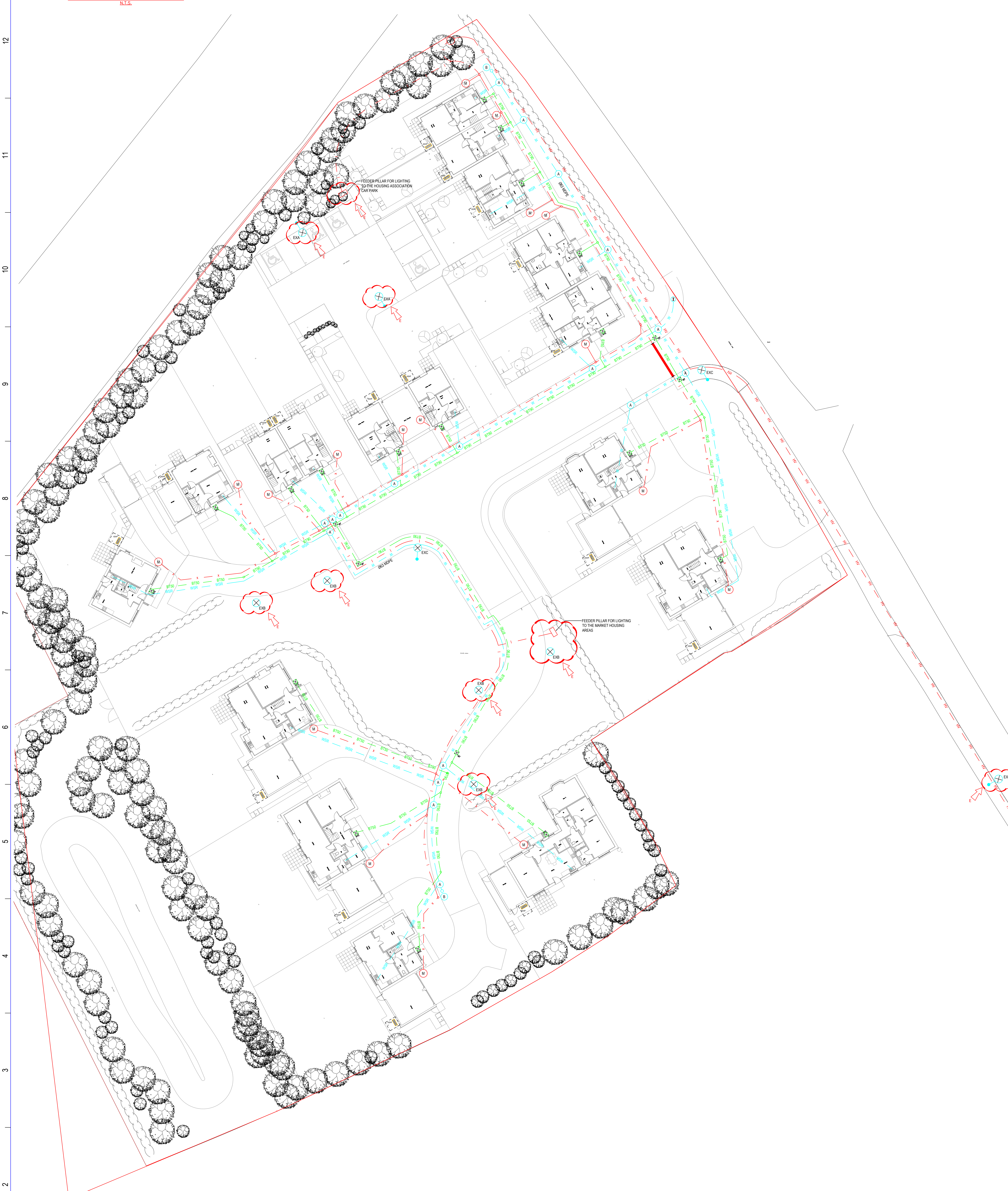
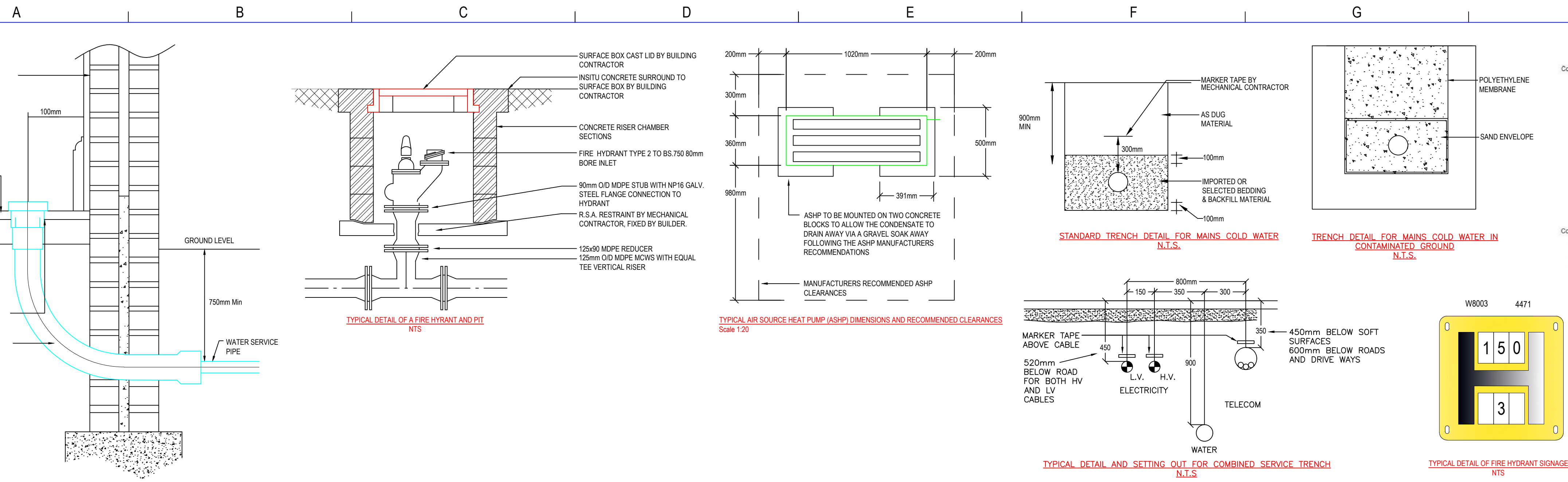


14  
13  
12  
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1



The above block is a 30mm long when the drawing is plotted to the correct scale.

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All scaled dimensions taken from this drawing are to be verified on site by the contractor, prior to ordering equipment and/or fabrication and/or installation.

This drawing shall be read in conjunction with all other Architectural, Structural and Engineering drawings, specifications and details.

This drawing shall not be used for installation or construction purposes. The contractor shall take full responsibility for production of working installation drawings prior to commencement of work on site is the responsibility of the contractor.

GENERAL NOTES

1. FINAL POSITIONS OF ALL EQUIPMENT TO BE AGREED WITH ARCHITECT.
2. FOR GENERAL LAYOUTS AND ARRANGEMENTS REFER TO ARCHITECTS LAYOUTS.
3. INCLUDE FOR FULL CO-ORDINATION WITH OTHER SERVICES & BUILDING STRUCTURE.
4. REFER TO ESDP SPECIFICATION.
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS ISSUED BY ESDP AND THE PROJECT TEAM.
6. FIRE BARRIERS/COMPARTMENTS AS PER ARCHITECTS LAYOUTS & FIRE OFFICERS REQUIREMENTS.
7. THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION.
8. INSTALLATION DRAWINGS TO BE PREPARED BY THE CONTRACTOR.
9. ALL SERVICES SHALL BE REINSTALLED IN ACCORDANCE WITH THE N.I.C.E. RECOMMENDATIONS.
10. AGREE EXACT ROUTES, MATERIAL TYPES, POSITIONS AND DEPTHS WITH STATUTORY AUTHORITY PRIOR TO COMMENCEMENT OF INSTALLATION.

COMPLETION NOTES

1. AT THE HANDOVER OF THE PROJECT THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL WORK AREAS, RESTORING ANY DAMAGED OR DEGRADED SURFACES OF FOOTWAYS OR EQUIPMENT TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SYSTEMS INSTALLED DURING THE CONSTRUCTION PERIOD.
2. THE CONTRACTOR SHALL THOROUGHLY TEST ALL SYSTEMS, INCLUDING THOSE INSTALLED BY THEIR SUB-CONTRACTORS, ALLOW TO RECTIFY ANY PROBLEM DISCOVERED DURING TESTING.
3. THE CONTRACTOR SHALL DEMONSTRATE TO THE CLIENT THAT ALL DEVICES AND SYSTEMS ARE FULLY FUNCTIONAL AND SHALL GIVE INSTRUCTIONS IN THEIR OPERATION AS REQUESTED.
4. THE CONTRACTOR SHALL PROVIDE AND ISSUE TEST CERTIFICATES FOR ALL SYSTEMS MODIFIED AND INSTALLED, AS INSTALLED DRAWINGS AND OPERATION AND MAINTENANCE MANUALS.

HYDRANT INSTALLATIONS NOTES

1. INSTALLATION TO COMPLY WITH BS 750:2006, BS3251:1976 & BS3306:2009
2. INSTALLATION TO COMPLY WITH PART 8 OF THE BUILDING REGULATIONS.
3. INSTALLATION TO BE UNDERTAKEN BY A WATER MARKED CERTIFIED CONTRACTOR.

EXTERNAL WATER NOTES

1. INSTALLATION TO COMPLY WITH THE WATER REGULATIONS AND BS EN 836.
2. THE WATER SERVICE MAIN FROM THE BOUNDARY TO EACH PROPERTY AND THE INSTALLATION OF ALL WATER METERS SHALL BE INSTALLED BY A WATER METER MANUFACTURER. THE FINAL CONNECTION OF EACH SERVICE PIPE TO THE MAIN SHALL BE PROVIDED BY THE STATUTORY AUTHORITY.
3. THE FINAL ROUTES OF THE NEW WATER MAINS SHALL BE AGREED WITH THE PRINCIPAL CONTRACTOR AND CONTRACT ADMINISTRATOR BEFORE COMMENCEMENT OF EXCAVATION.
4. REFERENCE SHALL BE MADE TO THE TOPOGRAPHICAL SURVEY DRAWING TO DETERMINE GROUND LEVELS AND THE EXTENT OF EXCAVATION FOR TRENCHING.
5. THE ROUTING OF THE SERVICES ARE ILLUSTRATED AND EXACT SETTING OUT DIMENSIONS ARE TO BE AGREED WITH THE UTILITY COMPANIES & THE CONTRACTOR.
6. THE VERTICAL DISTANCE BETWEEN THE TOP OF THE WATER PIPE AND FINISHED GROUND LEVEL SHALL BE:  
a. NOT LESS THAN 700mm  
b. NOT MORE THAN 1500mm  
c. 800mm BELOW ROADWAYS
7. PIPE MATERIALS SHALL BE SUITABLE FOR THE GROUND CONDITIONS AND APPROVED BY THE UTILITY COMPANY.
8. THE CONTRACTOR SHALL INSTRUCT THE SOIL ANALYST TO DETERMINE THAT THE MATERIAL TO BE USED FOR BURIED PIPEWORK IS SUITABLE.
9. ALL POLYTHENE TUBE AND FITTINGS SHALL BE INSTALLED FULLY IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND ELECTRO-FUSION WELDED.
10. ALL MOPE MEDIUM DENSITY POLYTHENE PIPEWORK JOINTS SHALL BE EITHER BUTT FUSION OR ELECTRO-FUSION WELDED USING AUTOMATICALLY CONTROLLED WELDED EQUIPMENT AS WISDOM FROM MESSERS FUSION LTD. TEL: 01452 810000.
11. THE MOPE PIPEWORK AND FITTINGS SHALL BE MANUFACTURED BY ONE OF THE FOLLOWING COMPANIES:  
a. FUSION LTD.  
b. DURAPPE  
c. BOWLITE
12. ALL MOPE UNDERGROUND SERVICES ENTRIES TO THE BUILDING TO BE VIA LONG RADIIUS BENDS.
13. EACH AND EVERY WELD (BUTT OR ELECTRO FUSION) SHALL BE RECORDED USING FUSION AUTOMATIC WELDING LOGGERS. COPIES DETAILING EACH WELD SHALL BE INCLUDED AS PART OF O&M MANUALS.
14. ALL TRENCHES TO BE FULLY PROTECTED DURING THE COURSE OF THE WORKS WITH SUITABLE BARRIERS.
15. ALL NEW PIPEWORK TO BE DISINFECTED IN LINE WITH BS EN 836 WITH DISINFECTANTS, FULLY FLUSHED OUT, WATER PURITY SAMPLES TAKEN AND RESULTS PROVIDED BY THE CONTRACTOR.
16. EXTERNAL MAINS TO BE PRESSURE TESTED BEFORE BACK FILLING.
17. ALL NEW MAINS SHALL BE FULLY WITNESSED AND TESTED PRIOR TO BACK FILLING. FIVE WORKING DAYS SHALL BE GIVEN TO THE CONTRACT ADMINISTRATOR OF TEST DATES AND TIMES.
18. ALL TRENCHES SHALL BE BACK FILLED WITH CAREFULLY SIFTED MATERIAL.
19. ALL GROUND COVER SHALL BE REINSTATED TO MATCH EXISTING SURFACES.

EXTERNAL WATER SERVICES LEGEND

- A 80mm MOPE MOVS & METER
- B SEVERN TREATMENT WASH OUT
- C FIRE HYDRANT 1/2" MINIMUM DELIVERY
- W WATER MAIN
- WATER MAIN SERVICE ROUTES
- ASHP SOURCE HEAT PUMP LOCATION (REFER TO AIR INSTALLATION DETAIL IN REMOTE LOCATIONS. ASHP PIPEWORK SHALL BE LAID USING SPECIALIST PIPEWORK CONTRACTOR. PIPES AND CABLES LAID BY OTHERS)

EXTERNAL ELECTRICITY LEGEND

- WPD MAIN ELECTRICITY CABLE LAID BY WPD INTO A 125mm DUCT, EXCAVATION, DUCT SUPPLY AND INSTALLATION BY CONTRACTOR USING WPD APPROVED DUCT. DUCT ENDS TO BE SEALED AND DRAW CORDS TO BE PROVIDED. TRENCH DEPTH TO PROVIDE A MINIMUM COVER OF 450mm.
- WPD HV WORKS
- WPD MAIN ELECTRICITY CABLE ROAD CROSSING LAID BY WPD INTO A 125mm DUCT, EXCAVATION, DUCT SUPPLY AND INSTALLATION BY CONTRACTOR USING WPD APPROVED DUCT. DUCT ENDS TO BE SEALED AND DRAW CORDS TO BE PROVIDED. TRENCH DEPTH TO PROVIDE A MINIMUM COVER OF 450mm.
- WPD CONNECTION TO DWELLING CABLE INSTALLED WITHIN 450mm DUCT, EXCAVATION, DUCT SUPPLY AND INSTALLATION BY CONTRACTOR USING WPD APPROVED DUCT. DUCT ENDS TO BE SEALED AND DRAW CORDS TO BE PROVIDED. TRENCH DEPTH TO PROVIDE A MINIMUM COVER OF 450mm.
- GARAGE ELECTRIC SUPPLY
- EXISTING OVERHEAD BT SERVICE CABLE
- BT JUNCTION BOX/DRAW PIT REFER TO DETAIL
- NTE BT EXTERNAL NETWORK TERMINATION POINT
- BTP BT POLE FOR OVERHEAD SERVICE

EXTERNAL BT SERVICES LEGEND

- 8750 80mm BT SERVICE DUCT, EXCAVATION AND DUCT INSTALLATION BY CONTRACTOR DUCT FREE ISSUE FROM BT. FINAL ROUTE TO BE AGREED WITH BT.
- 8750 450mm BT SERVICE DUCT TO DWELLING EXCAVATION AND DUCT INSTALLATION BY CONTRACTOR DUCT FREE ISSUE FROM BT. FINAL ROUTE TO BE AGREED WITH BT.
- BT DUCT TEE
- EXISTING OVERHEAD BT SERVICE CABLE
- BT JUNCTION BOX/DRAW PIT REFER TO DETAIL
- NTE BT EXTERNAL NETWORK TERMINATION POINT
- BTP BT POLE FOR OVERHEAD SERVICE

LEGEND

- M POLE MOUNTED LUMINAIRE (6m COLUMNS)
- APPROXIMATE ROUTE OF EXISTING ABANDONED BY CABLEING. VERIFY THE DEAD STATUS OF CABLE PRIOR TO COMMENCEMENT OF WORKS
- #100mm LIGHTING DUCT

EXTERNAL BT SERVICES LEGEND

- 8750 80mm BT SERVICE DUCT, EXCAVATION AND DUCT INSTALLATION BY CONTRACTOR DUCT FREE ISSUE FROM BT. FINAL ROUTE TO BE AGREED WITH BT.
- 8750 450mm BT SERVICE DUCT TO DWELLING EXCAVATION AND DUCT INSTALLATION BY CONTRACTOR DUCT FREE ISSUE FROM BT. FINAL ROUTE TO BE AGREED WITH BT.
- BT DUCT TEE
- EXISTING OVERHEAD BT SERVICE CABLE
- BT JUNCTION BOX/DRAW PIT REFER TO DETAIL
- NTE BT EXTERNAL NETWORK TERMINATION POINT
- BTP BT POLE FOR OVERHEAD SERVICE

LEGEND

- M POLE MOUNTED LUMINAIRE (6m COLUMNS)
- APPROXIMATE ROUTE OF EXISTING ABANDONED BY CABLEING. VERIFY THE DEAD STATUS OF CABLE PRIOR TO COMMENCEMENT OF WORKS
- #100mm LIGHTING DUCT

REVISIONS

NO	DESCRIPTION	DATE
1	POLE MOUNTED LUMINAIRES ADDED	
2	FEEDER PILLARS ADDED	
3	BOLLARD LIGHTING ADDED	
4	POLE MOUNTED LUMINAIRE POSITIONS INDICATED	PP 14.12.2017
5	ASHP POSITIONS AMENDED TO AVOID WINDOWS	PP 04.12.2017
6	PLOT 12 WATER BUTT RELOCATED TO MIRROR PLOT 11	MS 21.11.2017
7	ASHP POSITIONS ADDED	
8	MAE SERVICE ROUTES ALTERED TO SUIT CLIENTS COMMENTS	SD 25.10.2017

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PROJECT  
SPERNAL LANE  
GREAT ALNE

TITLE  
PROPOSED EXTERNAL SITE SERVICES

PURPOSE OF ISSUE  
PRELIMINARY

SCALE	DESIGNED	DRAWN
1:200/BA1	RDW	SO
DRAWING FILE	DATE	
ME900	15.08.2017	
XREFS	LEVEL	AREA/ZONE
XSITE	0	
DRAWING NUMBER	REVISION	PROJECT NUMBER
ME900	E	ESDP17/0204