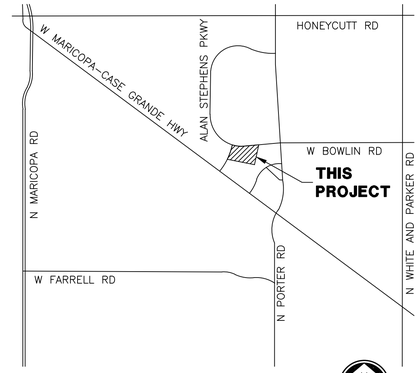
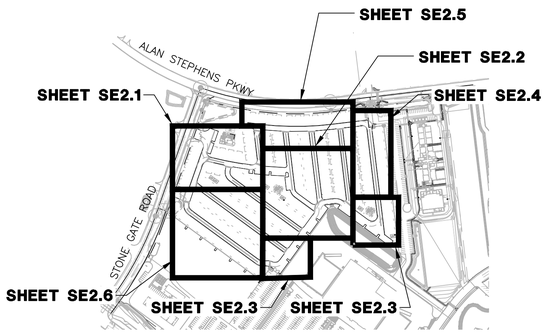
# VILLAS AT STONEGATE
## SITE ELECTRICAL PLAN
### MARICOPA, ARIZONA

1. ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), FEDERAL, STATE AND LOCAL JURISDICTION CODES.
2. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
3. VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR TO CALL 811 FOR BLUE STAKE. FOR ALL MUNICIPAL OR PRIVATELY OWNED UTILITIES EXISTING WITHIN LIMITS OF WORK OF PROJECT, CONTRACTOR TO PRIVATELY LOCATE UTILITIES. IRRIGATION LINES LESS THAN 2" WILL NOT TYPICALLY BE MARKED AND CAUTION SHOULD BE USED TO AVOID DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES CAUSED AS A RESULT OF CONTRACT WORK, ALL DAMAGES TO BE REPAIRED IN KIND.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
7. ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
8. CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
9. PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
10. LEAVE THE SITE CLEAN, REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
11. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
12. PROVIDE EMT INDOOR AND GRS OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30.
13. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
14. ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE XHHW (75 DEGREE C) FOR BELOW GRADE INSTALLATIONS (AND CONDUIT RISERS) AND THHN/THWN (75 DEGREE C) FOR ABOVE GRADE INSTALLATIONS. MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT. ALL CONDUCTORS SHALL BE NEW UNLESS NOTED OTHERWISE IN PLANS.
15. A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY, INCLUDING WITHIN EMT CONDUIT. EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED PER NEC TABLE 250.122.
16. WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDED CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
17. BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
18. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
19. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
20. ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
21. ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
22. WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT WALKS. ASPHALT WALKS SHALL BE REPLACED IN KIND.
23. CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXCEPTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR AFTER ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.
24. CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32–INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4–INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF–TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
25. ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
26. CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDER CIRCUIT WIRING. PROVIDE CERTIFIED TEST RESULTS FOR MEGGER TEST TO OWNER UPON COMPLETION OF PROJECT.
27. ALL CONDUIT SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
28. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH–IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
29. ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURES RECOMMENDATIONS AND BEAR U.L. APPROVAL. COORDINATE WITH ENGINEER/OWNER.
30. ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
31. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA–3R OR NEMA–4 ENCLOSURES.
32. CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A PLIABLE SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
33. CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
34. INSTALL FIRE SEALS IN ALL CONDUITS PENETRATING THE FIRE WALL TO MAINTAIN THE FIRE RESISTANCE RATING OF THE WALL, AS REQUIRED BY NEC 300.21.
35. ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR INLINE FUSING, PROVIDE 5 AMP FUSING IN FUSEHOLDER.
36. PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
37. MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
38. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER–RESISTANT TYPE. RECEPTACLE COVERS IN WET LOCATIONS SHALL BE EXTRA DUTY PER NEC 406.9(B). ALL WEATHERPROOF WHILE IN–USE RECEPTACLE COVERS SHALL BE METAL.
39. A MINIMUM OF (1) 20A 125V RECEPTACLE SHALL BE INSTALLED NOT LESS THAN 6 FEET AND NOT MORE THAN 20 FEET FROM THE INSIDE WALL OF EACH PERMANENTLY INSTALLED POOL, PER NEC 680.22(A)(1).
40. SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: LIGHT FIXTURES, POLES, POLE BASES, SERVICE ENTRANCE SECTION, ELECTRICAL EQUIPMENT, DISCONNECT SWITCHES, TIME CLOCKS AND OTHER CONTROLS, LIGHTING CONTACTORS AND PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
41. THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.




**VICINITY MAP**
NOT TO SCALE

NORTH




**AREA MAP**
NOT TO SCALE

NORTH



WRIGHT ENGINEERING PROJECT NO:
**22109**
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
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PHONE 480.497.5829 • FAX 480.497.5807
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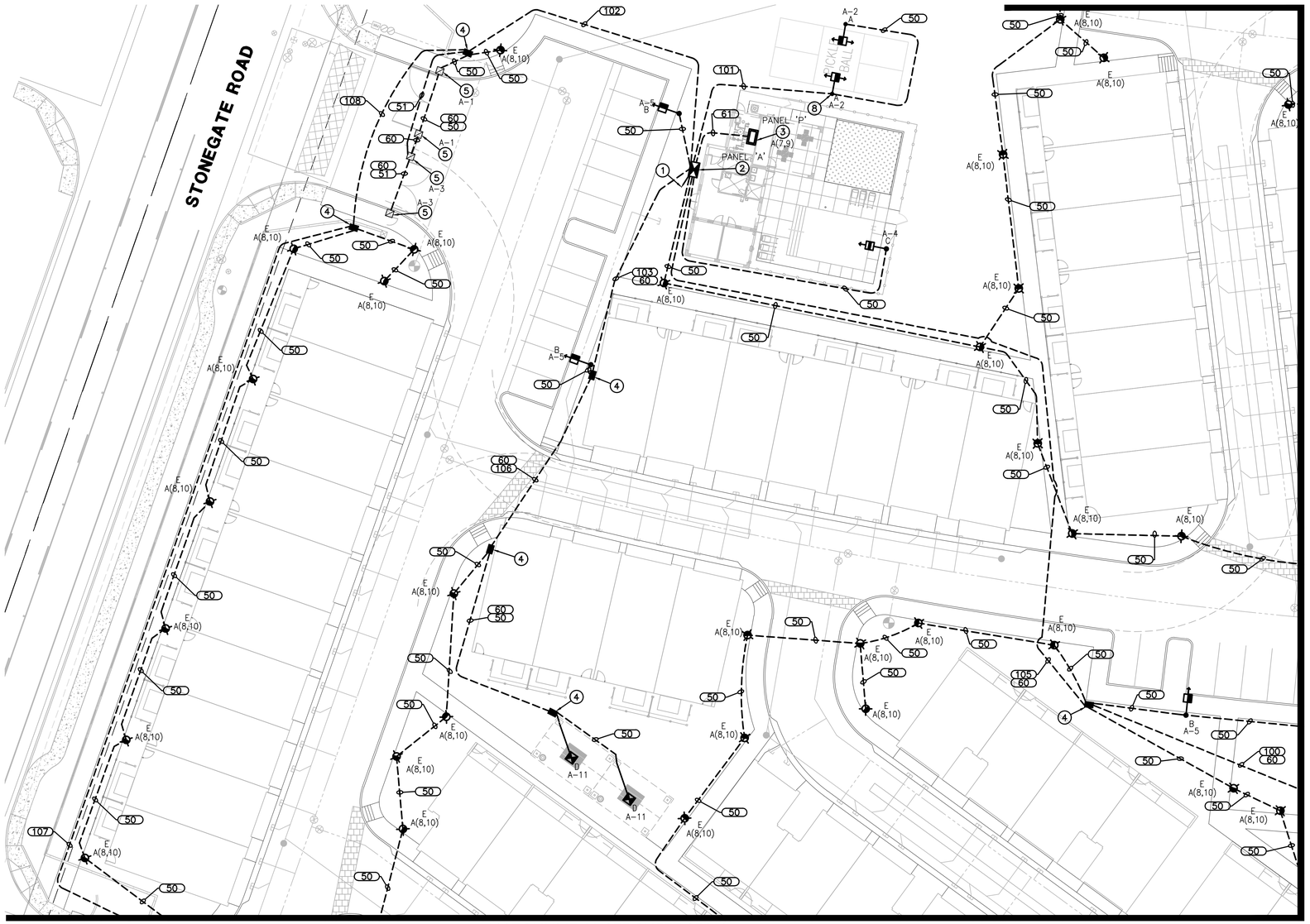
PROJECT: TITLE:
MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN
SITE ELECTRICAL COVER SHEET

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 5-31-23
Expires 3-31-23

DRAWING NO:
**SE1.1**
OF 18




## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
2. 200 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
3. 125 AMP, 120/240V, 1ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
4. #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
5. GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
6. GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
7. 100 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
8. PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
9. STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

## LEGEND

- 200A 120/240V 1ø PEDESTAL
- 125A 120/240V 1ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- (101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1ø PEDESTAL

## WIRE & CONDUIT TABLE

| CONDUIT | | WIRE | | | REMARKS |
|---|---|---|---|---|---|
| NO. | SIZE | POWER | GROUND | TYPE* | (CKT #) |
| 50 | 1" | 2-#12 | 1-#12 | CU | TYPICAL |
| 51 | 1" | 2-#10 | 1-#10 | CU | TYPICAL |
| 52 | 1" | 2-#8 | 1-#8 | CU | TYPICAL |
| 53 | 1" | 2-#4 | 1-#4 | CU | TYPICAL |
| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
| | | 2-#8 | | CU | A-3 |
| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 106 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A(8,10) |
| 107 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| 108 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| | | 2-#12 | | CU | B-6 |
| 203 | 1" | 2-#12 | 1-#12 | CU | B-4 |
| | | 2-#12 | | CU | B-6 |

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.

## LIGHT FIXTURE SCHEDULE

| SYMBOL | LETTER ID | MANUFACTURER | CATALOG NUMBER | FINISH COLOR | VOLTS | LAMP | LUMENS (MIN) | CCT | MOUNTING HEIGHT | DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | COOPER LIGHTING | GAN-SA2C-730-U-T3-BZ-HSS | BRONZE | 120 | 113W LED | 13,182 | 3000K | 14'-0" | TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | B | ARCHITECTURAL AREA LIGHTING | PRM22-72L-310-3K7-4W-DBS-UNV | BRONZE | 120 | 69.46W LED | 8,512 | 3000K | 14'-0" | TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4 |
| | C | COOPER LIGHTING | GAN-SA4C-730-U-T4W-BZ | BRONZE | 120 | 213W LED | 25,347 | 3000K | 14'-0" | TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | D | LUMINAIRE LIGHTING | SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ | BRONZE | 120 | 43W LED | 3,350 | 3000K | 10'-0" | RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3 |
| | E | COOPER LIGHTING | BRT6-A3-730-U-T4-42-BZ | BRONZE | 120 | 22W LED | 1,786 | 3000K | 3'-6" | BOLLARD SEE DETAIL 7 SHEET SE3.4 |

NORTH

GRAPHIC SCALE
20 10 0 10 20 40
1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING PROJECT NO:
**22109**
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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PROJECT: TITLE:

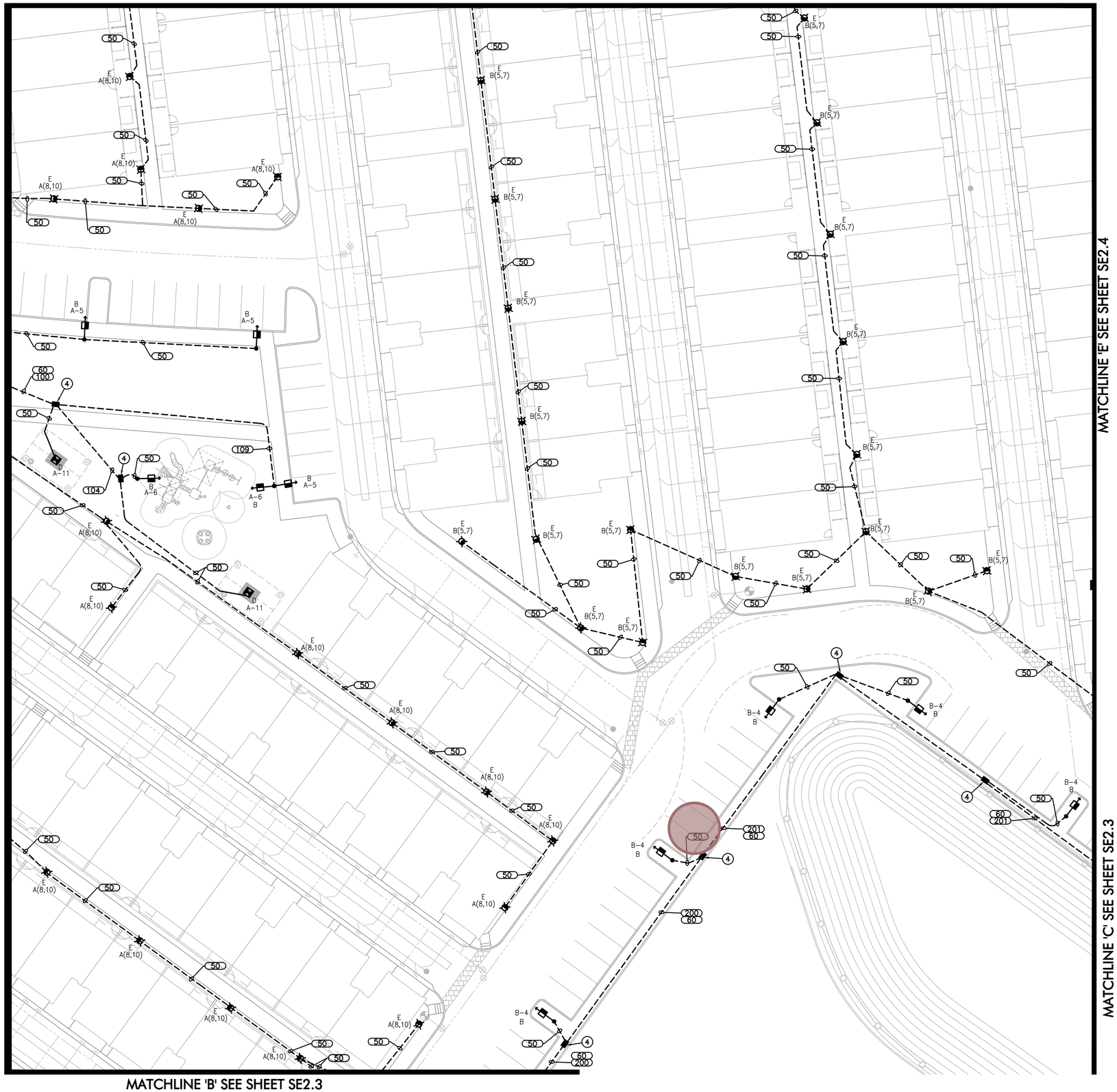
**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**SITE ELECTRICAL PLAN**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 3-29-23
Expires 3-31-23

DRAWING NO:
**SE2.1**
OF 18




## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
2. 200 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
3. 125 AMP, 120/240V, 1ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
4. #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
5. GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
6. GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
7. 100 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
8. PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
9. STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

## LEGEND

- 200A 120/240V 1ø PEDESTAL
- 125A 120/240V 1ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- (101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1ø PEDESTAL

## WIRE & CONDUIT TABLE

| CONDUIT NO. | CONDUIT SIZE | WIRE POWER | WIRE GROUND | WIRE TYPE* | REMARKS (CKT #) |
|---|---|---|---|---|---|
| 50 | 1" | 2-#12 | 1-#12 | CU | TYPICAL |
| 51 | 1" | 2-#10 | 1-#10 | CU | TYPICAL |
| 52 | 1" | 2-#8 | 1-#8 | CU | TYPICAL |
| 53 | 1" | 2-#4 | 1-#4 | CU | TYPICAL |
| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
| | | 2-#8 | | CU | A-3 |
| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 106 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A(8,10) |
| 107 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| 108 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| | | 2-#12 | | CU | B-6 |
| 203 | 1" | 2-#12 | 1-#12 | CU | B-4 |
| | | 2-#12 | | CU | B-6 |

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

SEE SHEET SE2.1 FOR LIGHT FIXTURE SCHEDULE

NORTH

**GRAPHIC SCALE**

20 10 0 10 20 40

1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

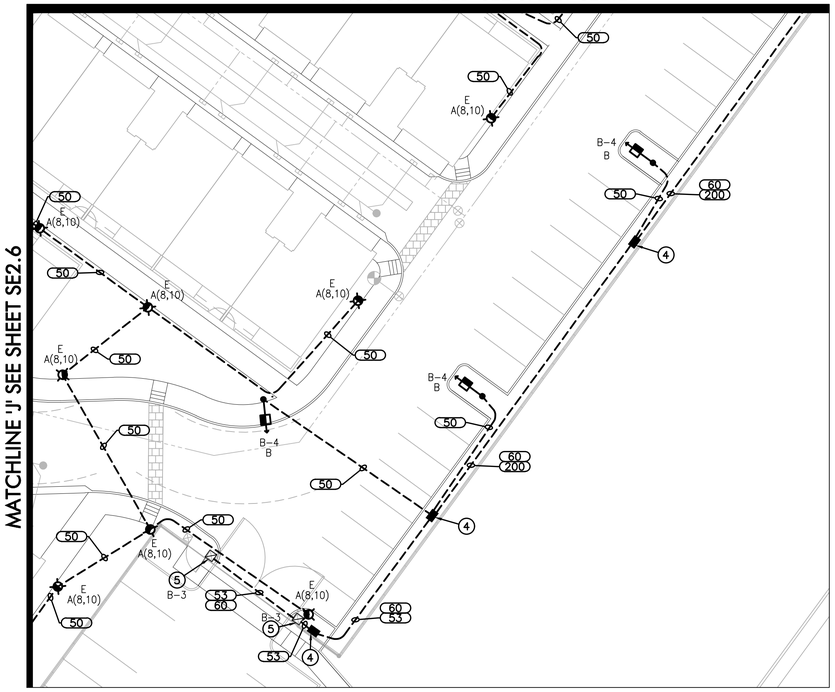
**SITE ELECTRICAL PLAN**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
8-19-22
State of Arizona
Expires 3-31-23

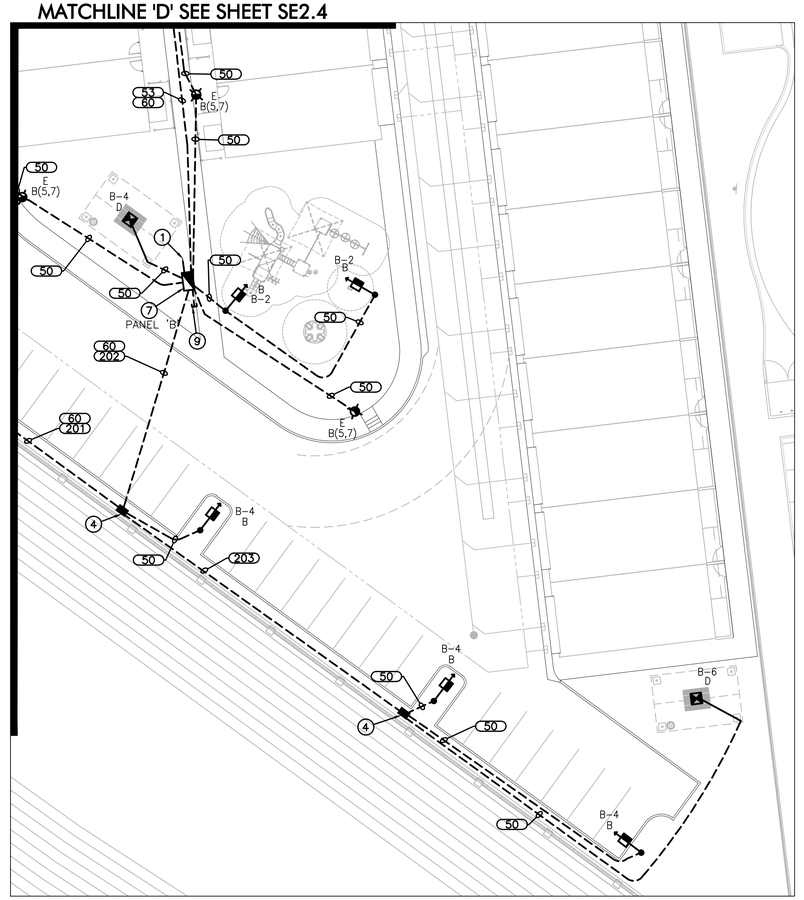
DRAWING NO:
**SE2.2**
OF 18

MATCHLINE 'B' SEE SHEET SE2.2




MATCHLINE 'D' SEE SHEET SE2.4

MATCHLINE 'C' SEE SHEET SE2.2




## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
2. 200 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
3. 125 AMP, 120/240V, 1ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
4. #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
5. GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
6. GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
7. 100 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
8. PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
9. STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

## LEGEND

- 200A 120/240V 1ø PEDESTAL
- 125A 120/240V 1ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- (101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1ø PEDESTAL

## LIGHT FIXTURE SCHEDULE

| SYMBOL | LETTER ID | MANUFACTURER | CATALOG NUMBER | FINISH COLOR | VOLTS | LAMP | LUMENS (MIN) | CCT | MOUNTING HEIGHT | DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | COOPER LIGHTING | GAN-SA2C-730-U-T3-BZ-HSS | BRONZE | 120 | 113W LED | 13,182 | 3000K | 14'-0" | TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | B | ARCHITECTURAL AREA LIGHTING | PRM22-72L-310-3K7-4W-DBS-UNV | BRONZE | 120 | 69.46W LED | 8,512 | 3000K | 14'-0" | TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4 |
| | C | COOPER LIGHTING | GAN-SA4C-730-U-T4W-BZ | BRONZE | 120 | 213W LED | 25,347 | 3000K | 14'-0" | TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | D | LUMINAIRE LIGHTING | SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ | BRONZE | 120 | 43W LED | 3,350 | 3000K | 10'-0" | RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3 |
| | E | COOPER LIGHTING | BRT6-A3-730-U-T4-42-BZ | BRONZE | 120 | 22W LED | 1,786 | 3000K | 3'-6" | BOLLARD SEE DETAIL 7 SHEET SE3.4 |

## WIRE & CONDUIT TABLE

| CONDUIT NO. | CONDUIT SIZE | WIRE POWER | WIRE GROUND | WIRE TYPE* | REMARKS (CKT #) |
|---|---|---|---|---|---|
| 50 | 1" | 2-#12 | 1-#12 | CU | TYPICAL |
| 51 | 1" | 2-#10 | 1-#10 | CU | TYPICAL |
| 52 | 1" | 2-#8 | 1-#8 | CU | TYPICAL |
| 53 | 1" | 2-#4 | 1-#4 | CU | TYPICAL |
| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
| | | 2-#8 | | CU | A-3 |
| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 106 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A(8,10) |
| 107 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| 108 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| | | 2-#12 | | CU | B-6 |
| 203 | 1" | 2-#12 | 1-#12 | CU | B-4 |
| | | 2-#12 | | CU | B-6 |

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
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GRAPHIC SCALE
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DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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PROJECT: MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN

TITLE: SITE ELECTRICAL PLAN

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
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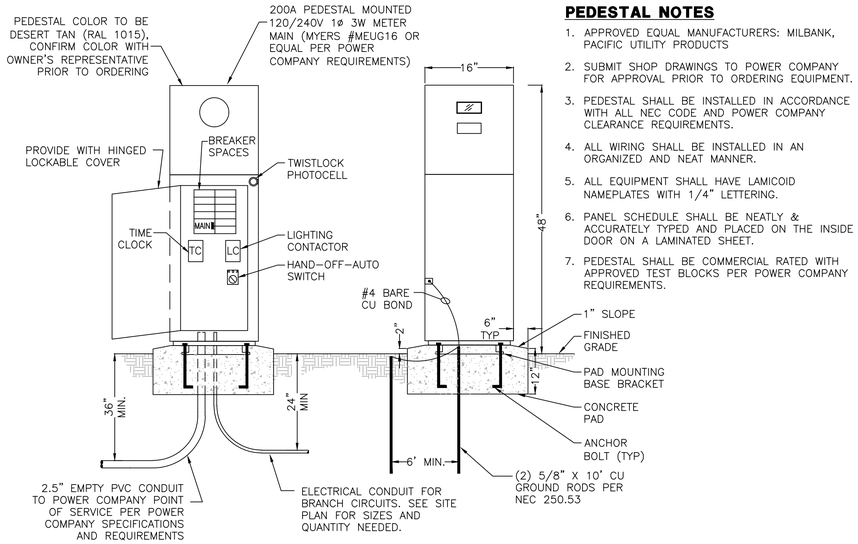
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No. 57159
CLIFFORD M. TOLMAN
8-9-22
Expires 3-31-23

DRAWING NO: SE2.3
OF 18

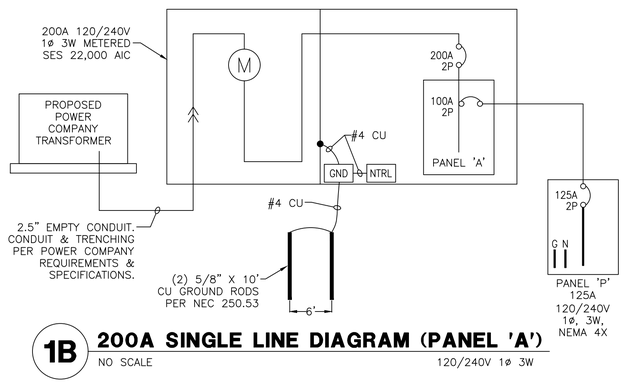



## PEDESTAL NOTES

1. APPROVED EQUAL MANUFACTURERS: MILBANK, PACIFIC UTILITY PRODUCTS
2. SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
3. PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
4. ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
5. ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
6. PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
7. PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

## 1A 200A PEDESTAL MOUNTED SERVICE (PANEL 'A')

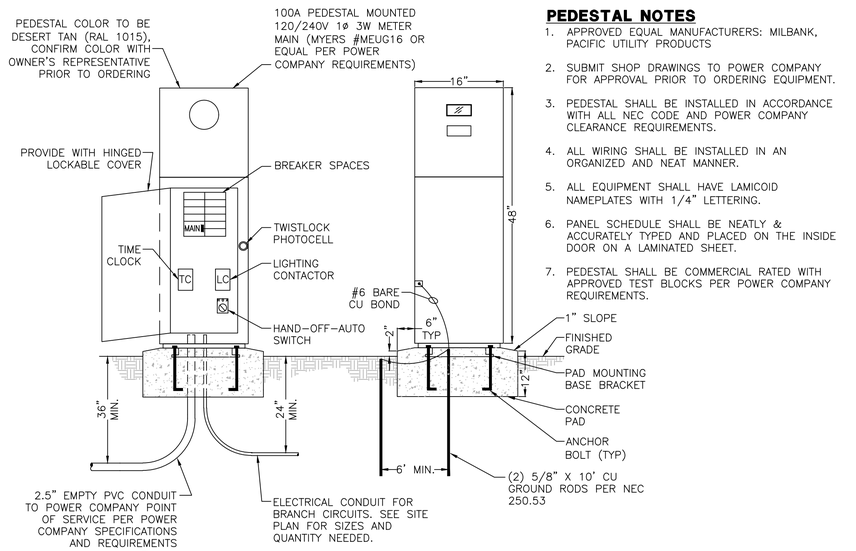
NO SCALE — 120/240V 1ø 3W




## 1B 200A SINGLE LINE DIAGRAM (PANEL 'A')

NO SCALE — 120/240V 1ø 3W

| PANEL NAME: A | | | 120/240V, 1ø, 3W | | | | 200A MAIN BKR | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION: SEE SITE PLAN | | | TYPE: PLUG-IN | | | | PEDESTAL MTD., NEMA 3R | | |
| CKT NO. | BKR SIZE | DESCRIPTION | LOAD | Aø | Bø | LOAD | DESCRIPTION | BKR SIZE | CKT NO. |
| 1 | 20/1 | WEST EXIT GATE | 1920 | 2203 | | 283 | PICKLEBALL LIGHTS* | 20/1 | 2 |
| 3 | 20/1 | WEST ENTRY GATE | 1920 | | 2187 | 267 | POOL LIGHT* | 20/1 | 4 |
| 5 | 20/1 | PARKING LOT LIGHTS* | 295 | 485 | | 190 | PLAYGROUND LIGHTS* | 20/1 | 6 |
| 7 | 125/ | PANEL 'P' | 12000 | | 13417 | 1417 | BOLLARDS* | 20/ | 8 |
| 9 | /2 | | 12000 | 13417 | | 1417 | | /2 | 10 |
| 11 | 20/1 | RAMADA LIGHTS* | 215 | | 215 | 0 | SPARE | 20/1 | 12 |
| 13 | 20/1 | SOUTH EXIT GATE | 1920 | 1920 | | 0 | SPARE | 20/1 | 14 |
| 15 | 20/1 | SOUTH ENTRY GATE | 1920 | | 2120 | 200 | LIGHTING CONTROL | 20/1 | 16 |
| CODE TOTAL VA/ø | | | | 18025 | 17939 | *INDICATES LOAD @ 125% | | | |
| CODE TOTAL AMPS/ø | | | | 150.2 | 149.5 | 22,000 AIC BREAKERS | | | |

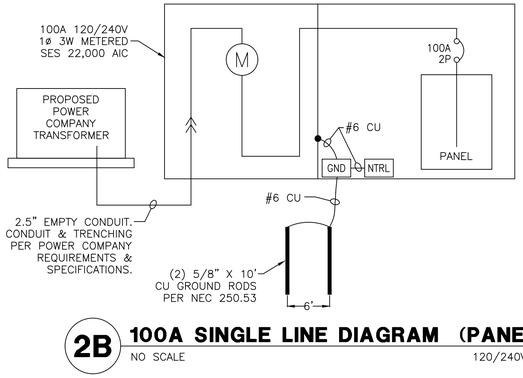



## PEDESTAL NOTES

1. APPROVED EQUAL MANUFACTURERS: MILBANK, PACIFIC UTILITY PRODUCTS
2. SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
3. PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
4. ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
5. ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
6. PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
7. PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

## 2A 100A PEDESTAL MOUNTED SERVICE (PANEL 'B')

NO SCALE — 120/240V 1ø 3W




## 2B 100A SINGLE LINE DIAGRAM (PANEL 'B')

NO SCALE — 120/240V 1ø 3W

| PANEL NAME: B | | | 120/240V, 1ø, 3W | | | | 100A MAIN BKR | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION: SEE SITE PLAN | | | TYPE: PLUG-IN | | | | PEDESTAL MTD., NEMA 3R | | |
| CKT NO. | BKR SIZE | DESCRIPTION | LOAD | Aø | Bø | LOAD | DESCRIPTION | BKR SIZE | CKT NO. |
| 1 | 20/1 | NORTH EXIT GATE | 1920 | 2110 | | 190 | PLAYGROUND LIGHTS* | 20/1 | 2 |
| 3 | 20/1 | SOUTH EXIT GATE | 1920 | | 2436 | 516 | PARKING LOT LIGHTS* | 20/1 | 4 |
| 5 | 20/ | BOLLARDS* | 578 | 686 | | 108 | RAMADA LIGHTS* | 20/1 | 6 |
| 7 | /2 | | 578 | | 578 | 0 | SPARE | 20/1 | 8 |
| 9 | 20/1 | SPARE | 0 | 0 | | 0 | SPARE | 20/1 | 10 |
| 11 | 20/1 | SPARE | 0 | | 0 | 0 | SPARE | 20/1 | 12 |
| 13 | 20/1 | SPARE | 0 | 0 | | 0 | SPARE | 20/1 | 14 |
| 15 | 20/1 | SPARE | 0 | | 200 | 200 | LIGHTING CONTROL | 20/1 | 16 |
| CODE TOTAL VA/ø | | | | 2796 | 3214 | *INDICATES LOAD @ 125% | | | |
| CODE TOTAL AMPS/ø | | | | 23.3 | 26.8 | 22,000 AIC BREAKERS | | | |



WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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www.wrightengineering.us

PROJECT: TITLE:

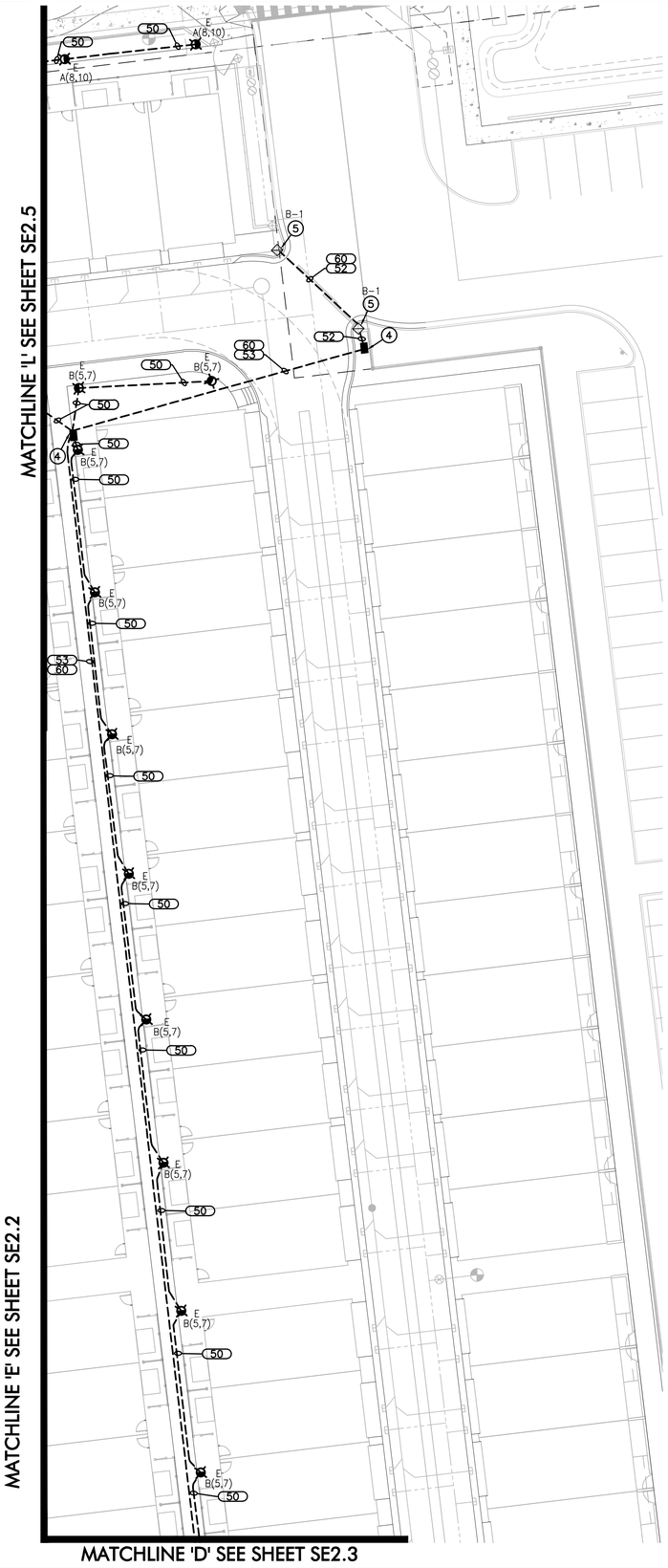
**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**SITE ELECTRICAL DETAILS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 8-19-22
Expires 3-31-23

DRAWING NO:
**SE3.1**
OF 18




## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
2. 200 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
3. 125 AMP, 120/240V, 1ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
4. #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
5. GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
6. GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
7. 100 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
8. PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
9. STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

## LEGEND

- 200A 120/240V 1ø PEDESTAL
- 125A 120/240V 1ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- (101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1ø PEDESTAL

## WIRE & CONDUIT TABLE

| CONDUIT | | WIRE | | | REMARKS |
|---|---|---|---|---|---|
| NO. | SIZE | POWER | GROUND | TYPE* | (CKT #) |
| 50 | 1" | 2-#12 | 1-#12 | CU | TYPICAL |
| 51 | 1" | 2-#10 | 1-#10 | CU | TYPICAL |
| 52 | 1" | 2-#8 | 1-#8 | CU | TYPICAL |
| 53 | 1" | 2-#4 | 1-#4 | CU | TYPICAL |
| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
| | | 2-#8 | | CU | A-3 |
| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
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| | | 2-#12 | | CU | A(8,10) |
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| | | 2-#12 | | CU | A(8,10) |
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| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
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| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
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| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
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| 203 | 1" | 2-#12 | 1-#12 | CU | B-4 |
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## LIGHT FIXTURE SCHEDULE

| SYMBOL | LETTER ID | MANUFACTURER | CATALOG NUMBER | FINISH COLOR | VOLTS | LAMP | LUMENS (MIN) | CCT | MOUNTING HEIGHT | DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | COOPER LIGHTING | GAN-SA2C-730-U-T3-BZ-HSS | BRONZE | 120 | 113W LED | 13,182 | 3000K | 14'-0" | TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | B | ARCHITECTURAL AREA LIGHTING | PRM22-72L-310-3K7-4W-DBS-UNV | BRONZE | 120 | 69.46W LED | 8,512 | 3000K | 14'-0" | TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4 |
| | C | COOPER LIGHTING | GAN-SA4C-730-U-T4W-BZ | BRONZE | 120 | 213W LED | 25,347 | 3000K | 14'-0" | TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | D | LUMINAIRE LIGHTING | SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ | BRONZE | 120 | 43W LED | 3,350 | 3000K | 10'-0" | RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3 |
| | E | COOPER LIGHTING | BRT6-A3-730-U-T4-42-BZ | BRONZE | 120 | 22W LED | 1,786 | 3000K | 3'-6" | BOLLARD SEE DETAIL 7 SHEET SE3.4 |

NORTH

GRAPHIC SCALE
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1 INCH = 20 FEET

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Arizona Blue Stake, Inc.
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SITE ELECTRICAL PLAN

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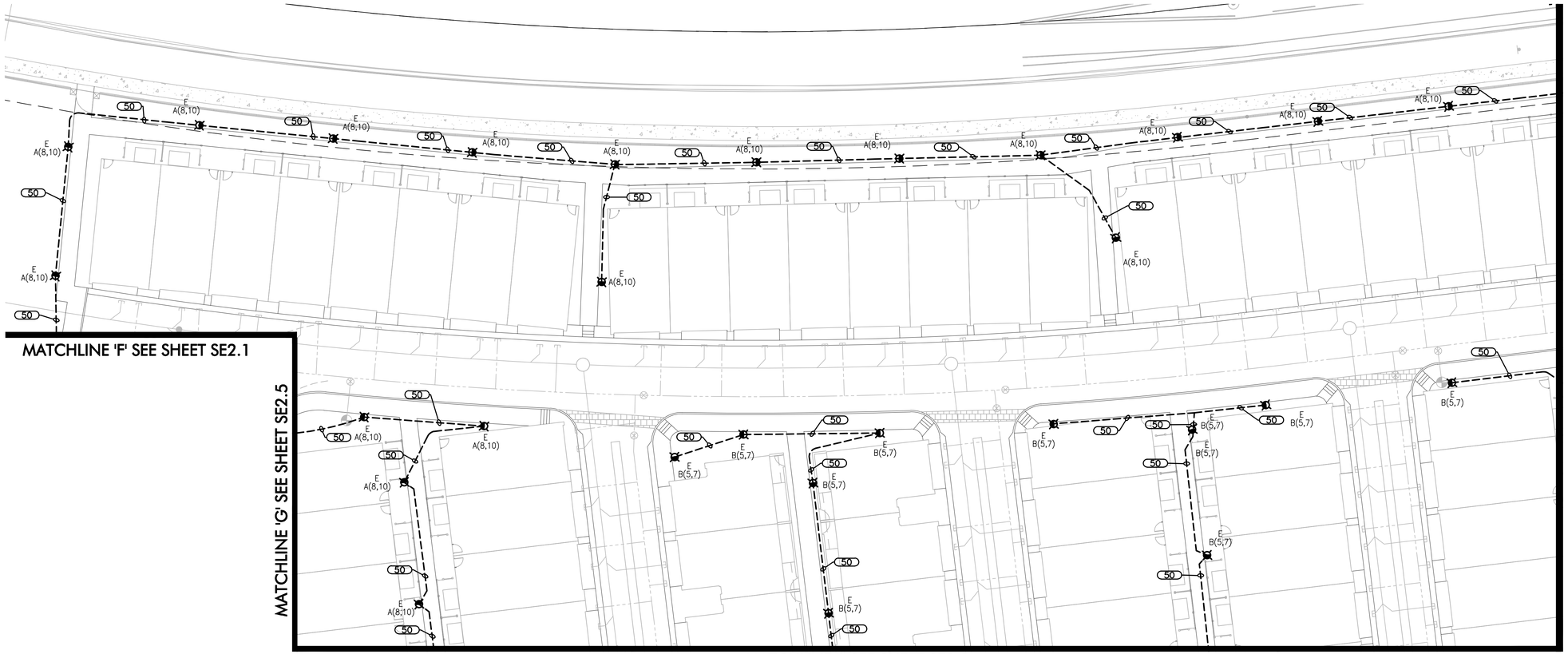
SE2.4
OF 18




## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
2. 200 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 1 ON SE3.1.
3. 125 AMP, 120/240V, 1ø, 3W, WALL-MOUNTED SUB-PANEL PER BUILDING ELECTRICAL PLANS
4. #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SE3.2.
5. GATE CONTROLLER. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT, STUB UPS, CONDUCTORS, SPLICES AND OTHER NECESSARY COMPONENTS FOR A COMPLETE SYSTEM.
6. GATE KEYPAD. COORDINATE WITH GATE CONTRACTOR FOR EXACT LOCATION AND DETAILS. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WIRING.
7. 100 AMP, 120/240V, 1ø, 3W, METERED ELECTRIC PEDESTAL, SEE DETAIL 2 ON SE3.1.
8. PUSH BUTTON ON LIGHT POLE TO FACE COURT, SEE DETAIL 4 ON SE3.3.
9. STUB OUT 5' OF 1" CONDUIT WITH PULL ROPE AS SHOWN ON SITE PLAN, FOR FUTURE USE. CAP CONDUIT AT GRADE AND MARK LOCATION ON AS-BUILT DRAWINGS.

## LEGEND

- 200A 120/240V 1ø PEDESTAL
- 125A 120/240V 1ø SUB-PANEL PER BUILDING ELECTRICAL PLANS
- NEW PULL BOX
- GATE CONTROLLER
- GATE KEYPAD
- NEW UNDERGROUND CONDUIT
- A-1 CIRCUIT NUMBER
- (101) WIRE & CONDUIT TAG, SEE WIRE & CONDUIT TABLE
- 100A 120/240V 1ø PEDESTAL

## WIRE & CONDUIT TABLE

| CONDUIT | | WIRE | | | REMARKS |
|---|---|---|---|---|---|
| NO. | SIZE | POWER | GROUND | TYPE* | (CKT #) |
| 50 | 1" | 2-#12 | 1-#12 | CU | TYPICAL |
| 51 | 1" | 2-#10 | 1-#10 | CU | TYPICAL |
| 52 | 1" | 2-#8 | 1-#8 | CU | TYPICAL |
| 53 | 1" | 2-#4 | 1-#4 | CU | TYPICAL |
| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
| | | 2-#8 | | CU | A-3 |
| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 106 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A(8,10) |
| 107 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| 108 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| | | 2-#12 | | CU | B-6 |
| 203 | 1" | 2-#12 | 1-#12 | CU | B-4 |
| | | 2-#12 | | CU | B-6 |

* THIS COLUMN IDENTIFIES THE CONDUCTOR MATERIAL TYPE.
CU = COPPER, AL = ALUMINUM.

## LIGHT FIXTURE SCHEDULE

| SYMBOL | LETTER ID | MANUFACTURER | CATALOG NUMBER | FINISH COLOR | VOLTS | LAMP | LUMENS (MIN) | CCT | MOUNTING HEIGHT | DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | COOPER LIGHTING | GAN-SA2C-730-U-T3-BZ-HSS | BRONZE | 120 | 113W LED | 13,182 | 3000K | 14'-0" | TYPE 3 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | B | ARCHITECTURAL AREA LIGHTING | PRM22-72L-310-3K7-4W-DBS-UNV | BRONZE | 120 | 69.46W LED | 8,512 | 3000K | 14'-0" | TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4 |
| | C | COOPER LIGHTING | GAN-SA4C-730-U-T4W-BZ | BRONZE | 120 | 213W LED | 25,347 | 3000K | 14'-0" | TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
| | D | LUMINAIRE LIGHTING | SWP1212-NODIM-40W-30K-MVOLT-OP-BRZ | BRONZE | 120 | 43W LED | 3,350 | 3000K | 10'-0" | RAMADA LIGHT SEE DETAIL 5 SHEET SE3.3 |
| | E | COOPER LIGHTING | BRT6-A3-730-U-T4-42-BZ | BRONZE | 120 | 22W LED | 1,786 | 3000K | 3'-6" | BOLLARD SEE DETAIL 7 SHEET SE3.4 |

NORTH

**GRAPHIC SCALE**

20 10 0 10 20 40

1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)



WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**SITE ELECTRICAL PLAN**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 8-9-22
Expires 3-31-23

DRAWING NO:
**SE2.5**
OF 18

## CONSTRUCTION NOTES

1. 2.5" SCH. 40 PVC CONDUIT TO POINT OF SERVICE, CONTRACTOR SHALL VERIFY POINT OF ELECTRIC SERVICE LOCATION AND SPECIFICATIONS WITH POWER CO. PLANS & INSTALL CONDUIT TO THIS LOCATION. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
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## LEGEND

- 200A 120/240V 1ø PEDESTAL
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| 60 | 1.5" | PULL | ROPE | | SPARE |
| 61 | 1.5" | 3-#1 | 1-#6 | CU | PANEL 'P' |
| 100 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 101 | 1" | 2-#12 | 1-#12 | CU | A-2 |
| | | 2-#12 | | CU | PICKLE BALL PB |
| 102 | 1" | 2-#8 | 1-#8 | CU | A-1 |
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| | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
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| 103 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 104 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| 105 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| | | 2-#12 | | CU | A-11 |
| | | 2-#12 | | CU | A(8,10) |
| 106 | 1" | 2-#12 | 1-#12 | CU | A-6 |
| | | 2-#12 | | CU | A(8,10) |
| 107 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| 108 | 1.5" | 2-#4 | 1-#4 | CU | A-13 |
| | | 2-#4 | | CU | A-15 |
| | | 2-#12 | | CU | A(8,10) |
| 109 | 1" | 2-#12 | 1-#12 | CU | A-5 |
| | | 2-#12 | | CU | A-6 |
| 200 | 1.5" | 2-#4 | 1-#4 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 201 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| 202 | 1.5" | 2-#2 | 1-#2 | CU | B-3 |
| | | 2-#12 | | CU | B-4 |
| | | 2-#12 | | CU | B-6 |
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| | | 2-#12 | | CU | B-6 |

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| | B | ARCHITECTURAL AREA LIGHTING | PRM22-72L-310-3K7-4W-DBS-UNV | BRONZE | 120 | 69.46W LED | 8,512 | 3000K | 14'-0" | TYPE 4 PARKING LOT LIGHT SEE DETAIL 6 SHEET SE3.4 |
| | C | COOPER LIGHTING | GAN-SA4C-730-U-T4W-BZ | BRONZE | 120 | 213W LED | 25,347 | 3000K | 14'-0" | TYPE 4 AREA LIGHT SEE DETAIL 4 SHEET SE3.3 |
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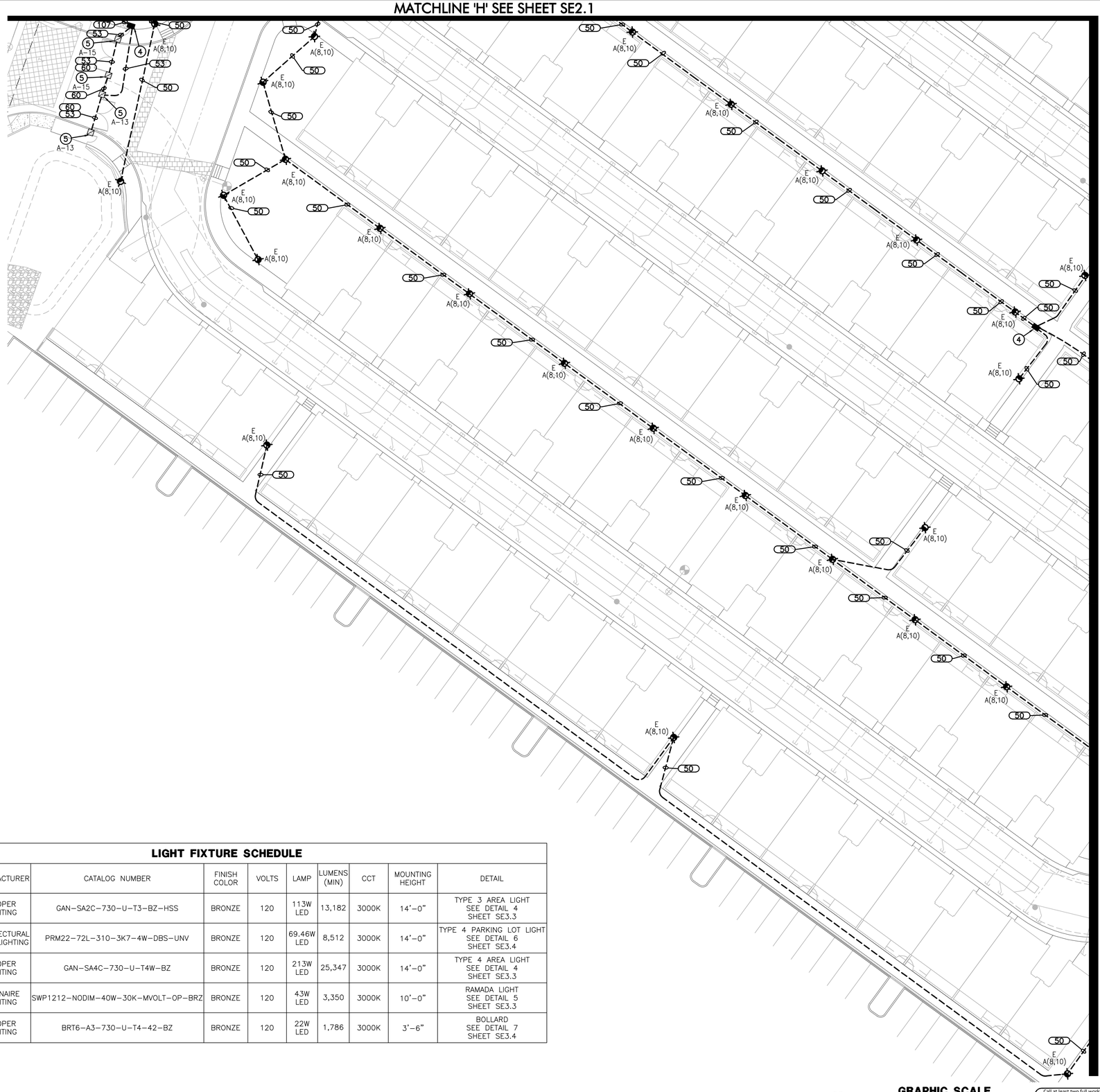


GRAPHIC SCALE
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1 INCH = 20 FEET
NORTH

Call at least two full working days before you begin excavation.
ARIZONA 811
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WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

PROJECT: TITLE:

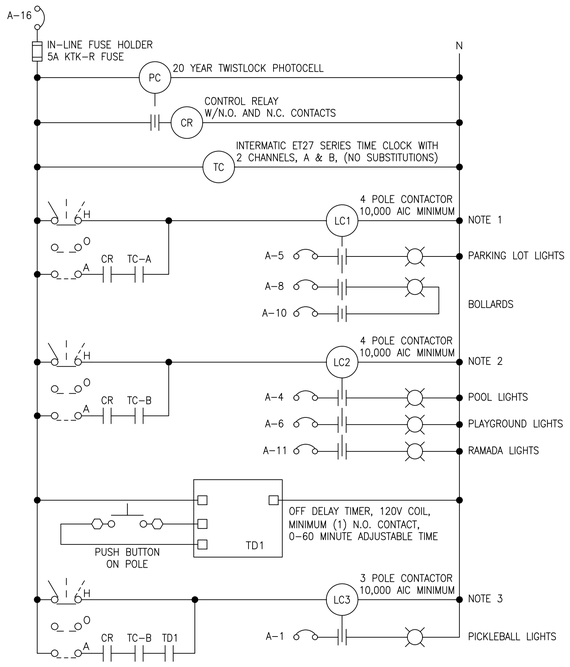
**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**SITE ELECTRICAL PLAN**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 4-7-22
Expires 3-31-23

DRAWING NO:
**SE2.6**
OF 18




## 1C LIGHTING CONTROL SCHEMATIC (PANEL 'A')

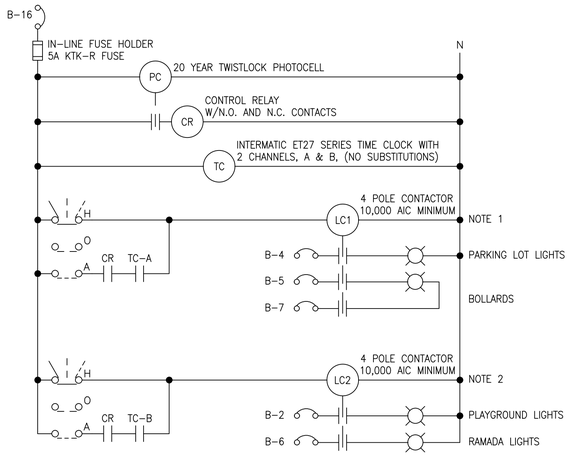
NO SCALE 120V

## CONTROL SCHEMATIC LEGEND

- HAND-OFF-AUTO SWITCH
- PC — PHOTOCELL RELAY
- CR# — CONTROL RELAY
- TC# — TIME CLOCK
- LC# — LIGHTING CONTACTOR
- TDR# — TIME DELAY RELAY
- N.O. — NORMALLY OPEN CONTACT
- CIRCUIT BREAKER
- REMOTE CONNECTION POINT
- DEVICE CONNECTION POINT

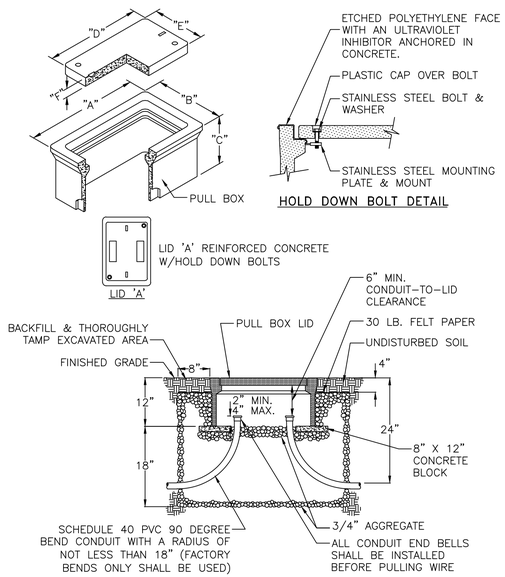
## CONTROLLER NOTES

1. THIS CIRCUIT TO BE ACTIVATED FROM DUSK TO DAWN.
2. THIS CIRCUIT TO BE ACTIVATED AT DUSK AND SHUT OFF AT 10:30 PM.
3. THIS CIRCUIT TO BE ACTIVATED VIA POLE MOUNTED PUSH BUTTON. ONCE ACTIVATED CIRCUIT WILL BE ON UNTIL TIMER EXPIRES. CIRCUIT CAN THEN BE REACTIVATED WITH PUSH BUTTON. CIRCUIT WILL BE AVAILABLE FOR USE FROM DUSK TO 10:30 PM.



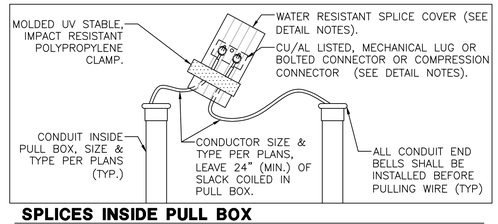

## 2C LIGHTING CONTROL SCHEMATIC (PANEL 'B')

NO SCALE 120V




## 3 PULL BOX INSTALLATION

NO SCALE




## SPLICES INSIDE PULL BOX

DETAIL NOTES:

1. THE PULL BOX SHALL BE MADE OF A HIGH DENSITY REINFORCED CONCRETE MATERIAL WITH END & SIDE KNOCKOUTS, & NON-SETTLING SHOULDERS TO MAINTAIN GRADE, MANUFACTURED WITH APPROXIMATE DIMENSIONS AS SHOWN.
2. STEEL REINFORCEMENT SHALL BE AS REGULARLY USED IN STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.
3. COVER LETTERING SHALL BE 1" LETTERS CAST IN STANDARD MARKINGS: "ELECTRIC" OR "HIGH VOLTAGE" OR "COMMUNICATIONS". AS REQUIRED.
4. THE PULL BOX SHALL HAVE AN ETCHED POLYETHYLENE FACE WITH AN ULTRAVIOLET INHIBITOR ANCHORED IN CONCRETE.
5. ALL CABLE & CONDUCTOR SPLICES MADE USING CU/AL LISTED, MECHANICAL LUG OR BOLTED CONNECTOR OR COMPRESSION CONNECTOR, (TYCO ELECTRONICS, NSI INDUSTRIES, ILSCO OR APPROVED EQUAL). CONNECTION TO BE INSULATED & MADE WATER RESISTANT WITH TYCO ELECTRONICS GELCAP-SL, NSI INDUSTRIES ESSLK-2/0 OR 3M SCOTCHCAST SPLICE KIT 85 SERIES.

DATA TABLE

| PULLBOX TYPE | PULLBOX LENGTH | PULLBOX WIDTH | PULLBOX HEIGHT | LID LENGTH | LID WIDTH | LID HEIGHT |
|---|---|---|---|---|---|---|
| | "A" | "B" | "C" | "D" | "E" | "F" |
| #3-1/2 | 19-3/4" | 14-1/4" | 12" | 15-1/2" | 10" | 1-3/4" |
| #5 | 25-1/8" | 15-5/8" | 12" | 20-3/4" | 10-5/8" | 2" |
| #7 | 35" | 22" | 12" | 30-1/2" | 17-1/2" | 2" |



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DRAWN BY: XAG
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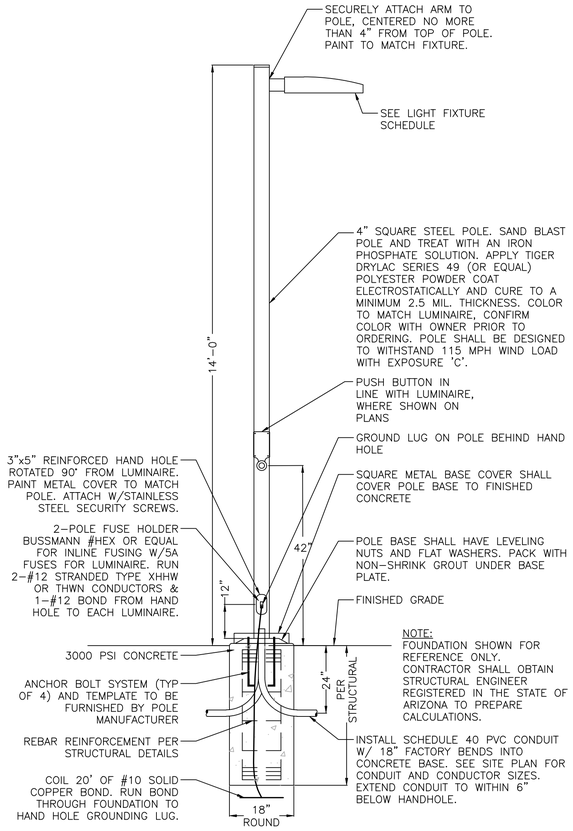
PROJECT: MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN

TITLE: SITE ELECTRICAL DETAILS

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |


DRAWING NO: **SE3.2**
OF 18




## 4A FLUSH FOUNDATION STEELSPORTS LIGHT DETAIL

NO SCALE

| | | | | | |
|---|---|---|---|---|---|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |

**Streetworks**

**GAN Galleon**

Area / Roadway Luminaire

**Typical Applications**

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

**Interactive Menu**

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 4
- Product Specifications page 4
- Energy and Performance Data page 4
- Control Options page 9

**Product Certifications**

**Product Features**

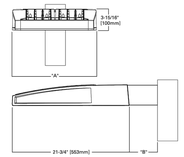
**Quick Facts**

- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

**Connected Systems**

- WaveLinx
- Enlighted

**Dimensional Details**

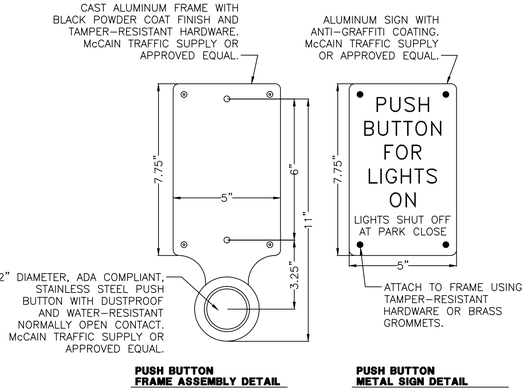



| Number of Light Squares | "A" Width | "B" Standard Arm Length | "B" Extended Arm Length | "B" QM Arm Length | "B" QML Length | "B" QMEA Length |
|---|---|---|---|---|---|---|
| 1-4 | 15-1/2" | 7" | 10" | 10-5/8" | – | 16-9/16" |
| 5-6 | 21-5/8" | 7" | 10" | 10-5/8" | – | 16-9/16" |
| 7-8 | 27-5/8" | 7" | 13" | 10-5/8" | 10-5/16" | – |
| 9-10 | 33-3/4" | 7" | 16" | – | 10-5/16" | – |

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

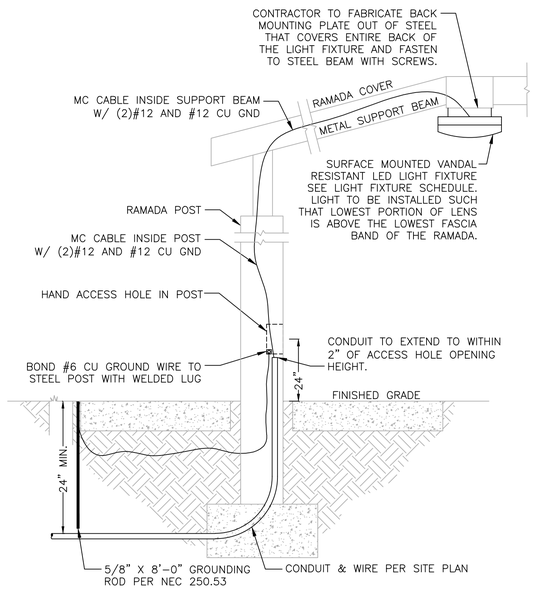
COOPER Lighting Solutions

PSS0000065N page 1
August 3, 2021 11:06 AM




## 4B PUSH BUTTON DETAIL

NO SCALE




## 5 RAMADA ELECTRICAL DETAIL

NO SCALE


SWOOP **SWP1212** Vandal Resistant

SWP1212 Series LED

| | |
|---|---|
| Fixture Type | Date |
| Job Name | Approved By |
| Catalog Number | |

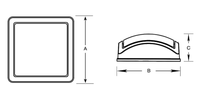
SPECIFICATIONS

UL Listing | Buy American

| | |
|---|---|
| **Description** | The Swoop SWP1212 series features a durable, color-impregnated, polycarbonate housing supported by a marine grade, die cast aluminum base plate to provide a lighting fixture that will survive in many challenging environments. |
| **Bezel** | One piece injection molded UV stabilized polycarbonate mechanically interlocked to lens. Minimum wall thickness shall be 0.140". Color is molded through entire part for scratch resistant finish. |
| **Lens** | One piece injection molded UV stabilized prismatic polycarbonate with minimum 0.140" wall thickness. Available in Clear or Opal and secured to base plate with (4) concealed captive stainless steel screws. XWP and YWP models come with a chemically etched, scratch resistant surface painted lens. |
| **Reflector** | Die formed, shaped for maximum efficiency and finished with high gloss electrostatically applied white polyester powder coat. |
| **Drivers** | 0-10V dimming to 1%, 10% or Non-Dimming Driver is also available. |
| **LED** | Nichia NFSL757G series @ 2700K, 3000K, 3500K, 4000K, or 5000K and 82 CRI wired in parallel-series. $L_{70}$ projected life of over 130,000 hours at 50°C. |
| **Buy American** | Luminaire LED, LLC products are assembled in the USA. Our products meet the Buy America(n) government procurement requirements under FAR, DFARS, and DOT. Please refer to www.acuitybrands.com/buy-american for additional information. |
| **UL Listing** | U.L., C.UL. Wet Location Listing standard. |
| **Warranty** | Lifetime warranty, Luminaire LED incorporated will repair or replace any fixture damaged due to vandalism for the lifetime of the installation. 10-year warranty on LED boards against operational defects. Tested in accordance with LM-80. |
| **Note** | Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice. |

DIMENSIONAL DATA

| | A | B | C |
|---|---|---|---|
| SWP1212 | 12.34 | 12.34 | 5.05 |
| XWP1212 With Trim | 12.34 | 12.34 | 5.05 |
| YWP1212 With Trim | 12.34 | 12.34 | 5.05 |




Luminaire LED | One Lithonia Way, Conyers GA 30012 | 1.800.705.SERV (7378) | www.luminaireled.net


LUMINAIRE-LED-SWOOP-SWP1212-LED
Rev. 06/24/21
Page 1 of 3

WRIGHT ENGINEERING PROJECT NO:

**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**SITE ELECTRICAL DETAILS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

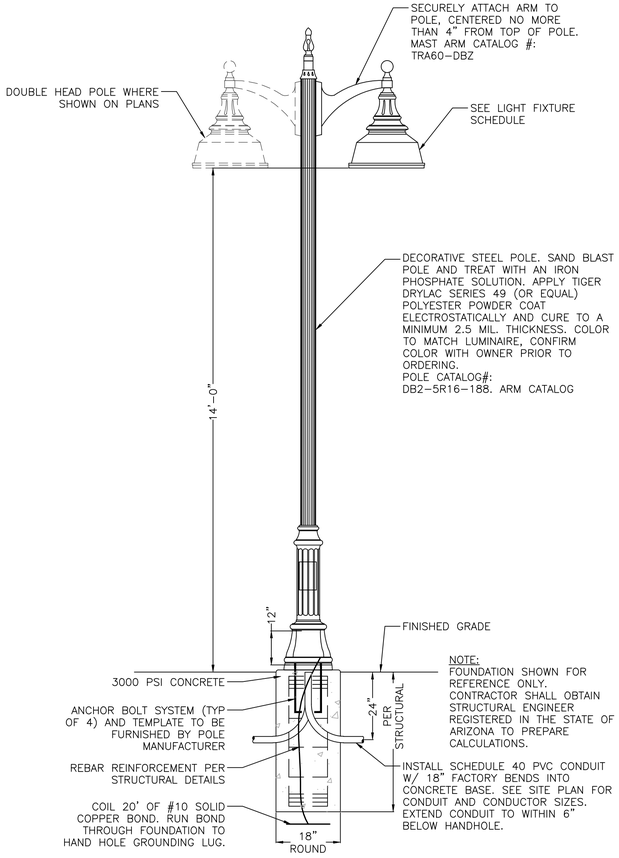
Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 3-31-23
Expires 3-31-23

DRAWING NO:

**SE3.3**

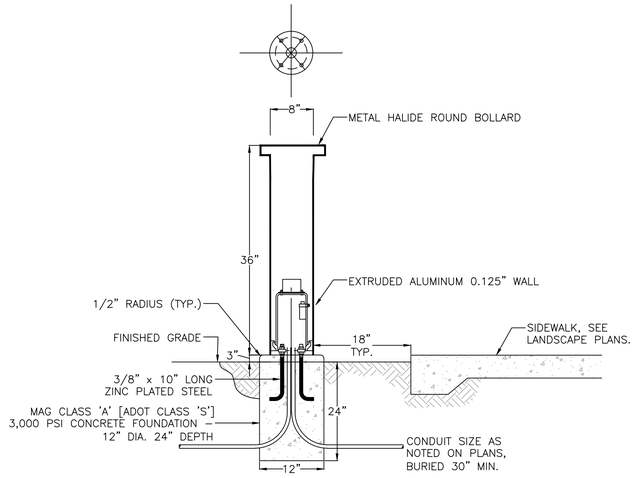
OF 18

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)




## 6 FLUSH FOUNDATION STEEL AREA LIGHT DETAIL

NO SCALE




## 7 BOLLARD LIGHT DETAIL

NO SCALE

architectural area lighting

# PRM22

DECORATIVE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

PROMENADE

Promenade PRM22

RELATED PRODUCTS

PRM2N PRMD2 PRMS2 PRM32

### FEATURES

- Reliable, uniform, glare free illumination
- Types 1, 2, 3, 4W, SQ, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- Upgrade Kits

### SPECIFICATIONS

**CONSTRUCTION**
- All housing components aluminum 360 alloy, sealed with continuous silicone rubber gaskets
- Standard configurations do not require a flat lens, optional lenses is tempered glass
- All internal and external hardware is stainless steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish is match the luminaire housing

**LED/OPTICS**
- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate.
- Cartridge is easily disassembled to replace components. Optics are held in place without the use of adhesives.
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features revolutionary individual LED optical control based on high performance TIR optical designs.
- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

**INSTALLATION**
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

**ELECTRICAL**
- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- 100%-1% dimming range. Fixture will be wired for low voltage 0-10V dimming control


- Driver and surge suppressor are mounted to a prewired tray with quick disconnects that may be removed from the gear compartment

**CERTIFICATIONS**
- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 6/06/2020. See Buy American Solutions

**WARRANTY**
- See HLI Standard Warranty for additional information

| KEY DATA | |
|---|---|
| LUMEN RANGE | 8,200-16,000 |
| WATTAGE RANGE | 70-160 |
| EFFICACY RANGE (LPW) | 109.7-140.4 |
| INPUT CURRENT RANGE (mA) | 310-700 mA |
| WEIGHT | 45 lbs/20.4 kg |
| EPA | 1.9 |



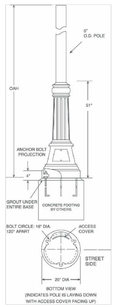

PHOTOMETRY | DELIVERED LUMENS | DIMENSIONAL DRAWINGS

## Decorative Poles

DATE TYPE PAGE 10 OF 22

DB2

5" ROUND (RD) & FLUTED (FL) DECORATIVE BASE




CATALOG NO.MAXIMUM ALLOWABLE EPA (MPH)

| BASE | POLE | DIA | SHAFT | WT | 85 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ☐ DB2 | 5R14-188 | 14' (4.3M) | 5" RD X .188" | 116 | 32.3 | 28.5 | 22.7 | 18.6 | 15.5 | 13.1 | 11.2 | 9.6 |
| ☐ DB2 | 5R16-188 | 16' (4.9M) | 5" RD X .188" | 123 | 27.3 | 23.9 | 19.0 | 15.5 | 12.8 | 10.8 | 9.2 | 7.9 |
| ☐ DB2 | 5R18-188 | 18' (5.5M) | 5" RD X .188" | 129 | 22.8 | 19.8 | 15.6 | 12.7 | 10.5 | 8.8 | 7.4 | 6.4 |
| ☐ DB2 | 5R20-188 | 20' (6.2M) | 5" RD X .188" | 136 | 18.9 | 16.4 | 12.8 | 10.3 | 8.5 | 7.0 | 5.9 | 5.0 |
| ☐ DB2 | 5R22-188 | 22' (6.8M) | 5" RD X .188" | 142 | 15.8 | 13.5 | 10.4 | 8.3 | 6.8 | 5.6 | 4.7 | 3.9 |
| ☐ DB2 | 5R24-188 | 24' (7.4M) | 5" RD X .188" | 148 | 13.1 | 11.1 | 8.4 | 6.6 | 5.3 | 4.3 | 3.6 | 3.0 |
| ☐ DB2 | 5R25-188 | 25' (7.7M) | 5" RD X .188" | 151 | 11.9 | 10.0 | 7.5 | 5.9 | 4.7 | 3.8 | 3.1 | 2.5 |
| ☐ DB2 | 5R14-250 | 14' (4.3M) | 5" RD X .250" | 132 | 35.7 | 31.5 | 25.2 | 20.6 | 17.2 | 14.5 | 12.4 | 10.7 |
| ☐ DB2 | 5R16-250 | 16' (4.9M) | 5" RD X .250" | 140 | 30.5 | 26.8 | 21.3 | 17.4 | 14.5 | 12.2 | 10.4 | 9.0 |
| ☐ DB2 | 5R18-250 | 18' (5.5M) | 5" RD X .250" | 150 | 25.8 | 22.5 | 17.9 | 14.5 | 12.0 | 10.1 | 8.6 | 7.3 |
| ☐ DB2 | 5R20-250 | 20' (6.2M) | 5" RD X .250" | 158 | 21.8 | 18.9 | 14.8 | 12.0 | 9.9 | 8.3 | 7.0 | 6.0 |
| ☐ DB2 | 5R22-250 | 22' (6.8M) | 5" RD X .250" | 167 | 18.5 | 15.9 | 12.4 | 9.9 | 8.1 | 6.7 | 5.7 | 4.8 |
| ☐ DB2 | 5R24-250 | 24' (7.4M) | 5" RD X .250" | 176 | 15.7 | 13.4 | 10.3 | 8.2 | 6.6 | 5.5 | 4.5 | 3.8 |
| ☐ DB2 | 5R25-250 | 25' (7.7M) | 5" RD X .250" | 180 | 14.5 | 12.3 | 9.3 | 7.4 | 6.0 | 4.9 | 4.0 | 3.4 |
| ☐ DB2 | 5F16-188 | 14' (4.3M) | 5" FL X .188" | 119 | 21.4 | 18.7 | 14.8 | 12.1 | 10.0 | 8.2 | 6.9 | 5.8 |
| ☐ DB2 | 5F16-188 | 16' (4.9M) | 5" FL X .188" | 123 | 17.8 | 15.5 | 12.1 | 9.8 | 8.0 | 6.6 | 5.4 | 4.5 |
| ☐ DB2 | 5F18-188 | 18' (5.5M) | 5" FL X .188" | 129 | 14.5 | 12.5 | 9.7 | 7.8 | 6.3 | 5.1 | 4.1 | 3.3 |
| ☐ DB2 | 5F20-188 | 20' (6.2M) | 5" FL X .188" | 136 | 11.8 | 10.0 | 7.6 | 6.1 | 4.8 | 3.7 | 3.0 | 2.3 |
| ☐ DB2 | 5F22-188 | 22' (6.8M) | 5" FL X .188" | 142 | 9.4 | 7.9 | 5.8 | 4.6 | 3.9 | 2.6 | 2.0 | 1.4 |
| ☐ DB2 | 5F24-188 | 24' (7.4M) | 5" FL X .188" | 148 | 7.4 | 6.1 | 4.3 | 3.3 | 2.4 | 1.7 | 1.1 | 0.6 |
| ☐ DB2 | 5F25-188 | 25' (7.7M) | 5" FL X .188" | 151 | 6.6 | 5.2 | 3.6 | 2.7 | 1.9 | 1.2 | 0.7 | 0.3 |

NOTE: OVERALL HEIGHT IS MEASURED TO TOP OF POLE.

SPECIFICATIONS
Base shall be cast aluminum #356 alloy, free of any porosity, foreign materials, or cosmetic fillers. Base casting shall be heat treated to a T-6 condition, and of uniform wall thickness, with no warping or mold shifting.

WARNINGS
Caution must be exercised in the selection of a design wind speed when the pole is to be installed in a special wind region (as indicated by the wind map) or in an area where wind speed is unpredictable.

AAL recommends consulting a local structural engineer when the pole is to be installed in an area that may be subject to extreme weather and exposure.

Poles installed on structures such as buildings and bridges may be subjected to vibration, oscillations, and other fatigue effects which are not covered by the AAL warranty.

The use of banners or other appendages can severely affect the loading of a pole. No banner or other appendage should be attached to an AAL pole unless approved by AAL.

If the products are to be used on an existing foundation or on other structures, the customer assumes all responsibility for the structural integrity of the existing foundation, anchorage or structures and all the consequences arising therefrom.

CAUTION
Poles should never be erected without the luminaire installed. Warranty is voided if the pole is erected without the luminaire. The warranty is voided if the pole is not grouted under the entire base after installation.

Anchor bolts shall be hot dip galvanized steel. Six galvanized hex nuts and flat washers, and a bolt circle template shall be provided. Anchor bolts for poles 14 feet high or less are 3/4" x 24" x 3". Anchor bolt for poles more than 14 feet high are 1"x 36" x 4".

SOLD TO PO # JOB NAME
/ /
APPROVALS

Architectural Area Lighting
16555 East Gale Ave. I City of Industry I CA 91745
P 626.968.5666 I F 626.369.2695 I www.aal.net
Design patents, Copyright © 2010 Rev 01/2012

| Project | | Catalog # | | Type | |
|---|---|---|---|---|---|
| Prepared by | | Notes | | Date | |

# McGraw-Edison

## BRT6 Bollard

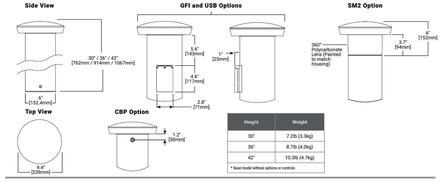
Round LED Pedestrian Luminaire

**Interactive Menu**
- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 2
- Energy and Performance Data page 3

**Product Certifications**

**Quick Facts**
- 4 Optical Distributions
- Available in 30', 36', and 42"
- Lumen packages range from 560 - 4400 (5W - 49W)
- Efficacy up to 122 lumens per watt
- Zero uplight on all configurations

**Dimensional Details**




| Height | Weight |
|---|---|
| 30" | 7.2lb (3.3kg) |
| 36" | 8.7lb (4.0kg) |
| 42" | 10.3lb (4.7kg) |

* Base model without options or controls

COOPER Lighting Solutions

PS0000468En page 1
April 14, 2022 2:47 PM

WRIGHT ENGINEERING PROJECT NO:

**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

MARICOPA, ARIZONA
VILLAS AT STONEGATE
SITE ELECTRICAL PLAN

SITE ELECTRICAL DETAILS

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

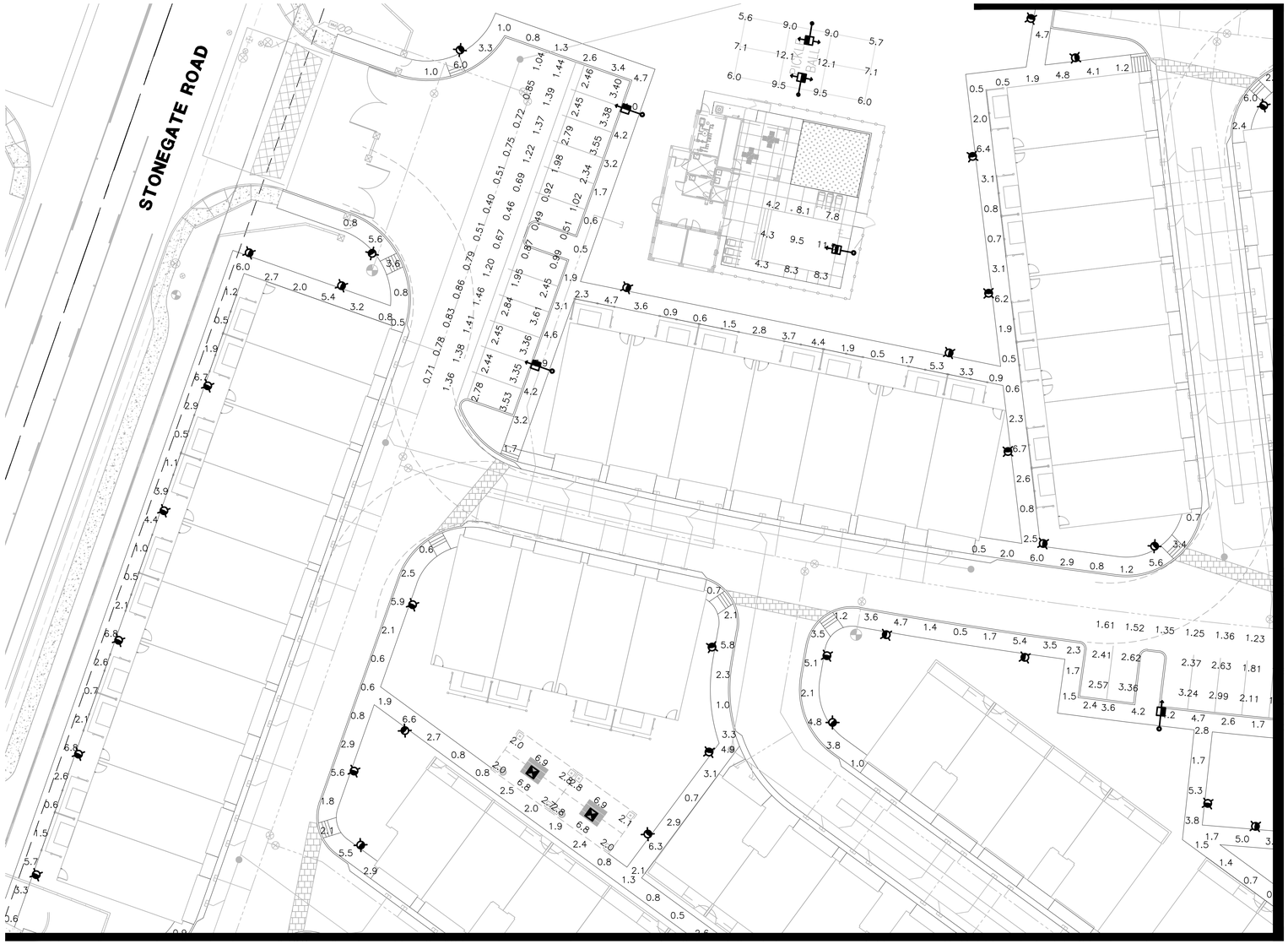
Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed
8-19-22
Expires 3-31-23

DRAWING NO:

**SE3.4**

OF 18

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)




## PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2

Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3

T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

NORTH

GRAPHIC SCALE
20 10 0 10 20 40
1 INCH = 20 FEET

Call at least two full working days before you begin excavation
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)



WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

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ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
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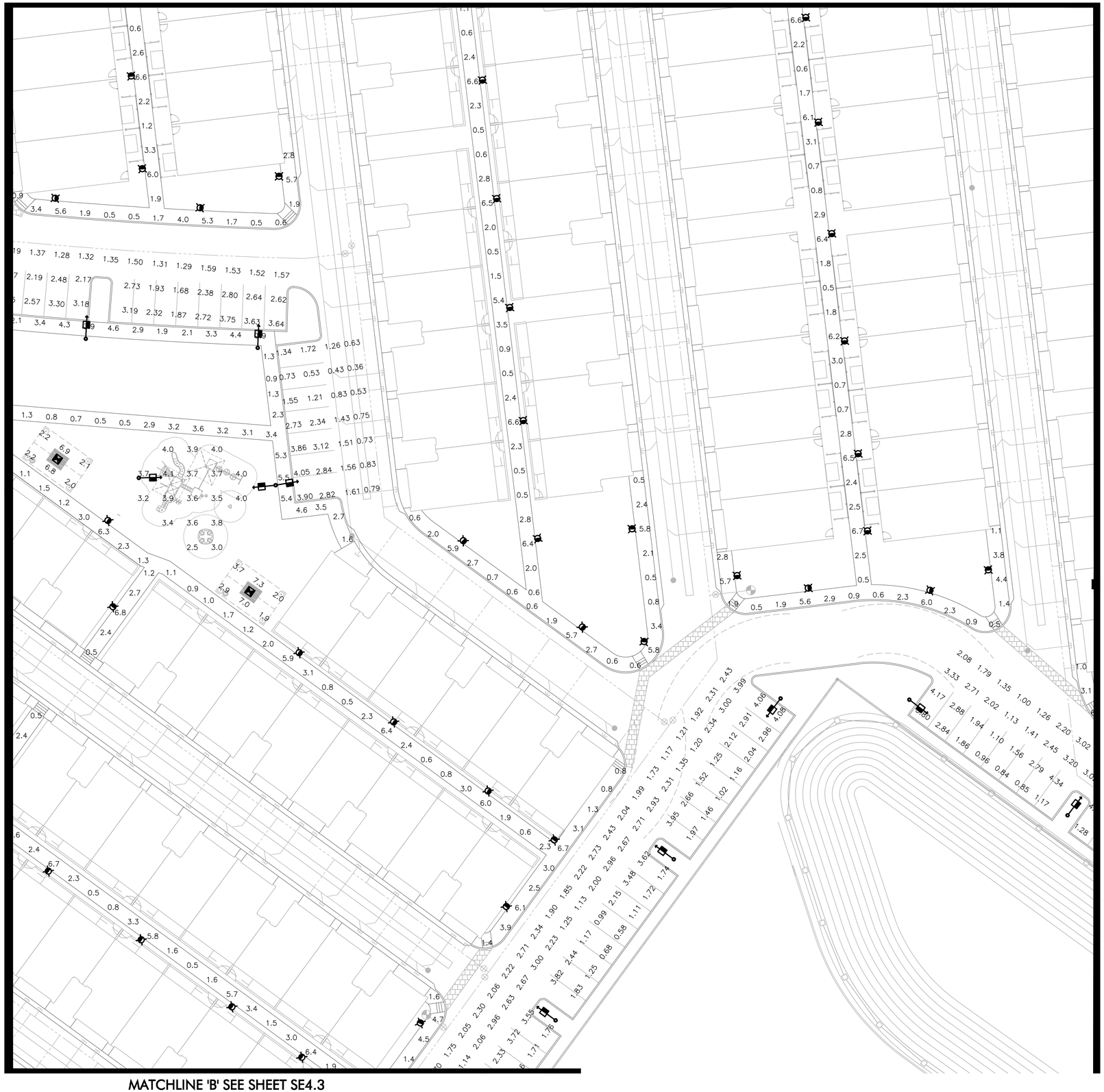
PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 8-8-22
Expires 3-31-23

DRAWING NO:
**SE4.1**
OF 18

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Minimum 2.0
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kw all locations= 0.2

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candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
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1 INCH = 20 FEET

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ARIZONA 811
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Dial 811 or 1-800-STAKE-IT (782-5348)


H:\2022\22109-Villas at Stonegate\22109-SE.dwg

WRIGHT ENGINEERING PROJECT NO:
**22109**
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
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PROJECT: TITLE:

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**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

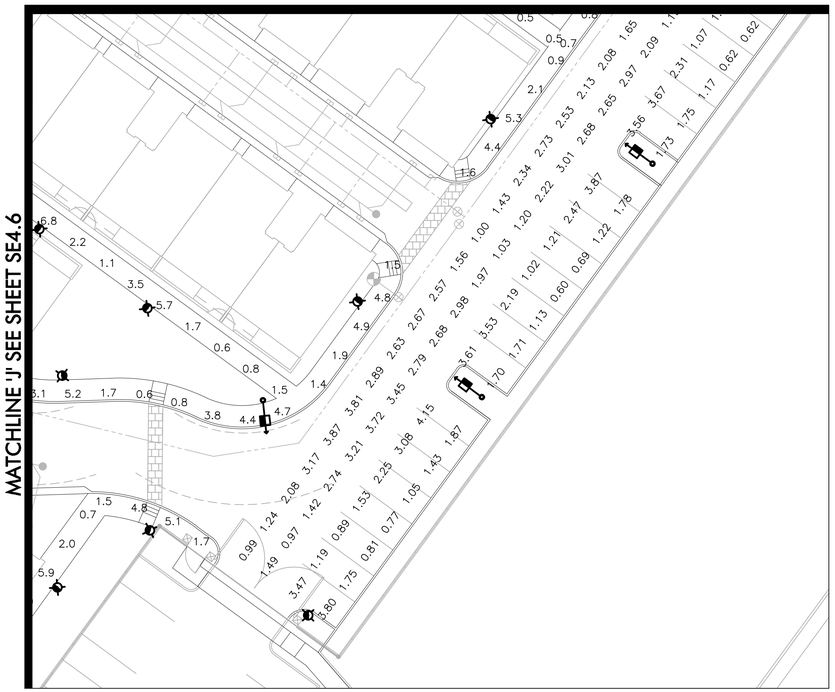
| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 8-2-22
Expires 3-31-23

DRAWING NO:
**SE4.2**
OF 18

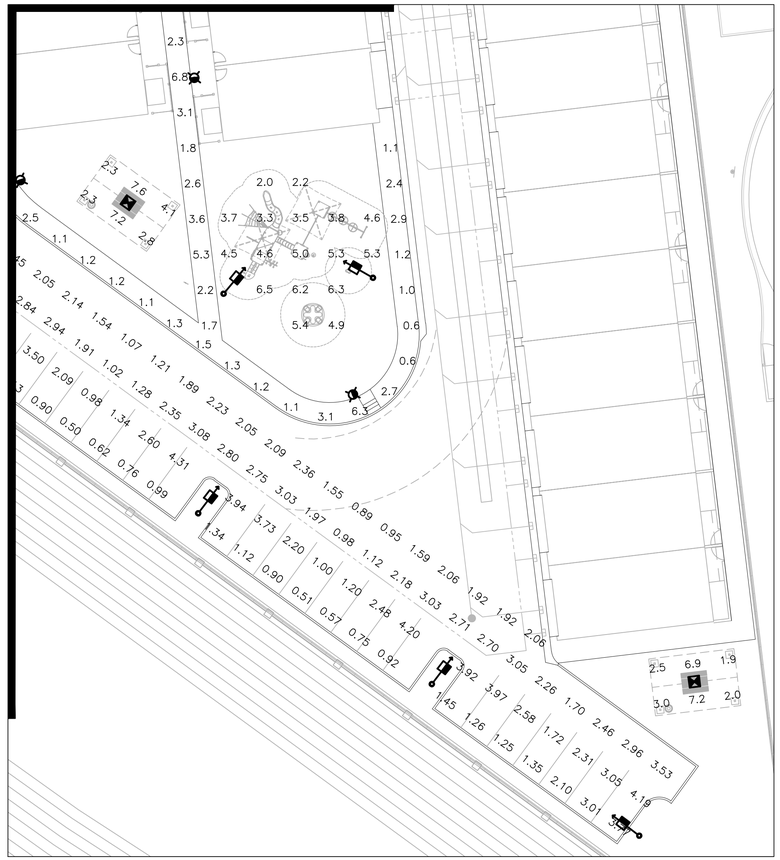
MATCHLINE 'B' SEE SHEET SE4.2

MATCHLINE 'J' SEE SHEET SE4.6



MATCHLINE 'D' SEE SHEET SE4.4

MATCHLINE 'C' SEE SHEET SE4.2



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Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2

Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3

T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

NORTH

GRAPHIC SCALE
20 10 0 10 20 40
1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING PROJECT NO:
**22109**
DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

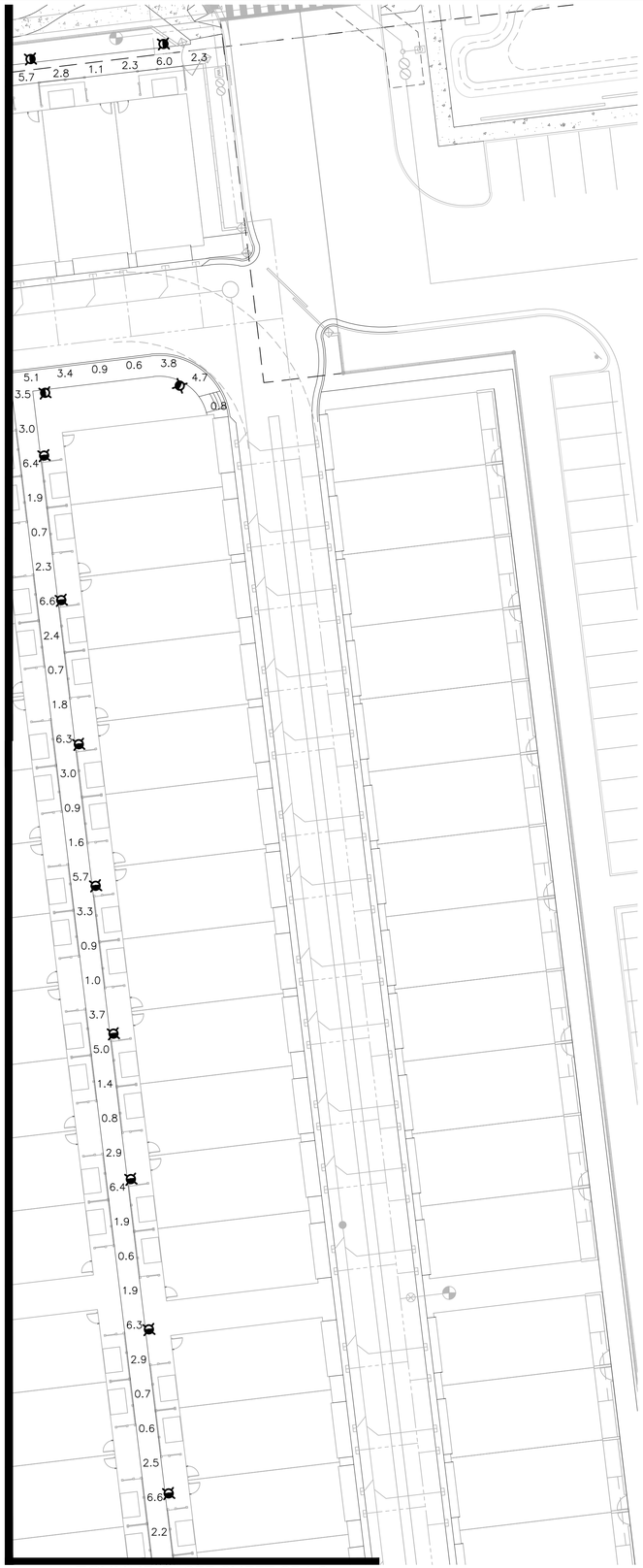
PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
State of Arizona
8-19-22
Expires 3-31-23

DRAWING NO:
**SE4.3**
OF 18




## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2

Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3

T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

## PHOTOMETRIC RESULTS

Parking Lot
391 points

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 2.04 |
| Maximum | 4.34 |
| Minimum | 0.36 |
| Avg:Min | 5.66 |
| Max:Min | 12.06 |
| Coef Var | 0.48 |

Playground
35 points

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 4.1 |
| Maximum | 6.5 |
| Minimum | 2.0 |
| Avg:Min | 2.04 |
| Max:Min | 3.25 |
| Coef Var | 0.25 |

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 8.2 |
| Maximum | 12.1 |
| Minimum | 5.6 |
| Avg:Min | 1.47 |
| Max:Min | 2.16 |
| Coef Var | 0.27 |
| UnifGrad | 1.34 |

Pool
9 points at z=0, sp 10ft by 10ft

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 7.4 |
| Maximum | 11.5 |
| Minimum | 4.2 |
| Avg:Min | 1.75 |
| Max:Min | 2.74 |
| Coef Var | 0.33 |
| UnifGrad | 2.21 |

Ramada
36 points

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 4.0 |
| Maximum | 7.6 |
| Minimum | 1.9 |
| Avg:Min | 2.10 |
| Max:Min | 4.00 |
| Coef Var | 0.55 |

Property Line
392 points

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 0.0 |
| Maximum | 0.9 |
| Minimum | 0.0 |
| Avg:Min | N/A |
| Max:Min | N/A |
| Coef Var | 2.94 |

Pathway
757 points

| HORIZONTAL | FOOTCANDLES |
|---|---|
| Average | 2.6 |
| Maximum | 6.8 |
| Minimum | 0.5 |
| Avg:Min | 5.23 |
| Max:Min | 13.60 |
| Coef Var | 0.72 |

NORTH

**GRAPHIC SCALE**

20 10 0 10 20 40

1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)

WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE (480.497.5829 • FAX (480.497.5807
www.wrightengineering.us

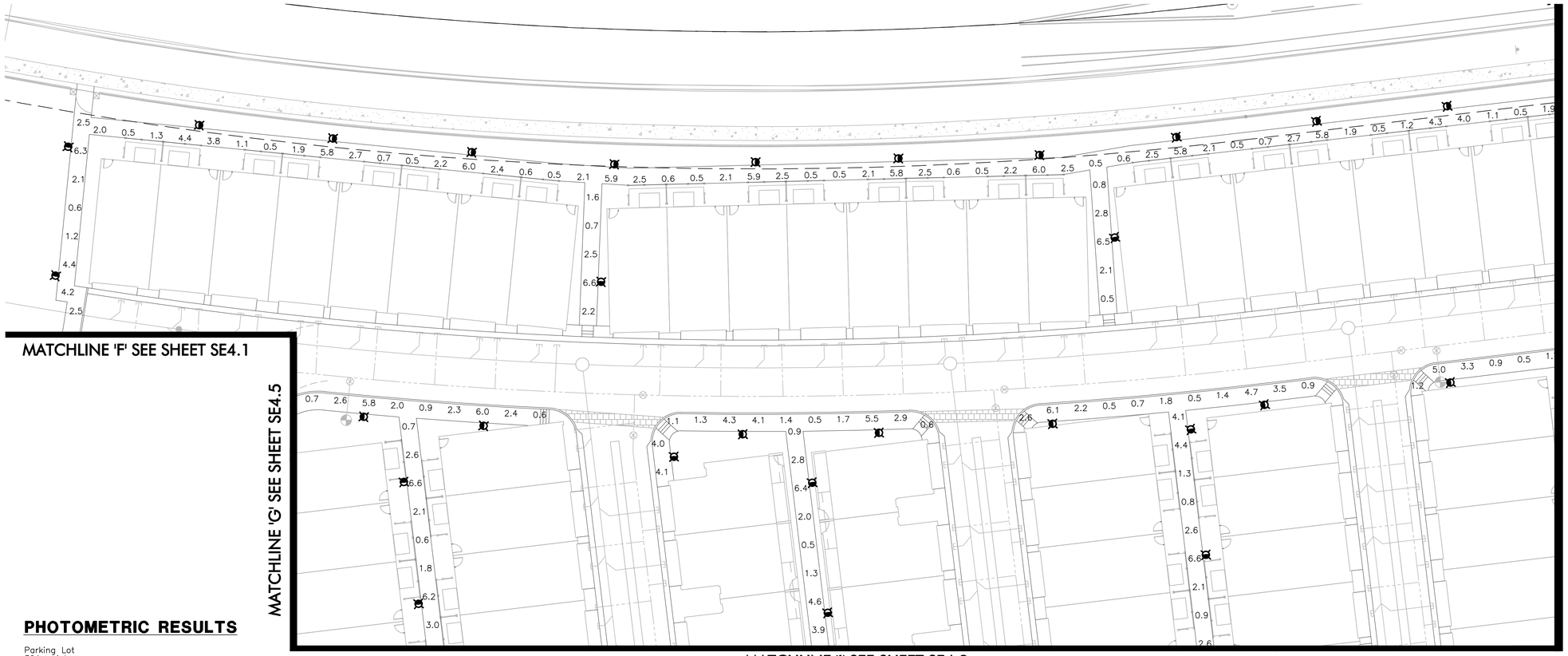
PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
8-11-22
Date Signed
Expires 3-31-23

DRAWING NO:
**SE4.4**
OF 18




## PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
kw all locations= 0.2

Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3

T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

NORTH

**GRAPHIC SCALE**

20 10 0 10 20 40

1 INCH = 20 FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)



WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Retired)
Certificate No.
57159
CLIFFORD M. TOLMAN
8-9-22
State of Arizona
Expires 3-31-23

DRAWING NO:
**SE4.5**
OF 18

## PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
Coef Var 0.25

Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
Average 8.2
Maximum 12.1
Minimum 5.6
Avg:Min 1.47
Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

Pool
9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
32 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 113
mounting height= 14 ft
number locations= 2, number luminaires= 2
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Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
120 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 43
mounting height= 10 ft
number locations= 6, number luminaires= 6
kw all locations= 0.3

T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

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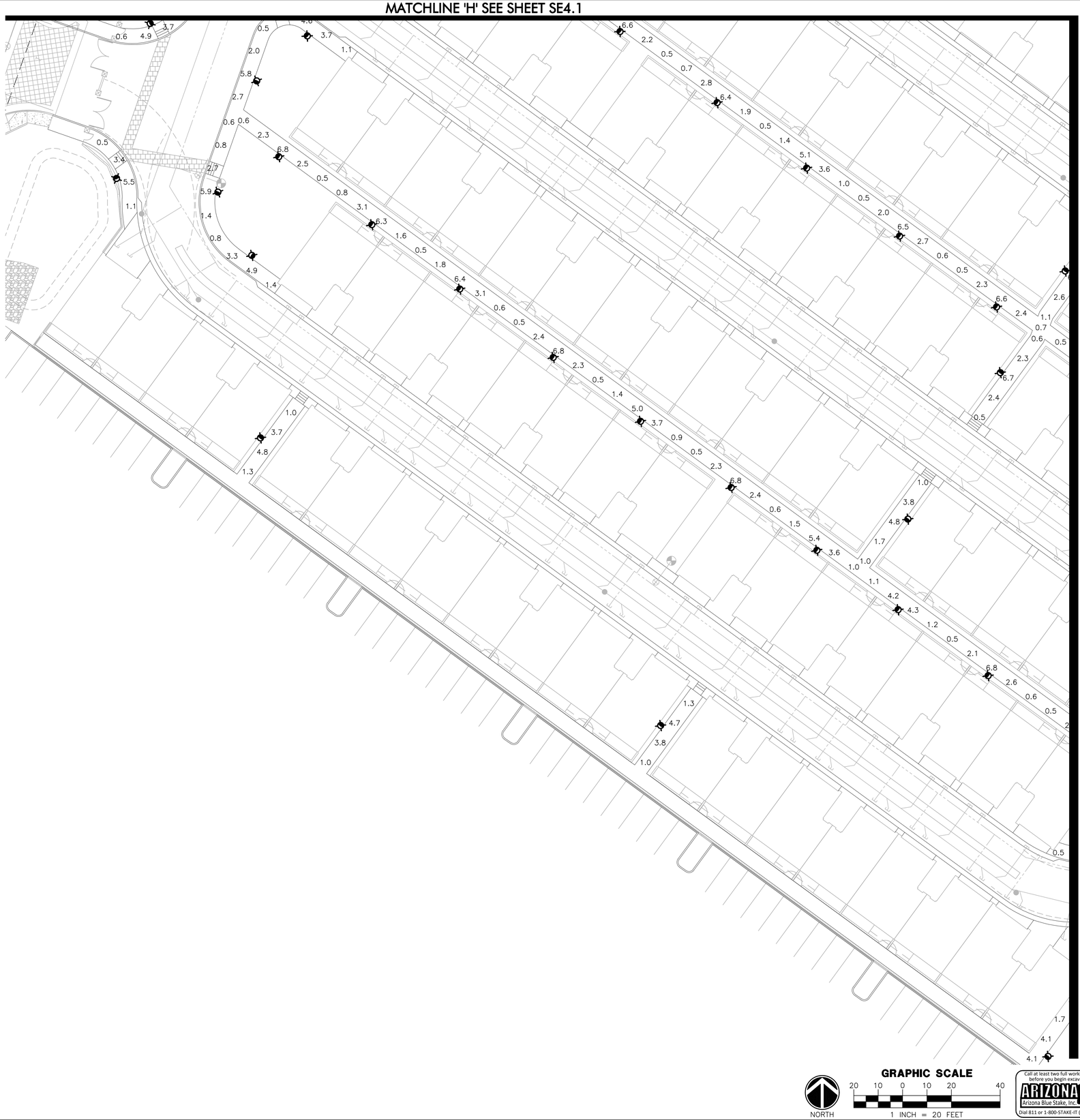
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2




GRAPHIC SCALE
20 10 0 10 20 40
1 INCH = 20 FEET
NORTH

Call at least two full working days before you begin excavation
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 811 or 1-800-STAKE-IT (782-5348)



WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
DRAWN BY: XAG
CHECKED BY: CMT

WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us

PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**

**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No.
57159
CLIFFORD M. TOLMAN
Date Signed 8-9-22
Expires 3-31-23

DRAWING NO:
**SE4.6**
OF 18

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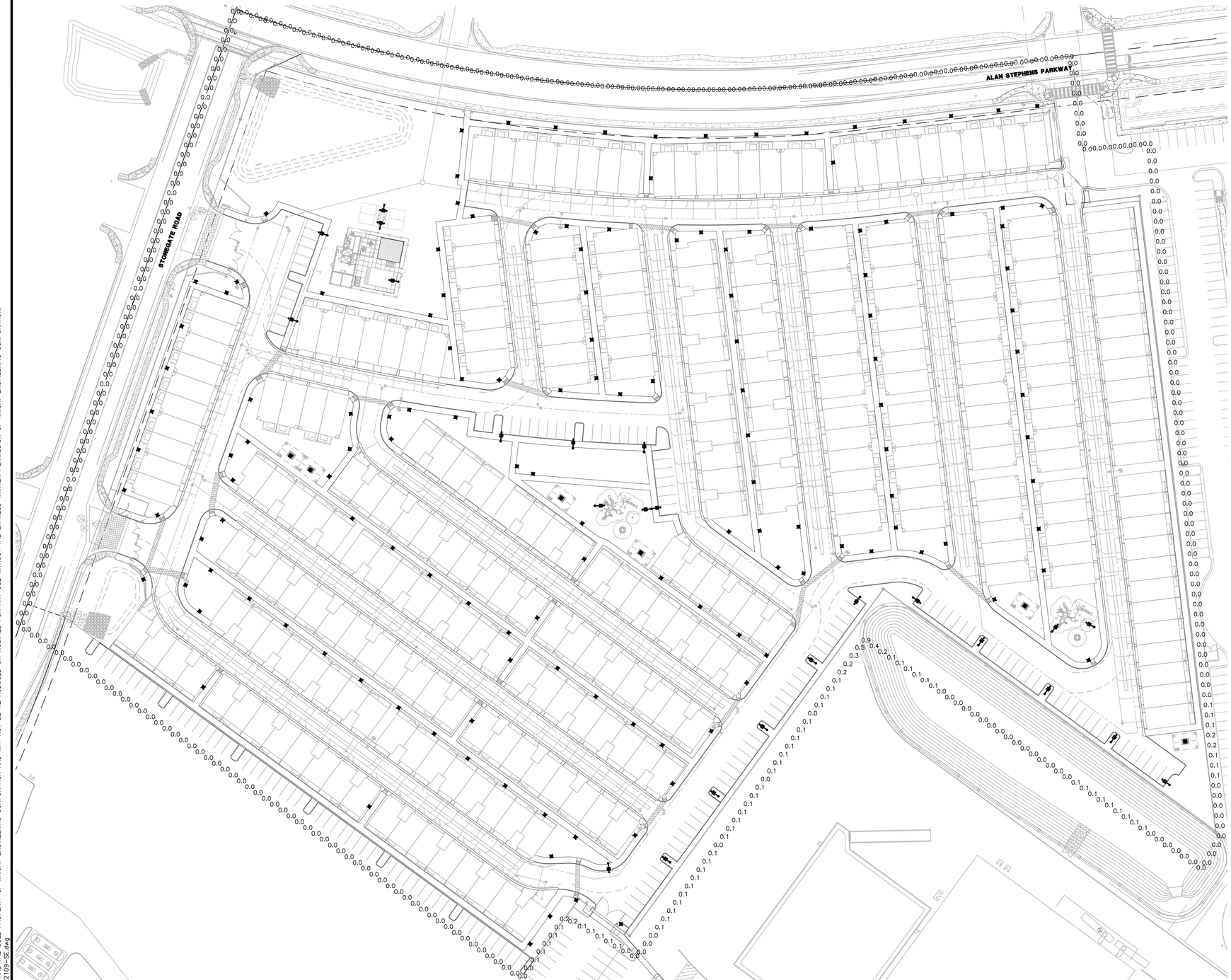


## PHOTOMETRIC LEGEND

T3 Area Light
candela file 'GAN-SA2C-730-U-T3-HSS.ies'
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kw all locations= 0.2

Ramada Light
candela file 'SWP1212_40W_40K_OP.ies'
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mounting height= 10 ft
number locations= 6, number luminaires= 6
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T4 Parking Lot Light
candela file 'PRM22-72L-310-3K7-4W.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 70
mounting height= 14 ft
number locations= 21, number luminaires= 21
kw all locations= 1.5

T4 Area Light
candela file 'GALN-SA4C-730-U-T4W_25347 lumens (1).ies'
64 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 213
mounting height= 14 ft
number locations= 1, number luminaires= 1
kw all locations= 0.2

BOLLARD
candela file 'BRT6-A4-730-U-T3-XX-BK.ies'
8 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 0.910, watts per luminaire = 22
mounting height= 3.5 ft
number locations= 147, number luminaires= 147
kw all locations= 3.2

## PHOTOMETRIC RESULTS

Parking Lot
391 points
HORIZONTAL FOOTCANDLES
Average 2.04
Maximum 4.34
Minimum 0.36
Avg:Min 5.66
Max:Min 12.06
Coef Var 0.48

Playground
35 points
HORIZONTAL FOOTCANDLES
Average 4.1
Maximum 6.5
Minimum 2.0
Avg:Min 2.04
Max:Min 3.25
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Pickle Ball Court
12 points at z=0, sp 1ft by 10ft
HORIZONTAL FOOTCANDLES
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Max:Min 2.16
Coef Var 0.27
UnifGrad 1.34

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9 points at z=0, sp 10ft by 10ft
HORIZONTAL FOOTCANDLES
Average 7.4
Maximum 11.5
Minimum 4.2
Avg:Min 1.75
Max:Min 2.74
Coef Var 0.33
UnifGrad 2.21

Ramada
36 points
HORIZONTAL FOOTCANDLES
Average 4.0
Maximum 7.6
Minimum 1.9
Avg:Min 2.10
Max:Min 4.00
Coef Var 0.55

Property Line
392 points
HORIZONTAL FOOTCANDLES
Average 0.0
Maximum 0.9
Minimum 0.0
Avg:Min N/A
Max:Min N/A
Coef Var 2.94

Pathway
757 points
HORIZONTAL FOOTCANDLES
Average 2.6
Maximum 6.8
Minimum 0.5
Avg:Min 5.23
Max:Min 13.60
Coef Var 0.72

NORTH

GRAPHIC SCALE
50 25 0 25 50 100
1 INCH = 50 FEET

Call at least two full working days before you begin excavation
ARIZONA 811
Arizona Blue Stake, Inc.
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WRIGHT ENGINEERING PROJECT NO:
**22109**

DESIGN BY: XAG
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CHECKED BY: CMT

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PROJECT: TITLE:

**MARICOPA, ARIZONA**
**VILLAS AT STONEGATE**
**SITE ELECTRICAL PLAN**
**PHOTOMETRIC ANALYSIS**

| NO. | DATE | SUBMITTALS/REVISIONS (DESCRIPTIONS) |
|---|---|---|
| 1 | AUG 2022 | 100% SUBMITTAL |

Registered Professional Engineer (Electrical)
Certificate No. 47159
CLIFFORD M. TOLMAN
8-19-22
Expires 3-31-23

DRAWING NO:
**SE4.7**
OF 18