



1167 Phoenixville Pike, Suite 105 | West Chester, PA 19380  
5 Pennsylvania Plaza, 24<sup>th</sup> Floor | New York, NY 10001  
[www.illuminationsinc.com](http://www.illuminationsinc.com)

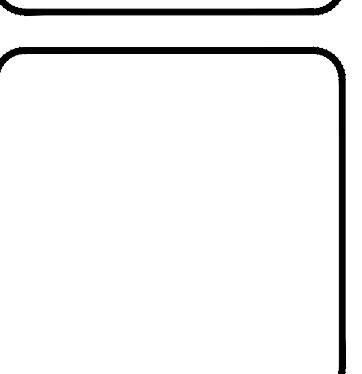


LANDSCAPE ARCHITECTS  
PLANNERS | DESIGNERS



Civil Engineering  
Land Planning  
Environmental  
[www.DLHowell.com](http://www.DLHowell.com)

1250 Wrights Lane  
West Chester, PA 19380  
Phone: (610) 918-9002  
Fax: (610) 918-9002

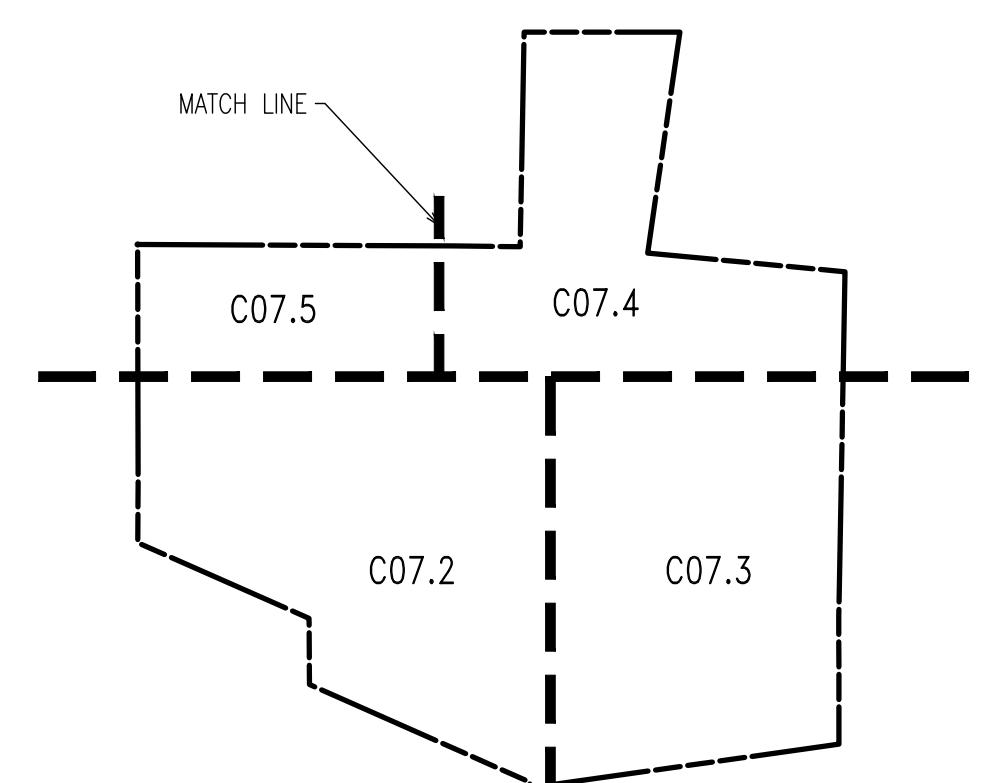
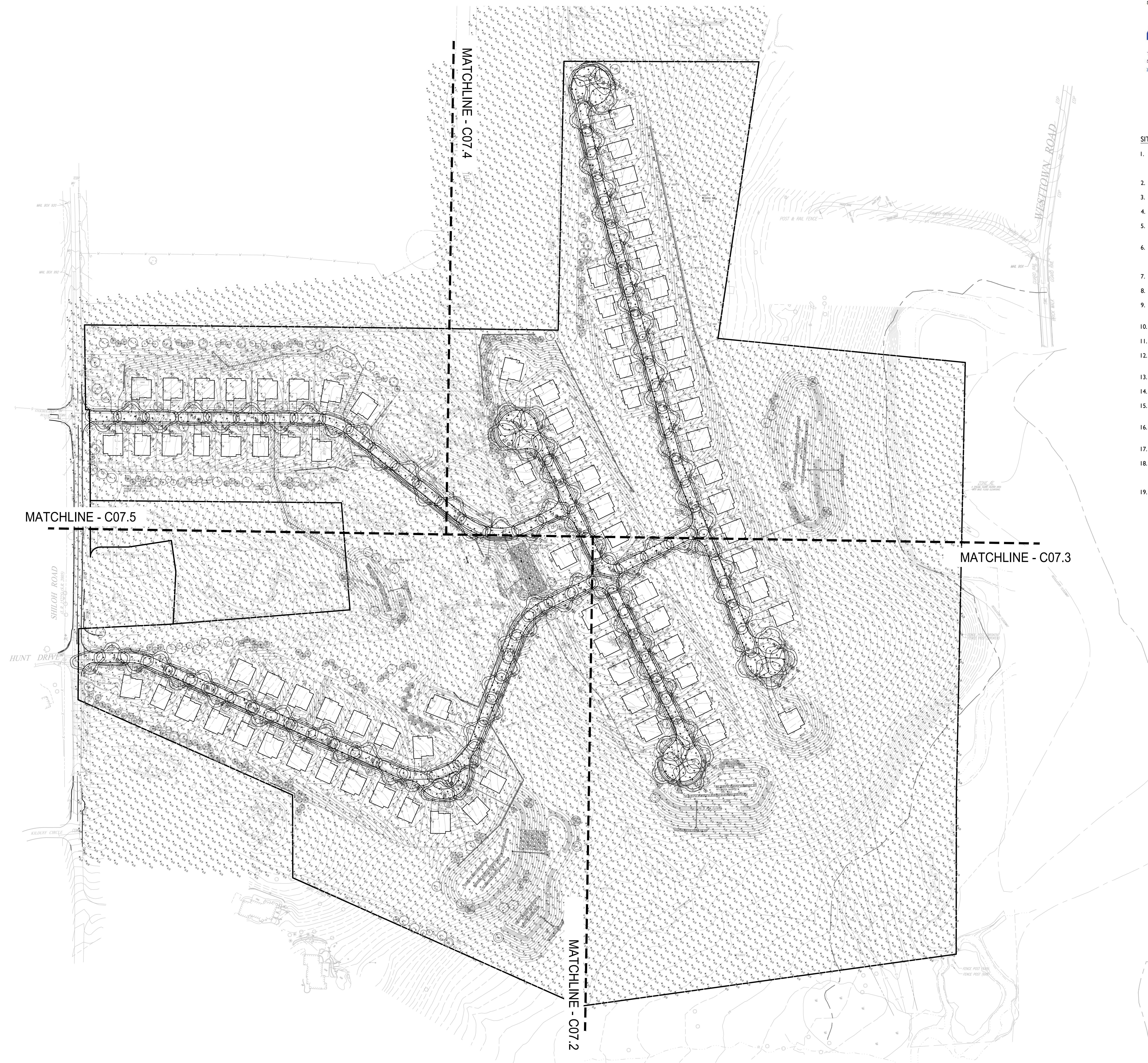


CONDITIONAL USE	OVERALL LIGHTING PLAN	DESCRIPTION
7		
6		
5		
4		
3		
2		
1		
6-14-23		PER TOWNSHIP ENGINEER COMMENTS
REV.		
DATE		

CLIENT:	FOX CLEARING, LLC
PROJECT:	STOKES PROPERTY
LOCATION:	1013 SHILOH ROAD WESTTOWN TWP., CHESTER COUNTY, PA

DATE:	04/17/23
SCALE:	1"=100'
DRAWN BY:	JPL
CHECKED BY:	PJS
PROJECT NO.:	3868
CAD FILE:	20230416_STOKES_TLP.dwg
PLATED:	06/14/23
DRAWING NO.:	C07.1
GRAPHIC SCALE:	1 inch = 100 feet

29 of 37



OVERALL LIGHTING PLAN

SCALE: 1"=100'

100 0 50 100 200

GRAPHIC SCALE

1 inch = 100 feet

29 of 37



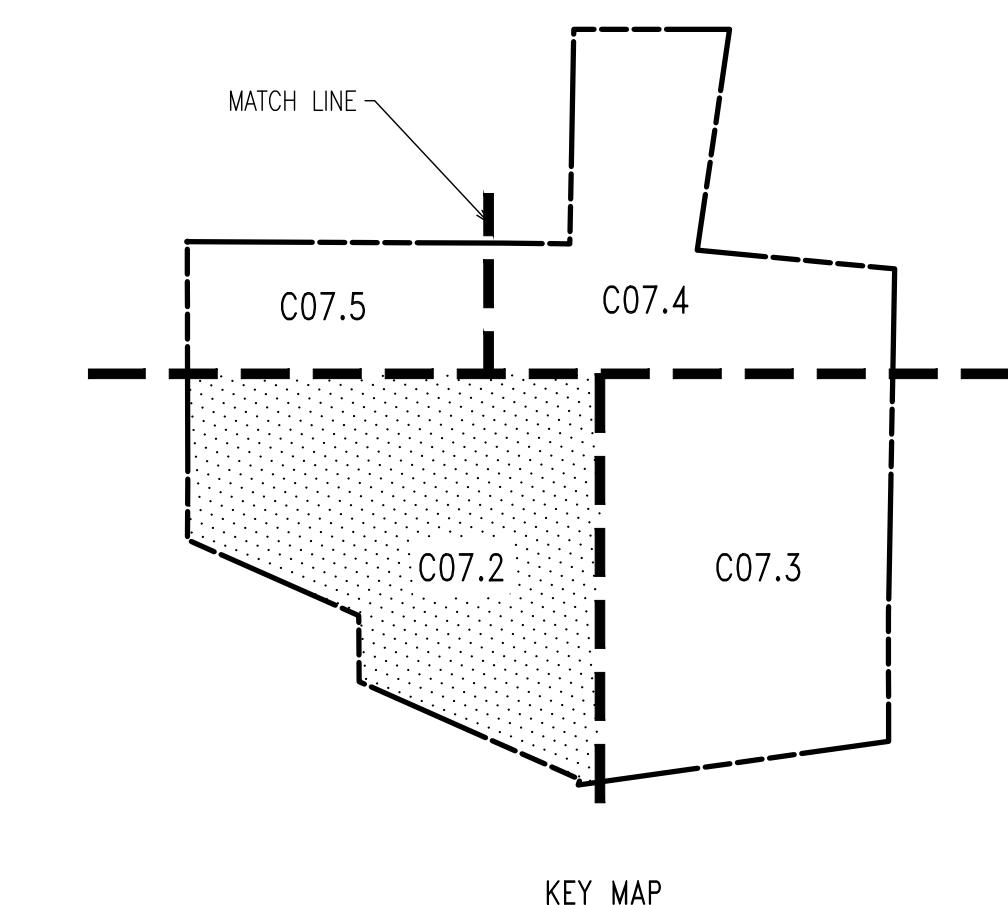
SITE PLAN NOTES:

- ALL LINES AND GRADE WORK NOT PRESENTLY ESTABLISHED AT THE SITE SHALL BE SET OUT BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL CIVIL ENGINEER EMPLOYED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THIS PLAN TO BE USED FOR LANDSCAPING AND SITE IMPROVEMENT PURPOSED ONLY.
- PLANS CREATED FROM DRAWINGS FROM DL HOWELL ENGINEERING DATED, 04/12/2023.
- LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING TREES AND PLANT MATERIAL WITHIN THE AREA OF PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS OFF-SITE; CLEAN-UP OF ALL PAVED AREAS (ROADWAYS, SIDEWALKS, ETC.); AND RESTORATION OF ALL DISTURBED LAWNS AREAS.
- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE TO UNDERGROUND UTILITIES DAMAGED.
- CONTRACTOR SHALL PROVIDE SCREENED PLANTING SOIL WHERE PLANTING IS TO OCCUR. 36" DEPTH, 6" DEPTH AT LAWN AREAS.
- FOLLOWING COMPLETION OF ALL PLANTING INSTALLATION WORK, THE CONTRACTOR SHALL BE REQUIRED TO RESTORE ALL DISTURBED LAWNS AREAS.
- NO TREES SHALL BE PLANTED CLOSER THAN 10 FEET FROM AN UNDERGROUND UTILITY.
- ALL LINES ARE PARALLEL OR PERPENDICULAR UNLESS SHOWN OTHERWISE.
- VERIFY LAYOUT OF ALL PROPOSED WORK TO EXISTING CONDITIONS. REPORT DISCREPANCIES BEFORE ANY CLEARING OR EXCAVATION IS DONE.
- PROVIDE STAKED LAYOUT ON SITE FOR OWNER AND LANDSCAPE ARCHITECT'S REVIEW PRIOR TO COMMENCING WORK.
- ALL DIMENSIONS SHOWN ARE TO FACE OF MATERIALS, UNLESS SHOWN OTHERWISE.
- PLEASE BE ADVISED THAT STUART AND ASSOCIATES, LLC PROVIDED LONG TERM MAINTENANCE SPECIFICATIONS FOR THE LANDSCAPE MATERIALS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING PA ONE CALL AND LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY DIGGING OR PLANT REMOVAL OCCURS.
- CONTRACTOR SHALL INSTALL SILT FENCE IN ANY AREAS WHERE SOIL MAY RUNOFF INTO PARKING AREAS OR INTO EXISTING INLETS.
- FOLLOWING THE COMPLETION, THE EXISTING VEGETATION WILL BE INSPECTED FOR HEALTH AND QUALITY, AND IF NOT DEEMED IN GOOD CONDITION, REPLACED WITH THE EQUIVALENT COMPENSATORY PLANTINGS.
- V.I.F. = VERIFY IN FIELD.

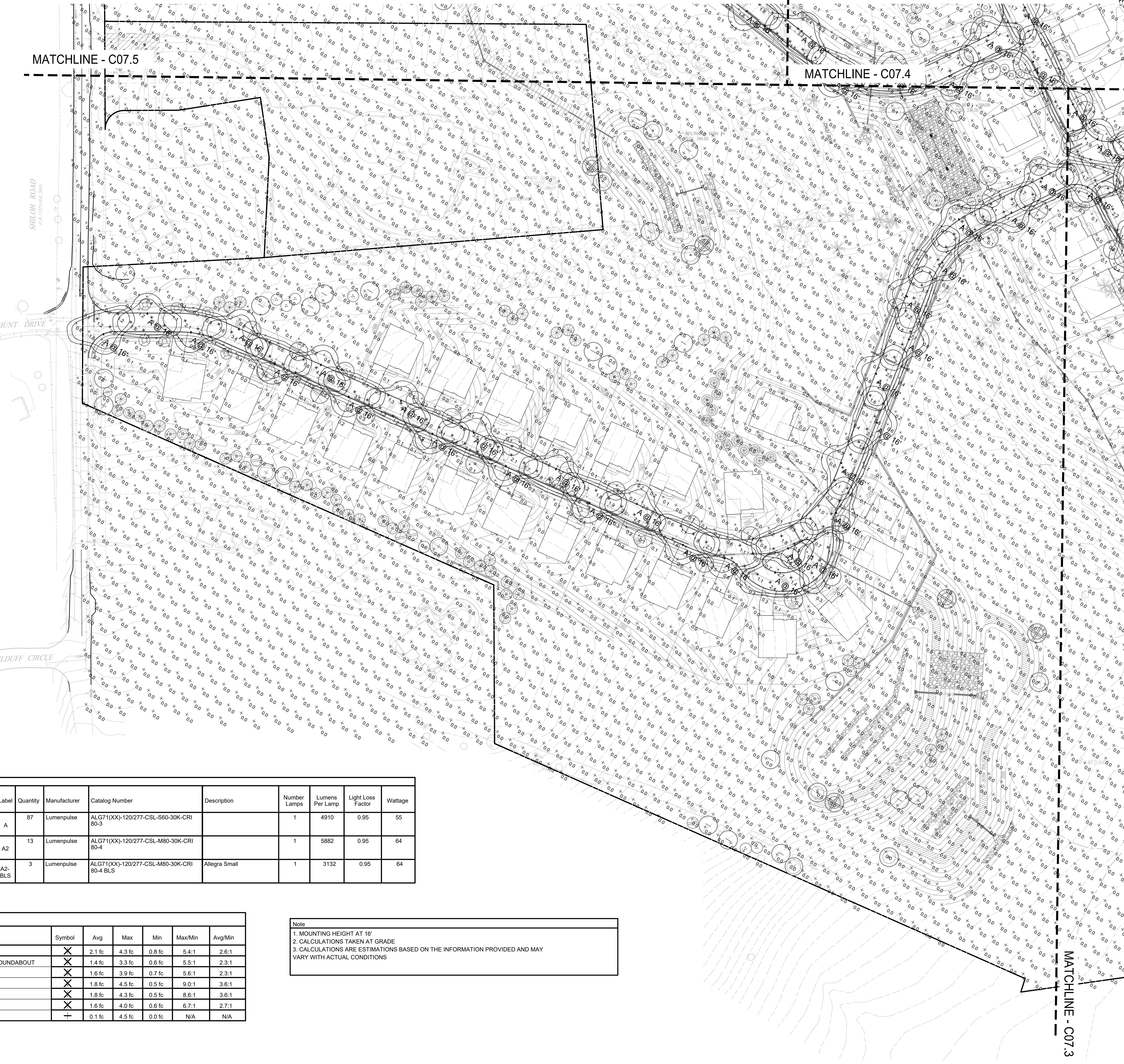
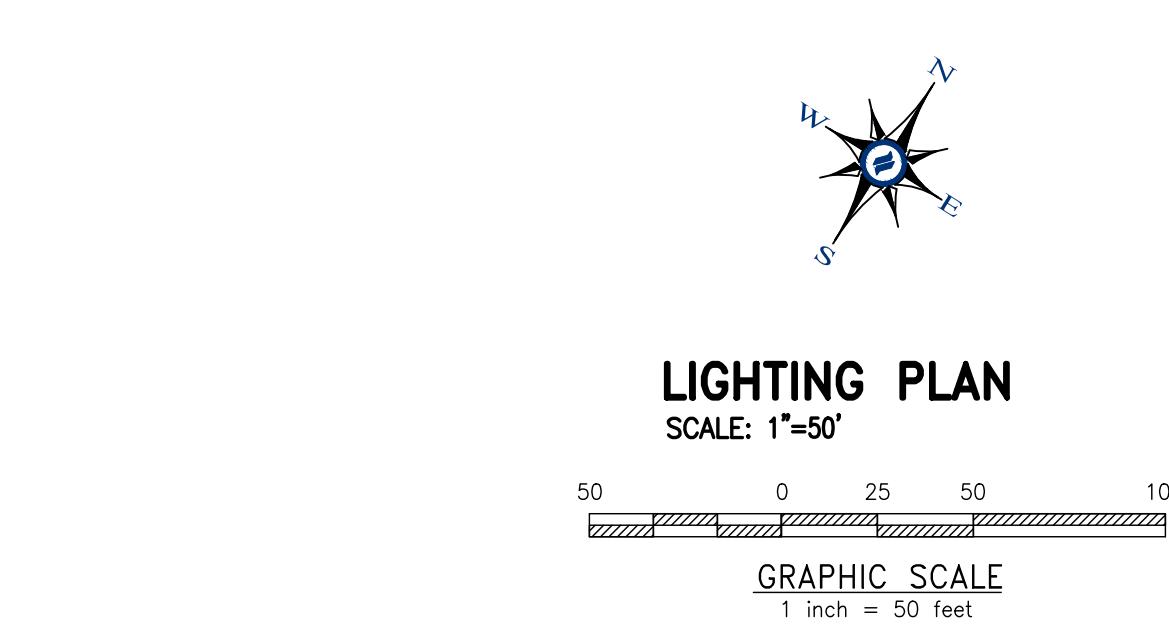
- SPEC NOTES:
- POLE LIGHT TO BE INSTALLED ON MATCHING FINISH POLE.
  - FINISH COLOR - BLACK
  - MOUNTING HEIGHT: 16'
  - SEE PLANISCHÉE FOR DISTRIBUTION TYPE.
  - WATTAGE TO BE SELECTED BY CONTRACTOR.

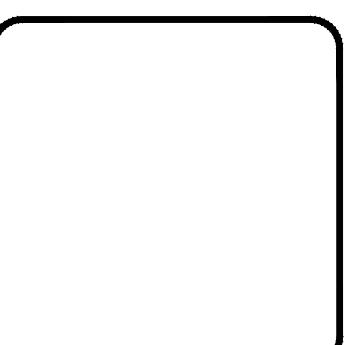
CONTRACTOR NOTES:

- GENERAL CONTRACTOR TO COORDINATE AND PROVIDE CONDUIT PER LIGHTING SHOWN.
- CONTRACTOR TO PROVIDE LIGHTING SUBMITTAL FOR FINAL APPROVAL BY OWNER AND LANDSCAPE ARCHITECT.
- REFER TO MANUFACTURER FOR INSTALLATION INSTRUCTIONS.



KEY MAP  
N.T.S.

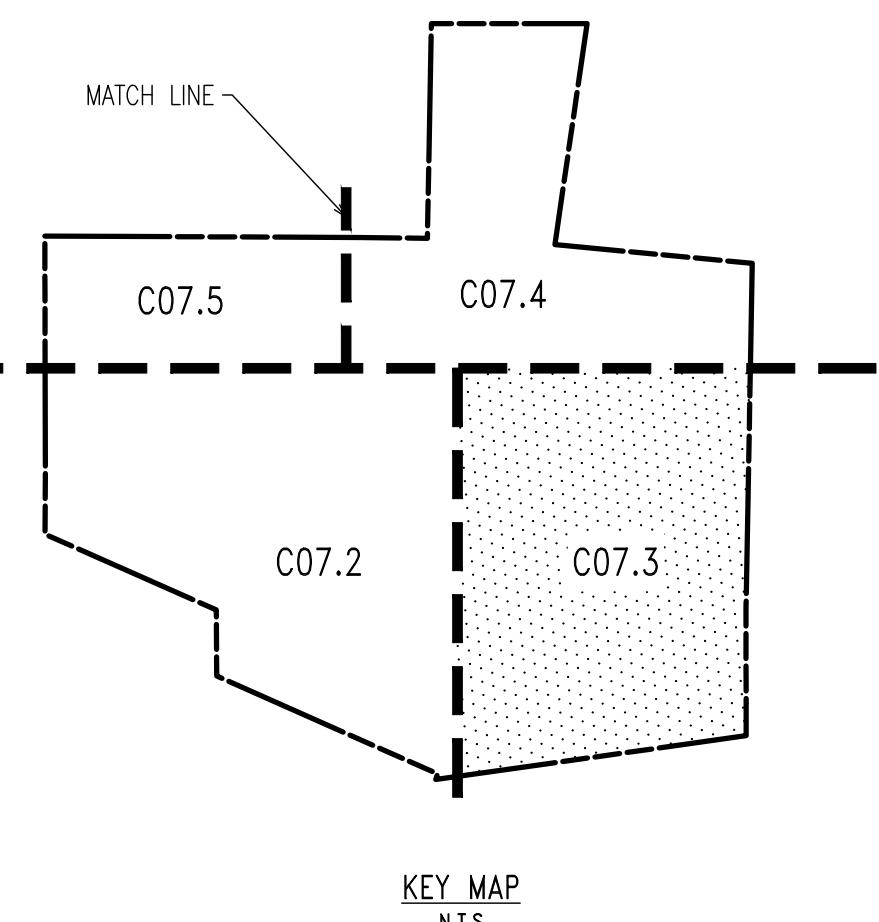




ITEM	DESCRIPTION	QUANTITY	DATE
1	6-14-23	PER TOWNSHIP ENGINEER COMMENTS	
2			
3			
4			
5			
6			
7			
8			

CLIENT: FOX CLEARING, LLC
PROJECT: STOKES PROPERTY
LOCATION: 1015 SHOLOH ROAD
WESTSTOWN TWP., CHESTER COUNTY, PA.

DATE: 04/17/23
SCALE: 1"=50'
DRAWN BY: JPL
CHECKED BY: PJS
PROJECT NO.: 3868
CAD FILE: 20230416_STOKES_LTP.dwg
PLOTTED: 06/14/23
DRAWING NO.: C07.3
HEET: 31 of 37



#### SITE PLAN NOTES:

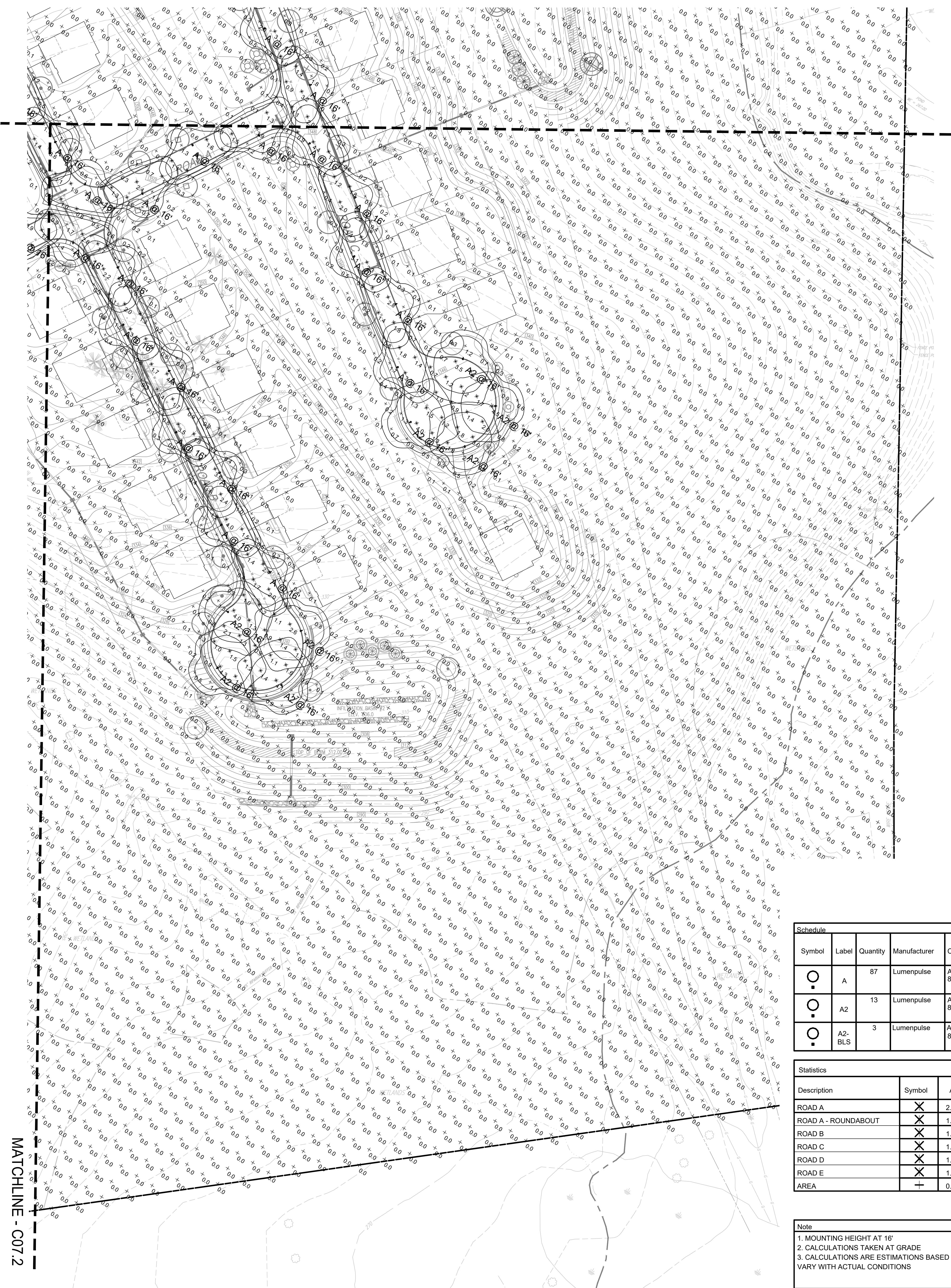
- ALL LINES AND GRADE WORK NOT PRESENTLY ESTABLISHED AT THE SITE SHALL BE LAID OUT BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL CIVIL ENGINEER EMPLOYED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THIS PLAN TO BE USED FOR LANDSCAPING AND SITE IMPROVEMENT PURPOSED ONLY.
- PLANS CREATED FROM DRAWINGS FROM HOWELL ENGINEERING DATED, 04/12/2023.
- LOCATION OF ALL UNDER-GROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING TREES AND PLANT MATERIAL WITHIN THE AREA OF PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS OFF-SITE, CLEAN-UP OF ALL PAVED AREAS (ROADWAYS, SIDEWALKS, ETC.); AND RESTORATION OF ALL DISTURBED LAWN AREAS.
- CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE TO UNDERGROUND UTILITIES DAMAGED.
- CONTRACTOR SHALL PROVIDE SCREENED PLANTING SOIL WHERE PLANTING IS OVER 36' DEPTH, & DEPTH AT LAWN AREAS.
- FOLLOWING COMPLETION OF ALL PLANTING INSTALLATION WORK, THE CONTRACTOR SHALL BE REQUIRED TO RESTORE ALL DISTURBED LAWN AREAS.
- NO TREE SHALL BE PLANTED CLOSER THAN 10 FEET FROM AN UNDERGROUND UTILITY.
- ALL LINES ARE PARALLEL OR PERPENDICULAR UNLESS SHOWN OTHERWISE.
- VERIFY LAYOUT OF ALL PROPOSED WORK TO EXISTING CONDITIONS. REPORT DISCREPANCIES BEFORE ANY CLEARING OR EXCAVATION IS DONE.
- PROVIDE STAKED LAYOUT ON SITE FOR OWNER AND LANDSCAPE ARCHITECT'S REVIEW PRIOR TO COMMENCING WORK.
- ALL DIMENSIONS SHOWN ARE TO FACE OF MATERIALS, UNLESS SHOWN OTHERWISE.
- PLEASE NOTE: CLIENT DID NOT RETAIN STUART AND ASSOCIATES, LLC, TO PROVIDE LONG TERM MAINTENANCE SPECIFICATIONS FOR THE LANDSCAPE MATERIAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING PA ONE CALL AND LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY DIGGING OR PLANT REMOVAL OCCURS.
- CONTRACTOR SHALL INSTALL SILT FENCE IN ANY AREAS WHERE SOIL MAY RUNOFF INTO PARKING AREAS OR INTO EXISTING INLETS.
- FOLLOWING THE COMPLETION, THE EXISTING VEGETATION WILL BE INSPECTED FOR HEALTH AND QUALITY, AND IF NOT DEEMED IN GOOD CONDITION, REPLACED WITH THE EQUIVALENT COMPENSATORY PLANTINGS.
- V.I.F. - VERIFY IN FIELD.

#### SPEC NOTES:

- POST LIGHT TO BE INSTALLED ON MATCHING FINISH POLE.
- FINISH/COLOR: BLACK
- MOUNTING HEIGHT: 16'
- SEE PLANSCHEDULE FOR DISTRIBUTION TYPE.
- WATTAGE TO BE SELECTED BY CONTRACTOR.

#### CONTRACTOR NOTES:

- GENERAL CONTRACTOR TO COORDINATE AND PROVIDE CONDUIT PER LIGHTING SHOWN.
- CONTRACTOR TO PROVIDE LIGHTING SUBMITTAL FOR FINAL APPROVAL BY OWNER AND LANDSCAPE ARCHITECT.
- REFER TO MANUFACTURER FOR INSTALLATION INSTRUCTIONS.

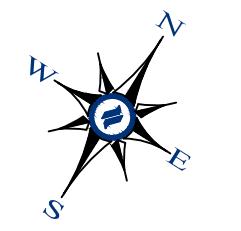


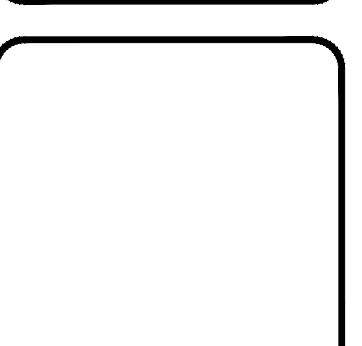
Schedule		Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
Symbol	Description										
○	A	87	Lumenpulse	ALG71(XX)-120/277-CSL-S60-30K-CRI 80-3				1	4910	0.95	55
○	A2	13	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4				1	5882	0.95	64
○	A2-BLS	3	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4 BLS	Allegra Small			1	3132	0.95	64

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ROAD A	X	2.1 fc	4.3 fc	0.8 fc	5.4:1	2.6:1
ROAD A - ROUNDABOUT	X	1.4 fc	3.3 fc	0.6 fc	5.5:1	2.3:1
ROAD B	X	1.6 fc	3.9 fc	0.7 fc	5.6:1	2.3:1
ROAD C	X	1.8 fc	4.5 fc	0.5 fc	9.0:1	3.6:1
ROAD D	X	1.8 fc	4.3 fc	0.5 fc	8.6:1	3.6:1
ROAD E	X	1.6 fc	4.0 fc	0.6 fc	6.7:1	2.7:1
AREA	+	0.1 fc	4.5 fc	0.0 fc	N/A	N/A

Note											
1. MOUNTING HEIGHT AT 16'											
2. CALCULATIONS TAKEN AT GRADE											
3. CALCULATIONS ARE ESTIMATIONS BASED ON THE INFORMATION PROVIDED AND MAY VARY WITH ACTUAL CONDITIONS											

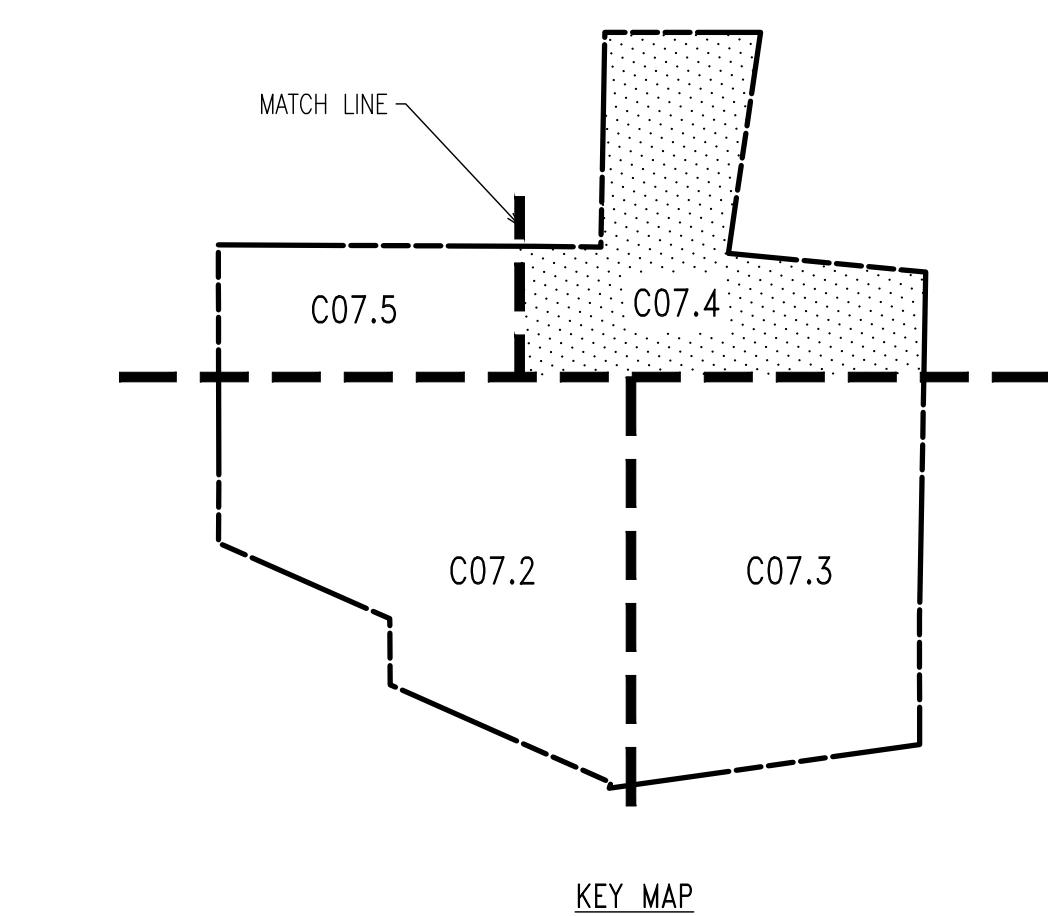
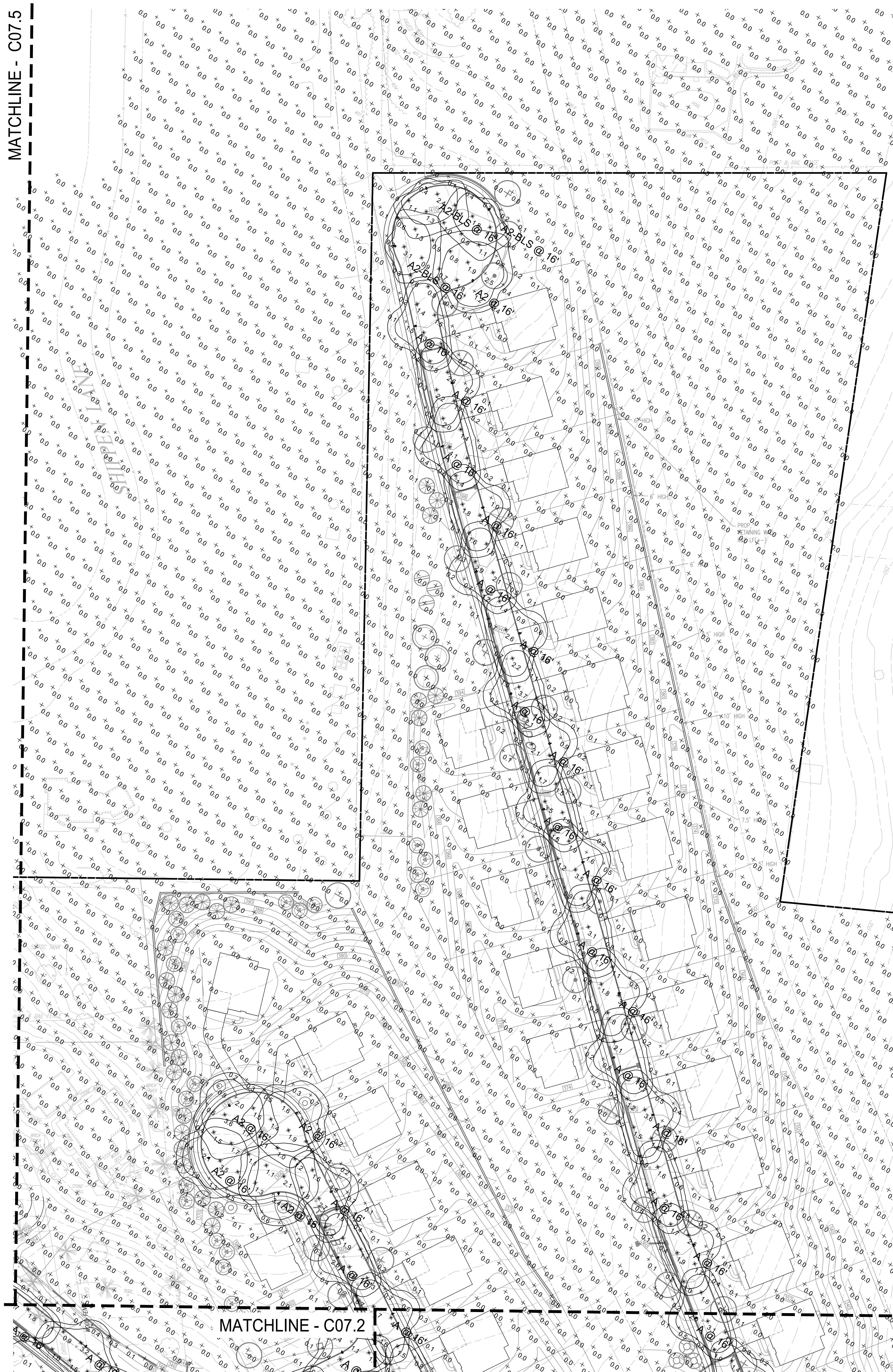
**LIGHTING PLAN**  
SCALE: 1"=50'  
GRAPHIC SCALE  
1 inch = 50 feet





SPEC	DESCRIPTION	REV.	DATE
7		6	6-14-23
6		5	4
5		3	2
4			

CLIENT: FOX CLEARING, LLC
PROJECT: STOKES PROPERTY
LOCATION: 103 SHILOH ROAD, WESTON TWP., CHESTER COUNTY, PA
DATE: 04/17/23
SCALE: 1"=50'
DRAWN BY: JPL
CHECKED BY: PJS
PROJECT NO.: 3868
CAD FILE: 20230416_STOKES_LTP.dwg
PLATED: 06/14/23
DRAWING NO.: C07.4
GRAPHIC SCALE 1 inch = 50 feet
32 of 37



Schedule								
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
○	A	87	Lumenpulse	ALG71(XX)-120/277-CSL-S60-30K-CRI 80-3		1	4910	0.95
○	A2	13	Lumenpulse	ALG71(XX)-120/277-CSL-M60-30K-CRI 80-4		1	5882	0.95
○	A2-BLS	3	Lumenpulse	ALG71(XX)-120/277-CSL-M60-30K-CRI 80-4 BLS	Allegra Small	1	3132	0.95
Statistics								
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min		
ROAD A	X	2.1 fc	4.3 fc	0.8 fc	5.4:1	2.6:1		
ROAD A - ROUNDABOUT	X	1.4 fc	3.3 fc	0.6 fc	5.5:1	2.3:1		
ROAD B	X	1.6 fc	3.9 fc	0.7 fc	5.6:1	2.3:1		
ROAD C	X	1.8 fc	4.5 fc	0.5 fc	9.0:1	3.6:1		
ROAD D	X	1.8 fc	4.3 fc	0.5 fc	8.6:1	3.6:1		
ROAD E	X	1.6 fc	4.0 fc	0.6 fc	6.7:1	2.7:1		
AREA	+	0.1 fc	4.5 fc	0.0 fc	N/A	N/A		

Note  
1. MOUNTING HEIGHT AT 16'  
2. CALCULATIONS TAKEN AT GRADE  
3. CALCULATIONS ARE ESTIMATIONS BASED ON THE INFORMATION PROVIDED AND MAY VARY WITH ACTUAL CONDITIONS



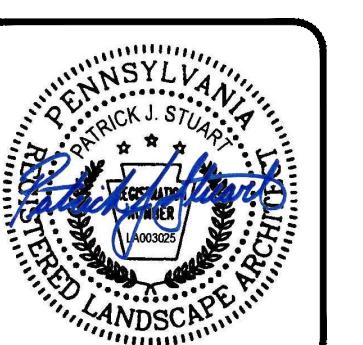
MATCHLINE - C07.3

MATCHLINE - C07.2

MATCHLINE - C07.5

LIGHTING PLAN  
SCALE: 1"=50'

50 0 25 50 100  
GRAPHIC SCALE  
1 inch = 50 feet

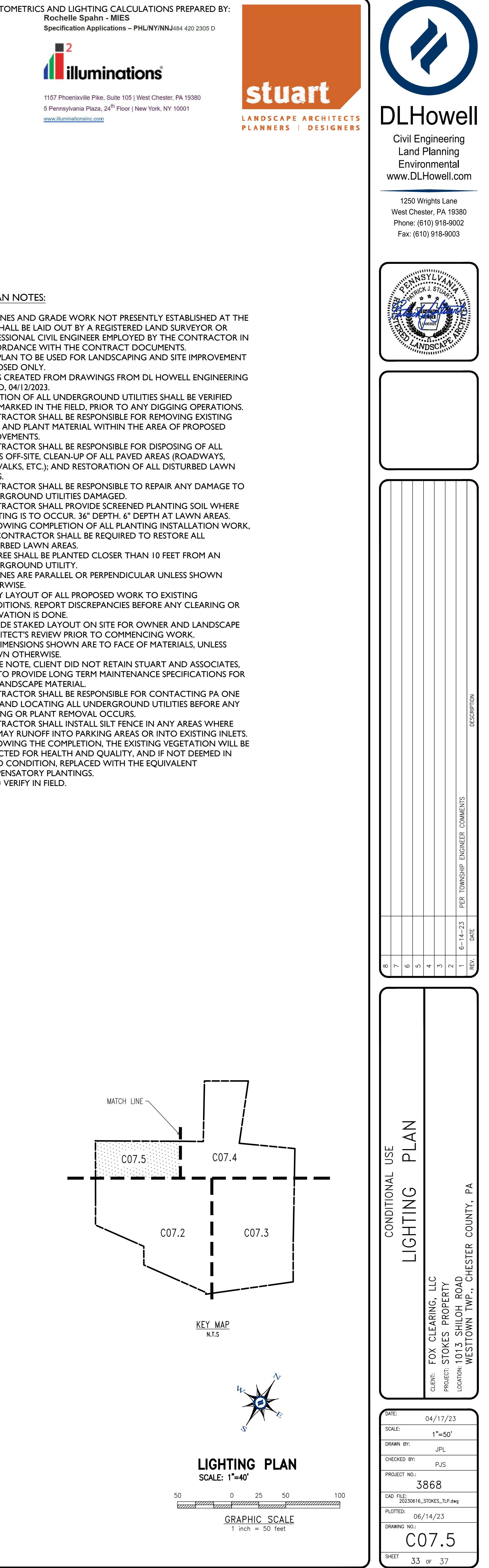


Schedule					Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
Symbol	Label	Quantity	Manufacturer	Catalog Number					
O	A	87	Lumenpulse	ALG71(XX)-120/277-CSL-S60-30K-CRI 80-3		1	4910	0.95	55
O	A2	13	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4		1	5882	0.95	64
O	A2-BLS	3	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4 BLS	Allegra Small	1	3132	0.95	64

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ROAD A	X	2.1 fc	4.3 fc	0.8 fc	5.4:1	2.6:1
ROAD A - ROUNDABOUT	X	1.4 fc	3.3 fc	0.6 fc	5.5:1	2.3:1
ROAD B	X	1.6 fc	3.9 fc	0.7 fc	5.6:1	2.3:1
ROAD C	X	1.8 fc	4.5 fc	0.5 fc	9.0:1	3.6:1
ROAD D	X	1.8 fc	4.3 fc	0.5 fc	8.6:1	3.6:1
ROAD E	X	1.6 fc	4.0 fc	0.6 fc	6.7:1	2.7:1
AREA	+	0.1 fc	4.5 fc	0.0 fc	N/A	N/A

Note

1. MOUNTING HEIGHT AT 16'
2. CALCULATIONS TAKEN AT GRADE
3. CALCULATIONS ARE ESTIMATIONS BASED ON THE INFORMATION PROVIDED AND MAY VARY WITH ACTUAL CONDITIONS



#### LIGHTING AND LIGHTING SUBSTITUTION NOTES:

1. EXTERIOR LIGHTING HAS BEEN DESIGNED PER THE LIGHTING HANDBOOK OF THE ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)
2. SELECTED FIXTURES TO BE FULL-COLOR AND DARK SKY FRIENDLY.
3. THE PLANS DO NOT INCLUDE LANDSCAPE SERVICES AT THE APPLICANT'S EXPENSES, IF DETERMINED APPLICABLE FOR CONSTRUCTION.
4. THE TOWNSHIP RESERVES THE RIGHT TO CONDUCT ONE OR MORE POST-INSTALLATION NIGHTTIME INSPECTIONS TO VERIFY COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION, AND IF APPROPRIATE, TO REQUIRE SUITABLE REMEDIAL ACTION AT NO EXPENSE TO TOWNSHIP.
5. POST-APPROVAL ALTERATIONS TO LIGHTING PLANS OR INTENDED SUBSTITUTION FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
6. LIGHT FIXTURES AND EQUIPMENT SHALL BE MAINTAINED SO AS TO CONTINUOUSLY MEET TOWNSHIP REQUIREMENTS.
7. ALL FIXTURES TO BE CONTROLLED WITH WIRELESS CONTROLLERS AND ALL SITE LIGHTING WILL BE REDUCED BY 75% FROM 11PM TO DAWN. NO OTHER LIGHTS SHALL BE PERMITTED AFTER 11PM.
8. ALL 120 VOLT CABLE TO BE INSTALLED BY LICENSED ELECTRICIAN.
9. ALL 120 VOLT CABLE TO RUN IN CONDUIT.
10. CONTRACTOR TO PROVIDE SUFFICIENT NIGHTTIME ADJUSTMENT TO ALL LIGHTING TO SATISFY TOWNSHIP REQUIREMENTS AND OWNER OR OWNER'S REPRESENTATIVE'S REQUESTS FOR CONCEALMENT.
11. ALL ELECTRICAL CONDUITS SHALL BE SCH. 40 PVC AND ALL BENDS SHALL BE SWEEP TYPE FOR PULING WIRE CONDUIT TO EXTEND BEYOND THE EDGE OF HARDCAPE ELEMENTS BY 12" MIN. CONDUIT TO BE TEMPORARILY CAPPED AND LOCATIONS STAKED PRIOR TO BACKFILLING.
12. WHILE EXTENDING CONDUITS UNDER EXISTING STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING STRUCTURES.
13. ALL SWITCHING CONTROL DEVICE TYPE AND LOCATIONS TO BE APPROVED BY OWNER OR OWNERS' REPRESENTATIVE.
14. ALL LIGHTING FIXTURES TO BE CONTROLLED BY AUTOMATIC SWITCHES TO PERMIT EXTINGUISHING OF LIGHTS AT DUSK AND DAWN. ALL NIGHT SAFETY OR SECURITY LIGHTING SHALL NOT HAVE LIGHTING INTENSITY LEVELS WHICH EXCEED 25% OF THE LEVELS NORMALLY PERMITTED BY THE TOWNSHIP BUT IN NO CASE SHALL THE INTENSITY LEVELS BE LESS THAN THE MINIMUM LEVELS FOR SAFETY AND SECURITY AS INVOKED BY THE IESNA A11 FINAL LIGHT LOCATIONS TO BE APPROVED BY LANDSCAPE ARCHITECT.
15. CONTRACTOR TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE OWNER AND OWNERS' REPRESENTATIVES TO DISCUSS ALL UNDERGROUND UTILITIES. AS-BUILT DRAWINGS ARE REQUESTED OF ALL SUCH FACILITIES.
16. CONTRACTOR TO PROVIDE PLANS FOR ALL AS-BUILT UNGROUNDED UTILITIES.
17. ALL FINAL LIGHT LOCATIONS TO BE REFERENCED, AIMED AS NECESSARY SO AS TO AVOID SHINING OF LIGHT INTO WINDOWS AND DOORS. CONTRACTOR TO ARRANGE PRE-CONSTRUCTION MEETING WITH THE OWNER AND OWNERS' REPRESENTATIVES INCLUDING MASONS AND OTHER INDIVIDUALS FAMILIAR WITH ANY UNDERGROUND FACILITIES.
18. ALL WIRING, UP LIGHTING AND SPOT LIGHT LOCATIONS TO BE COORDINATED WITH TREES ON THE LANDSCAPE PLAN.
19. CONDUIT TRENCHING TO AVOID ROOT ZONES OF EXISTING TREES TO REMAIN.
20. ALL TRENCH LOCATIONS NEAR AND AROUND EXISTING TREES TO BE MARKED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO CONCEALMENT.
21. THE ELECTRICAL ENGINEER THAT PROVIDES POWER PLANS.
22. IN THE EVENT THAT THE CONTRACTOR PROPOSES LIGHT FIXTURE SUBSTITUTIONS, REQUEST MUST BE RECEIVED BY THE LANDSCAPE ARCHITECT FOR REVIEW (14) FOURTEEN DAYS PRIOR TO BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTIONS. FAILURE TO SUBMIT WITHIN THAT DEADLINE RENDERS ALL SUBSTITUTIONS REQUESTS VOID, AND ORIGINALLY SPECIFIED FIXTURE(S) WILL BE SUPPLIED. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING:

  - 23.1. TOWNSHIP REQUIRED COPIES OF ALL MANDATORY SUBMITTALS FOR BOTH THE ORIGINALLY SPECIFIED FIXTURE(S) AND THE PROPOSED SUBSTITUTION(S).
  - 23.2. CONTRACTOR'S WRITTEN CERTIFICATION THAT THE PROPOSED SUBSTITUTION(S) CONFORM TO ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS IN EVERY RESPECT AND IS APPROPRIATE FOR THE APPLICATION INDICATED IN THE DOCUMENTS.
  - 23.3. CONTRACTOR'S WRITTEN STATEMENT INDICATING THE EFFECT OF THE SUBSTITUTION(S) ON THE CONSTRUCTION SCHEDULE COMPARED TO THE SCHEDULE WITH THE ORIGINALLY SPECIFIED FIXTURE(S).
  - 23.4. CONTRACTOR-NET UNIT PRICE FOR THE ORIGINALLY SPECIFIED FIXTURE(S) AND FOR THE PROPOSED SUBSTITUTE FIXTURE(S).
  - 23.5. ORIGINALLY SPECIFIED SUBSTITUTION FIXTURE(S) WITH SPECIFIED LAMPS AND CORRECT PLUG CONNECTION FOR 120 VOLT OPERATIONS.
  - 23.6. CONTRACTOR'S WRITTEN CERTIFICATION THAT ANY ALTERATIONS THAT MAY RESULT FROM THE PROPOSED LIGHTING FIXTURE SUBSTITUTION(S) WILL BE DESIGNED AND CONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
  - 23.7. REIMBURSEMENT TO THE LANDSCAPE ARCHITECT FOR ALL TIME ASSOCIATED WITH REVIEW OF FIXTURE SUBSTITUTIONS. PAYMENT SHALL BE MADE IN ADVANCE OF THE REVIEW, BASED ON THE LANDSCAPE ARCHITECT'S HOURLY RATES FOR THE PERSONAL INVOLVED IN THE REVIEW.
  - 23.8. CONTRACTOR'S WRITTEN WAIVER OF RIGHTS TO ADDITIONAL PAYMENT AND TIME FOR THE PROPOSED SUBSTITUTE SHOULD THE PROPOSED SUBSTITUTION FAIL TO PERFORM IN A MANNER THAT IS EQUIVALENT TO THE ORIGINALLY SPECIFIED FIXTURE(S).
  - 23.9. AS NOTED ABOVE, AN ADDENDUM INCORPORATING THE SUBSTITUTION SHALL INCORPORATE THE FOLLOWING REQUIREMENTS:

    - 23.9.1. ANY SUBSTITUTIONS TO LIGHTING FIXTURES AND THEIR PARTS MUST BE APPROVED BY THE OWNER, TENANT, TOWNSHIP AND THE LANDSCAPE ARCHITECT. ANY COST ASSOCIATED WITH REVIEW AND APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTITLED BORN BY THE CONTRACTOR.
    - 23.9.2. CONTRACTOR PREPARED LIGHTING PLANS AND PHOTOMETRIC LAYOUTS OF THE PROPOSED LIGHTING AREA WHICH INDICATES THE SYSTEM'S PERFORMANCE.
    - 23.9.3. A PHOTOMETRIC STUDY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH, HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION. FOR THE PROPOSED EARTHQUAKE CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
    - 23.9.4. A PHOTOGRAPH THAT CLEARLY ILLUSTRATES THE REPLACEMENT FIXTURE MOUNTED NOTING THE COLOR, FINISH, MANUFACTURER, AND ADDITIONAL PHYSICAL CHARACTERISTICS.
    - 23.9.5. THE LIGHTING CALCULATIONS AND PHOTOMETRICS WERE PREPARED BY REGISTERED LIGHTING DESIGNER, ROCHELLE SPAHN, MIES. (CERTIFIED WITH ILLUMINATING ENGINEER SOCIETY AND INTERNATIONAL ASSOCIATION LIGHTING DESIGNERS).

SPEC NOTES:

1. POST LIGHT TO BE INSTALLED ON MATCHING FINISH POLE.
2. FINISH COLOR: BLACK.
3. MOUNTING HEIGHT: 12'.
4. SEE PLANSCHEDULE FOR DISTRIBUTION TYPE.
5. WATTAGE TO BE SELECTED BY CONTRACTOR.

CONTRACTOR NOTES:

1. GENERAL CONTRACTOR TO COORDINATE AND PROVIDE CONDUIT PER LIGHTING SHOWN.
2. CONTRACTOR TO PROVIDE LIGHTING SUBMITTAL FOR FINAL APPROVAL BY OWNER AND LANDSCAPE ARCHITECT.
3. REFER TO MANUFACTURER FOR INSTALLATION INSTRUCTIONS.

#### SITE PLAN NOTES:

1. ALL LINES AND GRADE WORK NOT PRESENTLY ESTABLISHED AT THE SITE SHALL BE LAID OUT BY A REGISTERED LAND SURVEYOR OR PROFESSIONAL CIVIL ENGINEER EMPLOYED BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. THE PLANS TO BE USED FOR LANDSCAPING AND SITE IMPROVEMENT PURPOSED ONLY.
3. PLANS CREATED FROM DRAWINGS FROM DL HOWELL ENGINEERING DATED: 04/12/2023
4. LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING TREES AND PLANT MATERIAL WITHIN THE AREA OF PROPOSED IMPROVEMENTS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS OFF-SITE, CLEAN-UP OF ALL PAVED AREAS (ROADWAYS, SIDEWALKS, ETC.); AND RESTORATION OF ALL DISTURBED LAWN AREAS.
7. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE TO UNDERGROUND UTILITIES DAMAGED.
8. CONTRACTOR SHALL PROVIDE SCREENED PLANTING SOIL WHERE PLANTING IS TO OCCUR, 36" DEPTH, 6" DEPTH AT LAWN AREAS.
9. FOLLOWING COMPLETION OF ALL PLANTING INSTALLATION WORK, THE CONTRACTOR SHALL BE REQUIRED TO RESTORE ALL DISTURBED LAWN AREAS.
10. NO TREE SHALL BE PLANTED CLOSER THAN 10 FEET FROM AN UNDERGROUND UTILITY.
11. ALL LINES ARE PARALLEL OR PERPENDICULAR UNLESS SHOWN OTHERWISE.
12. VERIFY LAYOUT OF ALL PROPOSED WORK TO EXISTING CONDITIONS. REPORT DISCREPANCIES BEFORE ANY CLEARING OR EXCAVATION IS DONE.
13. PROVIDE STAKED LAYOUT ON SITE FOR OWNER AND LANDSCAPE ARCHITECT'S REVIEW PRIOR TO COMMENCING WORK.
14. ALL DIMENSIONS SHOWN ARE TO FACE OF MATERIALS, UNLESS SHOWN OTHERWISE.
15. PLEASE NOTE, CLIENT DID NOT RETAIN STUART AND ASSOCIATES, LLC, TO PROVIDE LONG TERM MAINTENANCE SPECIFICATIONS FOR THE LANDSCAPE MATERIALS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING PA ONE CALL AND LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY DIGGING OR PLANT REMOVAL OCCURS.
17. CONTRACTOR SHALL INSTALL SILT FENCE IN ANY AREAS WHERE SOIL MAY RUNOFF INTO PARKING AREAS OR INTO EXISTING INLETS.
18. FOLLOWING THE COMPLETION, THE EXISTING VEGETATION WILL BE INSPECTED FOR HEALTH AND QUALITY, AND IF NOT DEEMED IN GOOD CONDITION, REPLACED WITH THE EQUIVALENT COMPENSATORY PLANTINGS.
19. V.I.F. = VERIFY IN FIELD.

PHOTOMETRICS AND LIGHTING CALCULATIONS PREPARED BY:  
Rochelle Spahn - MIES  
Specification Applications - PHOT/NJ/NNJ484 420 2305 D



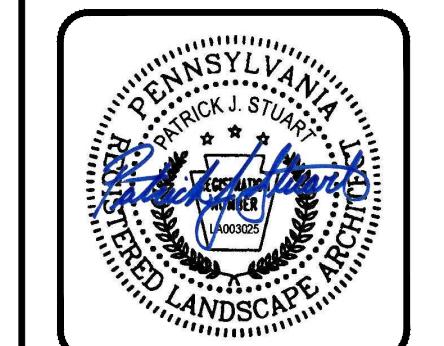
1107 Phoenixville Pike, Suite 105 West Chester, PA 19380  
5 Pennsylvania Plaza, 24th Floor | New York, NY 10001  
[www.illuminationsinc.com](http://www.illuminationsinc.com)



LANDSCAPE ARCHITECTS  
PLANNERS | DESIGNERS

Civil Engineering  
Land Planning  
Environmental  
[www.DLHowell.com](http://www.DLHowell.com)

1250 Wrights Lane  
West Chester, PA 19380  
Phone: (610) 918-9002  
Fax: (610) 918-9003



Schedule									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
○	A	87	Lumenpulse	ALG71(XX)-120/277-CSL-S60-30K-CRI 80-3		1	4910	0.95	55
○	A2	13	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4		1	5882	0.95	64
○	A2-BLS	3	Lumenpulse	ALG71(XX)-120/277-CSL-M80-30K-CRI 80-4 BLS	Allegra Small	1	3132	0.95	64

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ROAD A	X	2.1 fc	4.3 fc	0.8 fc	5.4:1	2.6:1
ROAD A - ROUNDABOUT	X	1.4 fc	3.3 fc	0.6 fc	5.5:1	2.3:1
ROAD B	X	1.6 fc	3.9 fc	0.7 fc	5.6:1	2.3:1
ROAD C	X	1.8 fc	4.5 fc	0.5 fc	9.0:1	3.6:1
ROAD D	X	1.8 fc	4.3 fc	0.5 fc	8.6:1	3.6:1
ROAD E	X	1.6 fc	4.0 fc	0.6 fc	6.7:1	2.7:1
AREA	+	0.1 fc	4.5 fc	0.0 fc	N/A	N/A

Note
1. MOUNTING HEIGHT AT 16'
2. CALCULATIONS TAKEN AT GRADE
3. CALCULATIONS ARE ESTIMATIONS BASED ON THE INFORMATION PROVIDED AND MAY VARY WITH ACTUAL CONDITIONS
V.I.F. = VERIFY IN FIELD.

#### Configured Specification Sheet

Project Name: Stokes		Qty				
Type: ALLEGRA	Catalog / Part Number: ALG7204/120-CSL-30K-CRI80-BKT2XDM					
Distributions	Type I	Type II	Type III	Type IV	Type V	Type VI
Color & Color Temperatures	2200K	2700K	3000K	3500K	4000K	5700K
Controls	ON/OFF	0-10V	IP66 (ip66 chamber)	5 Years (5 years)		
Rating	IP66 (ip66 chamber)	Certifications				
Features	Color and Color Temperature	Distributions	Options	Mounting Options	Warranty	Performance
	2200K, 2700K, 3000K, 3500K, 4000K, 5700K	Type I, Type II, Type III or Type IV (with or without backlight shield), Type V square and Type VI Sof Sole	Corrosion-resistant coating for hostile environments, Surge protection	Pendant Medium (4-Bolt Tension Adapter), Side Internal (2/3/8 in Tension)	5-year limited warranty	Output (nominal lumens) Minimum 3000lm / Maximum 17000lm
						Color Rendering 3.0CCT for CRI 70+ and 2.5CCT for CRI 80+
						Lumen Maintenance TM-21 L70 527,000 hrs (projected). To 77 °F, 36,000 hrs (reported. To 77 °F)
						Dark Sky Dark sky compliant (2200K, 2700K and 3000K color temperatures, BUG rating of U0)
Physical	Housing Material	Lens Material	Weight	EPA	PER TOWNSHIP ENGINEER COMMENTS	DATE
	Die cast low copper 360 aluminum alloy	Optical tempered clear glass (Clear lens), Optical tempered optic glass (Softline lens)	Up to 35 lbs	Up to 1.13 cu ft		

#### Configured Specification Sheet

How to order									
ALG7204	120	CSL	Unlocked	30K	Unlocked	MTX	DM	Dimmable	Unlocked
ALG7204	120	Voltage	Output (nominal lumens)	Color and Color Temperature	Color Rendering	Distributions			