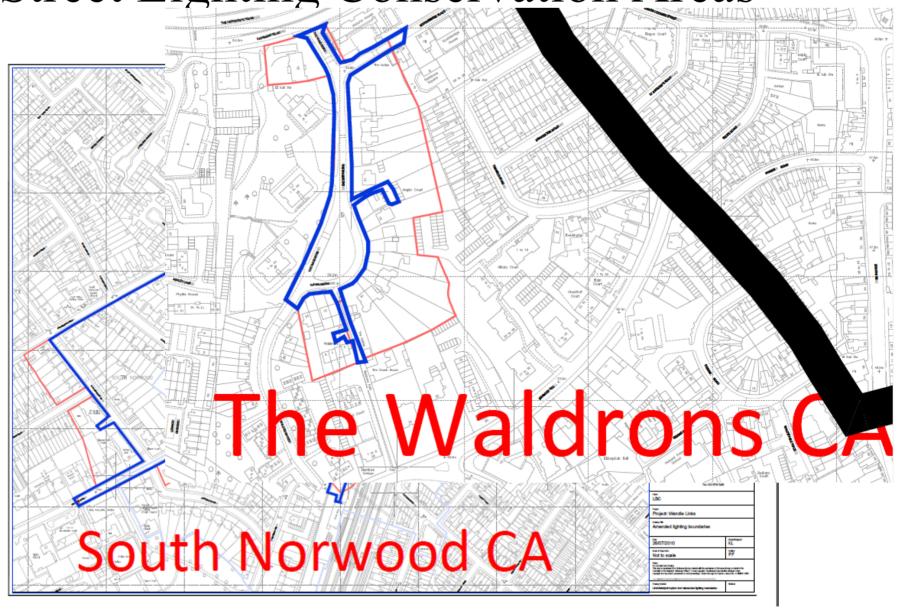
# Street Lighting conservation areas

- The council adopts a strategic approach to the protection of its heritage assets in line with current legislation, guidance from English heritage and best practice.
- adopts a pro-active approach through its Local Plan in assessing borough character and interpreting local distinctiveness that underlies the 16 places of Croydon
- The 16 Places of Croydon were developed as a part of the Core Strategy (Croydon Local Plan) and based on a detailed analysis of local and residential character of the borough. Including extensive statutory public consultation during the period 2009-2012
- local character and historic assets, the council carried out a Conservation Area review in 2007-8 which underwent an extensive consultation leading to the designation of nine new conservation areas.
- variation from PFI standard specification These are within Croydon Metropolitan
  Centre designated district centres and statutory conservation areas (adjusted to
  preclude anomalous situations arising such as different street lights on each side of
  the road and isolated areas).

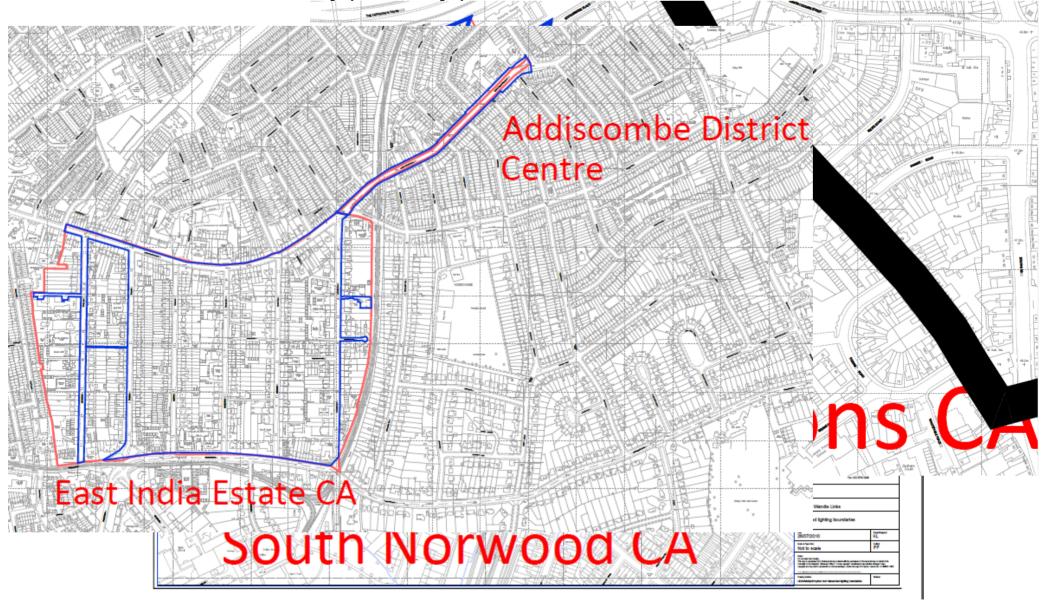
## Street Lighting Conservation Areas



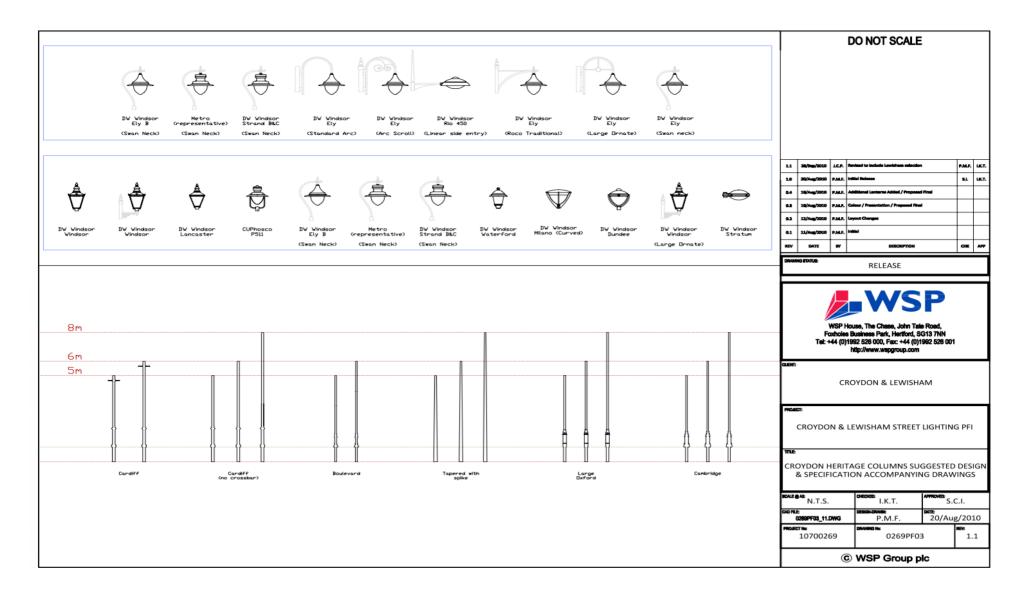
Street Lighting Conservation Areas



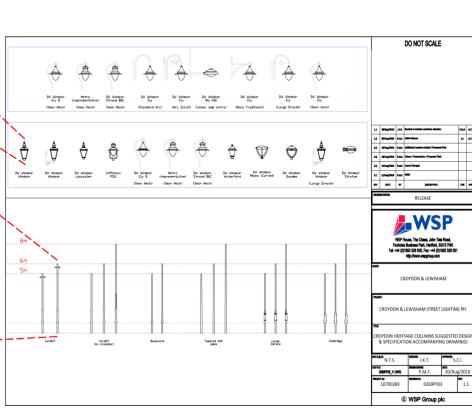
Street Lighting Conservation Areas



#### Street lighting conservation area street lighting palette









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S.C.I.

### **END**