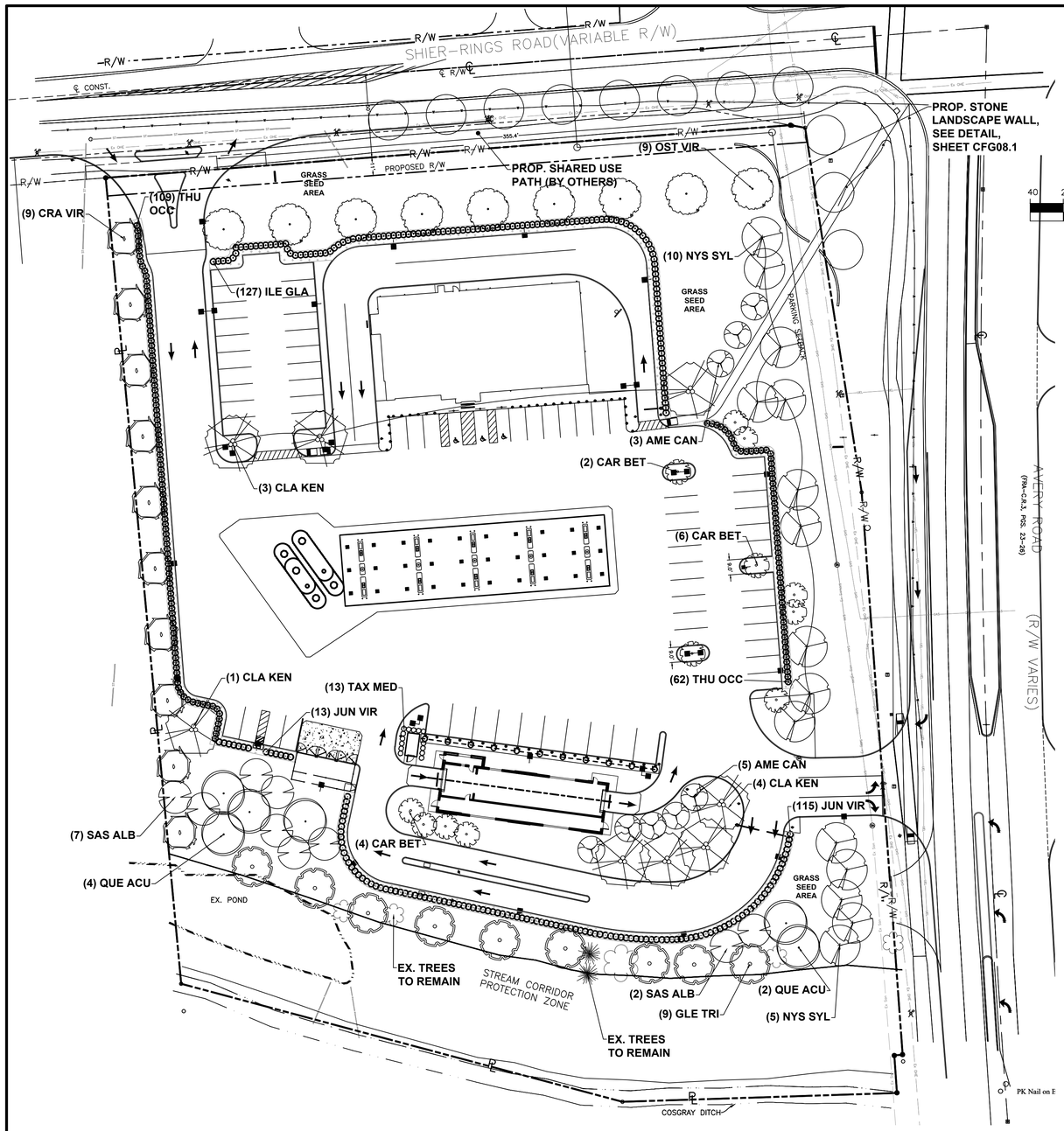
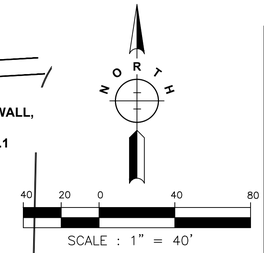




LANDSCAPE REQUIREMENTS:
CITY OF DUBLIN CODE SECTION 153

LOT COVERAGE:
PARCEL: 239,101 S.F. (5.489 AC.)
VEHICULAR USE AREA: 103,945 S.F. (43%)
BUILDING AREA: 10,948 S.F. (4.6%)

INTERIOR GREEN SPACE REQUIRED (§153.133B2):
REQUIRED: 5,198 S.F.
PROVIDED: 9,249 S.F.

PARKING LOT SCREENING AND LANDSCAPING:
PERIMETER BUFFER LANDSCAPING
LANDSCAPE MATERIALS USED TO FULFIL PERIMETER LANDSCAPING REQUIREMENTS SHALL BE INSTALLED TO PROVIDE 100 PERCENT YEAR ROUND OPACITY AT A MATURE HEIGHT OF 3.5 FEET. VUA PERIMETER TREE PLANTING SHALL BE AT THE RATE OF 1 TREE PER 40 L.F.

REQUIRED: CONTINUOUS HEDGE AND 1 TREE PER 40 L.F..

PROVIDED: CONTINUOUS HEDGE AND 1 TREE PER 40 L.F..

INTERIOR VEHICULAR USE AREA LANDSCAPING
ONE DECIDUOUS SHADE TREE PER PENINSULA ISLAND. FOR EACH 100 SQUARE FEET OF VUA, A MINIMUM OF 5 SQUARE FEET OF LANDSCAPED AREA SHALL BE PROVIDED. LANDSCAPE AREAS SHALL BE A MINIMUM OF 112 SQUARE FEET. TREES SHALL BE PLANTED AT A RATE OF ONE TREE PER EVERY 5,000 SQUARE FEET OF VUA.

LANDSCAPE AREA REQUIRED: 5,198 SQUARE FEET
TREES REQUIRED: VUA+BUILDING AREA = 114,893 = 23 SHADE TREES (2.5" CAL.)

SERVICE STRUCTURES
ALL SERVICE STRUCTURES SHALL HAVE CONTINUOUS (100% OPACITY) SCREENING.

STREET TREES
STREET TREES ARE REQUIRED ALONG ALL ROAD FRONTAGES PER 153.134. SPECIES AND SPACING TO BE DETERMINED BY CITY FORESTER.

NOTES:

ALL PLANT MATERIALS TO COMPLY WITH THE LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK BY AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, AND BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM INSTALLATION DATE.

CONSULT PLANT SCHEDULE FOR PLANT SIZES AND SPECIFICATIONS.

SCREENING SHRUBS TO PROVIDE 100% YEAR-ROUND OPACITY PER DUBLIN CODIFIED ORDINANCES SECTION 153.33.

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES PRIOR TO INSTALLATION. NOTIFY ENGINEER IF FIELD CONDITIONS NECESSITATE ADJUSTMENT OF PLANT LOCATIONS.

CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANS. PLANT LIST QUANTITIES ARE FOR CONVENIENCE ONLY.

PARKING LOT AND STREET TREES SHALL HAVE A CLEAR CANOPY HEIGHT OF 6' MIN.

ALL SHRUB AND GROUND COVER BEDS TO BE MULCHED WITH LANDSCAPE STONE: HUDSON VALLEY 2"-3" RIVER BED STONE, BROWN, GRAY AND TAN IN COLOR, OR EQUAL TO BE APPROVED BY THE LANDSCAPE ARCHITECT.

CONTRACTOR SHALL PROVIDE A ONE YEAR GUARANTEE ON ALL PLANTS INSTALLED AND PROVIDE COMPLETE MAINTENANCE ON ALL WORK FROM THE DAY OF APPROVAL OF THE OWNER'S REPRESENTATIVE CONTINUING FOR A THREE MONTH DURATION AT WHICH TIME THE OWNER WILL DECLARE JOB ACCEPTANCE.

EACH PLANTING TO BE FREE FROM DISEASE, INSECT INFESTATION AND DAMAGE AND IN ALL RESPECTS BE READY FOR FIELD PLANTING.

PLANTING HOLES TO BE DUG A MINIMUM OF TWICE THE WIDTH AND EQUAL IN DEPTH TO THE SIZE OF THE ROOT BALL AND TO BE AMENDED WITH ORGANIC SOIL CONDITIONER.

BED EDGES SHALL BE SMOOTH, CONSISTENT, HAND TRENCHED 6" DEEP AND 'V' SHAPED UNLESS OTHERWISE NOTED. ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE BED EDGE AND THE PLANTING BED.

IN AREAS WHERE BEDROCK OR HEAVILY COMPACTED ROCK FILL IS ENCOUNTERED, THE PLANTING HOLES ARE TO BE DUG TO A MINIMUM OF THREE TIMES THE WIDTH AND ONE FOOT DEEPER THAN THE SIZE OF THE ROOT BALL. NOTIFY ENGINEER IF FIELD CONDITIONS WARRANT ADJUSTMENT OF PLANT LOCATIONS.

EXISTING GRASS TO BE REMOVED, IF PRESENT, AND TOPSOIL TO BE SPREAD SMOOTH AND HAND RAKED TO REMOVE ALL ROCKS AND DEBRIS LARGER THAN 1 INCH IN DIAMETER PRIOR TO LAYING SOD OR SEEDING.

ALL CHANGES TO DESIGN OR PLANT SUBSTITUTIONS ARE TO BE AUTHORIZED BY THE ENGINEER.

TOPSOIL MIX IN PLANTING BEDS TO BE 3 PARTS SCREENED TOPSOIL AND 1 PART ORGANIC MATERIAL. TO A DEPTH OF 24"

ALL SEEDING INSTALLATION SHALL CONFORM TO ODOT SPECIFICATIONS. SEED AT 6 LBS/1000 SF WITH THE FOLLOWING SEED MIXTURE:

TITAN TALL-TYPE TURF FESCUE	70%
SR 4100 PERENNIAL RYEGRASS	20%
MERIT KENTUCKY BLUEGRASS	10%

IRRIGATION TO BE PROVIDED IN ALL STONE MULCH BEDS.

LEGEND

AMELANCHIER, CARPINUS, CLADASTRUS, CRATAEGUS, GLEDITSIA, NYSSA, OSTRYA, QUERCUS, SASSAFRASS, MULCH, ILEX, JUNIPERUS, TAXUS, THUJA

PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	CONDITION	REMARKS
	TREES					
AME CAN	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	8	6-7'	B&B	
CAR BET	CARPINUS BETULUS 'FRANS FONTAINE'	COLUMNAR HORNBEAM	12	2.5" CAL.	B&B	
CLA KEN	CLADRASTIS KENTUKEA	YELLOWWOOD	8	2.5" CAL.	B&B	
CRA VIR	CRATAEGUS VIRIDIS 'WINTER KING'	WINTER KING HAWTHORN	9	2.5" CAL.	B&B	
GLE TRI	GLEDITSIA TRAICANTHOS	HONEY LOCUST	9	2.5" CAL.	B&B	
NYS SYL	NYSSA SYLVATICA	BLACK TUPELO	15	2.5" CAL.	B&B	UNEVEN SPACING DUE TO EX. UTILITIES
OST VIR	OSTRYA VIRGINIANA	HOP HORNBEAM	9	2.5" CAL.	B&B	
QUE ACU	QUERCUS ACUTISSIMA	SAWTOOTH OAK	6	3" CAL.	B&B	
SAS ALB	SASSAFRASS ALBIDUM	SASSAFRASS	9	2.5" CAL.	B&B	
	SHRUBS					
ILE GLA	ILEX GLABRA	INKBERRY	127	#5 CONT.		
JUN VIR	JUNIPERUS VIRGINIANA 'GREY OWL;	GREY OWL JUNIPER	128	#3 CONT.		
TAX MED	TAXUS X MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	13	#3 CONT.		
THU OCC	THUJA OCCIDENTALIS 'HETZ MIDGET'	HETZ MIDGET ARBORVITAE	171	#5 CONT.		

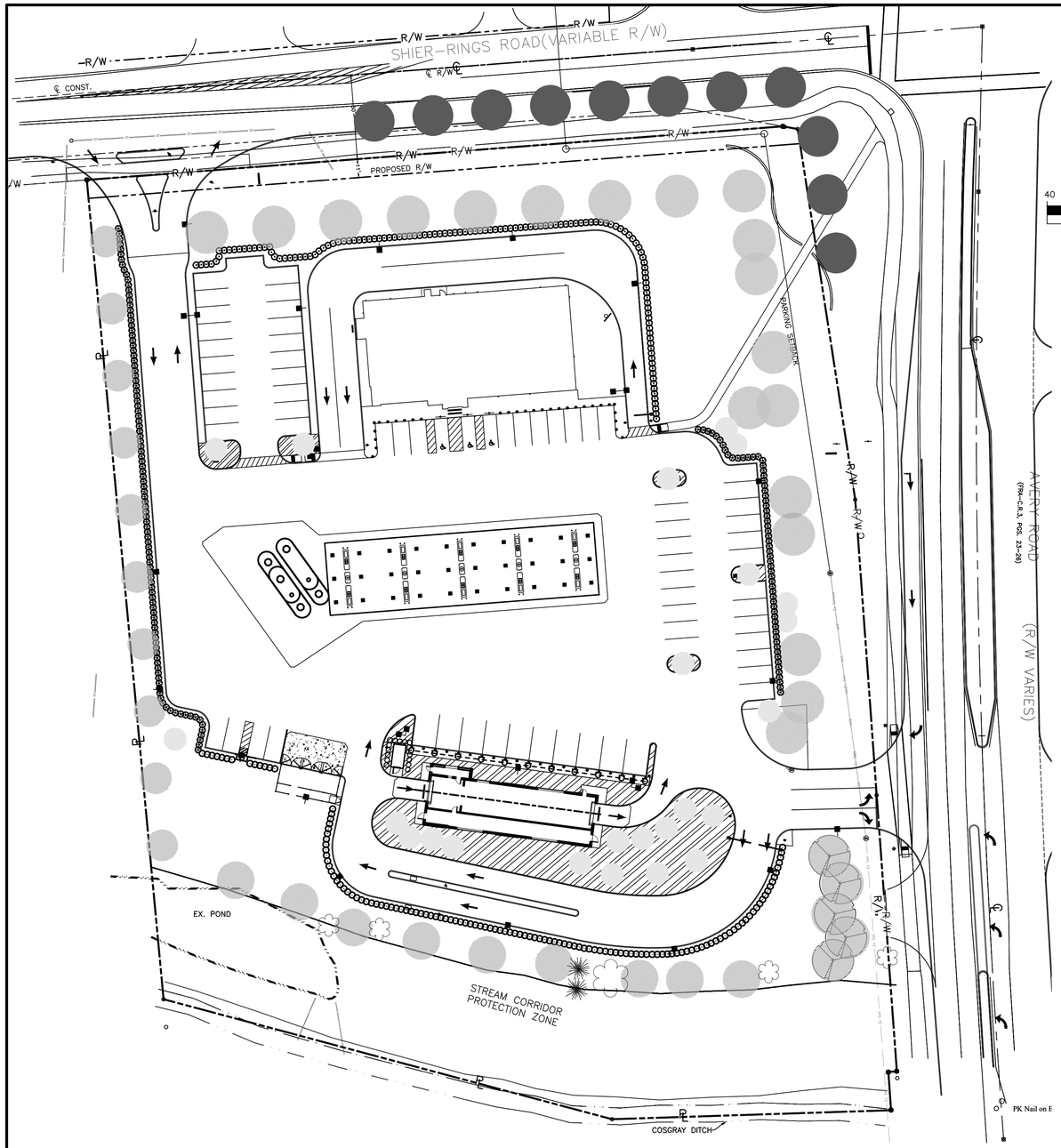
PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

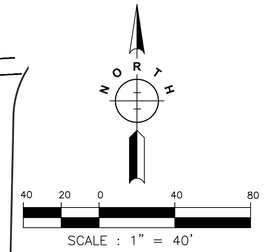
DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
LANDSCAPE PLAN

NO.	REVISIONS	DATE

DRAWN BY: RAK
CHECKED BY: TER
SCALE: 1"=40'
DATE: 11-23-2020
SHEET NO. **CFG08.0**

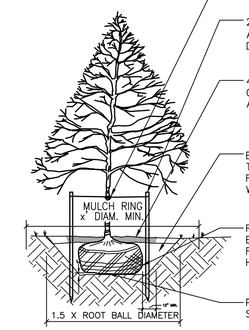
P:\2019\EOH01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG08a Landscape Plan.dwg by: rkoenig on 11/24/2020 1:58 PM ~ for PRIME AE





KEY

- VUA REQUIREMENT
- PERIMETER REQUIREMENT
- STREET TREES
- GREEN SPACE REQUIREMENT



REMOVE ALL TAGS.

PRUNE BROKEN OR DEAD BRANCHES.

FASTEN WITH 1/2" RUBBER HOSE AND WIRE OR APPROVED MATERIAL.

2"X2"X6' HARDWOOD STAKES OR APPROVED MATERIAL MIN. 24" DEPTH DRIVEN OUTSIDE EDGE OF ROOT BALL.

4" HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL. PROVIDE STONE MULCH AS PER SPECIFICATIONS.

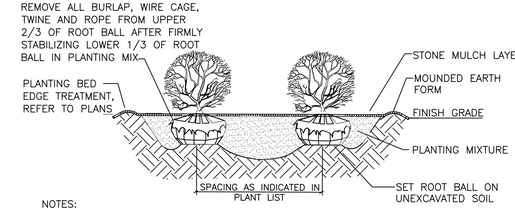
BACKFILL WITH TOPSOIL/FERTILIZER MIXTURE. TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE. FLOOD WITH WATER TWICE DURING FIRST 24 HOURS.

REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL. FOLD DOWN WIRE BASKET INTO PLANTING HOLE.

PLACE ROOT BALL ON UNDISTURBED SUBGRADE.

TREE PLANTING DETAIL

SCALE: NOT TO SCALE



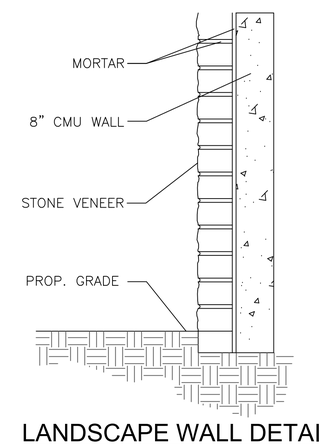
NOTES:

ALL SHRUBS PLANTED IN ROWS OR MASSES SHALL BE MATCHED IN SIZE AND FORM.

SHRUBS SHALL BEAR SAME RELATION TO FINISH GRADE AS THEY BORE TO EXISTING GRADE IN THE PREVIOUSLY PLANTED CONDITION.

MASS SHRUB PLANTING DETAIL

NO SCALE



LANDSCAPE WALL DETAIL

NO SCALE

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
LANDSCAPE DETAILS

NO.	REVISIONS	DATE

DRAWN BY:	CHECKED BY:
RAK	TER

SCALE: 1"=40'

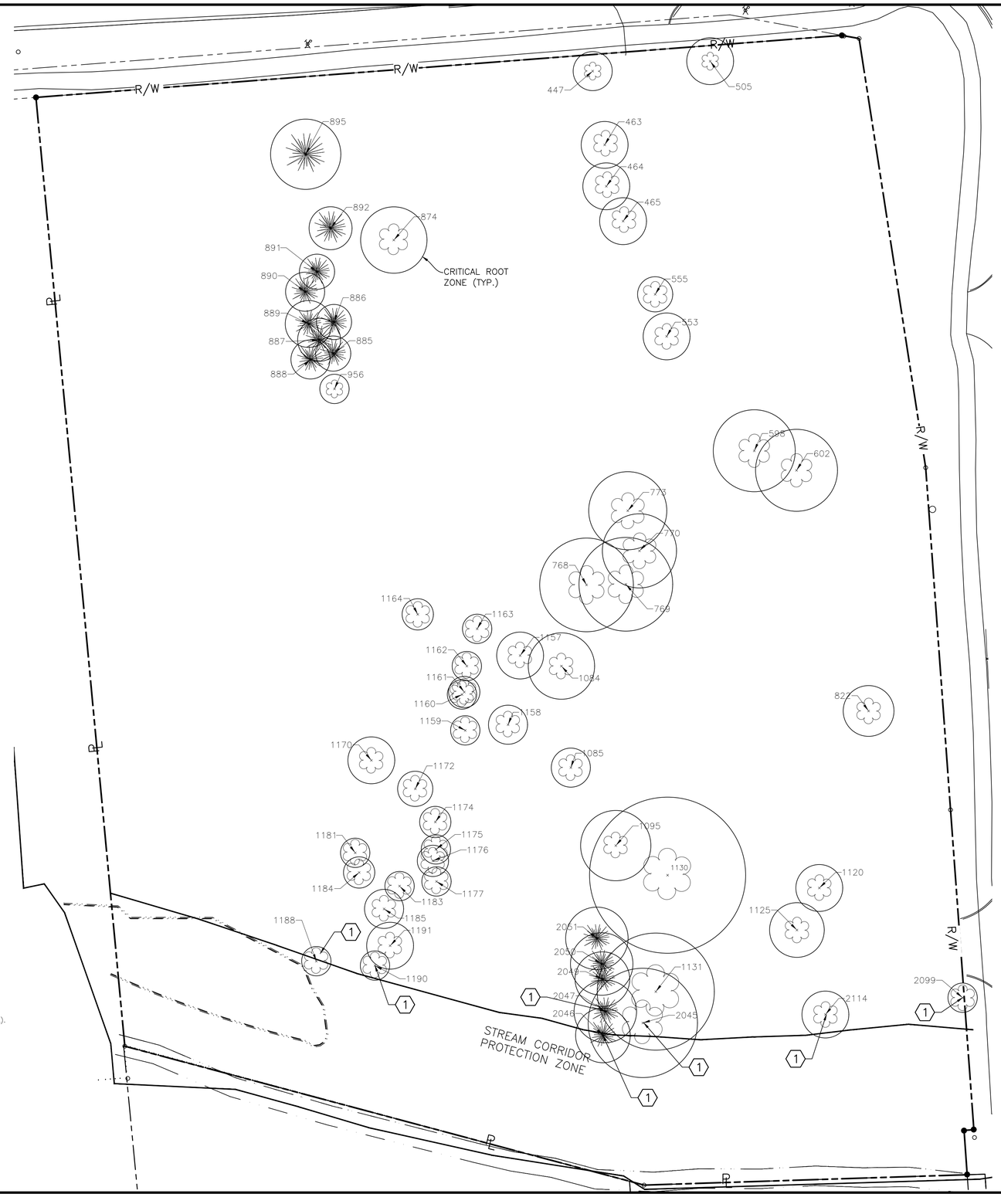
DATE: 11-23-2020

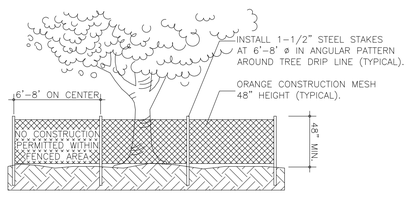
SHEET NO. **CFG08.1**

P:\2019\E0H01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG08a Landscape Plan.dwg by: rkoenig on 11/24/2020 1:58 PM ~ for PRIME AE

TREE PRESERVATION GENERAL NOTES:

1. THE OWNER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION, ERECTION AND MAINTENANCE OF TEMPORARY FENCING AROUND TREE PRESERVATION AREAS SO THAT ALL PROTECTED TREES SHALL BE PRESERVED. THE FENCING SHALL BE LOCATED A DISTANCE FROM THE TRUNK THAT EQUALS AT A MINIMUM, THE DISTANCE OF CRITICAL ROOT ZONE OR 15 FEET, WHICHEVER IS GREATER. WHERE PHYSICAL SITE CONSTRAINTS DO NOT ALLOW FOR SUCH INSTALLATION, TREE PROTECTION LOCATIONS AND METHODS SHALL BE DETERMINED ON SITE WITH THE CONSULTATION OF THE CITY OF DUBLIN LANDSCAPE INSPECTOR. CALL 614-410-4600 FOR TREE FENCING INSPECTION.
2. FENCING SHALL REMAIN IN PLACE AND BE SECURED IN AN UPRIGHT POSITION DURING THE ENTIRE CONSTRUCTION PERIOD TO PREVENT THE IMPINGEMENT OF CONSTRUCTION VEHICLES, MATERIALS, SPOILS AND EQUIPMENT INTO OR UPON THE TREE PRESERVATION AREA.
3. TREE PRESERVATION SIGNS, AVAILABLE FROM THE DIVISION OF LAND USE AND LONG RANGE PLANNING, MUST BE LOCATED ALONG THE FENCING. ANY CHANGE IN PROTECTIVE FENCING MUST BE APPROVED BY THE DIRECTOR OF LAND USE AND LONG RANGE PLANNING.
4. THE APPROVED TREE PRESERVATION PLAN SHALL BE AVAILABLE ON THE BUILDING SITE BEFORE WORK COMMENCES AND AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT. THE OWNER SHALL BE RESPONSIBLE FOR NOTIFYING ALL CONTRACTORS AND UTILITIES.
5. DURING ALL PHASES OF CONSTRUCTION, ALL STEPS TO PREVENT THE DESTRUCTION OR DAMAGE TO PROTECTED TREES SHALL BE TAKEN. NO CONSTRUCTION ACTIVITY, MOVEMENT AND/OR PLACEMENT OF EQUIPMENT, VEHICLES, MATERIALS OR SPOILS STORAGE SHALL BE PERMITTED WITHIN THE TREE PRESERVATION AREA. NO EXCESS SOIL, ADDITIONAL FILL LIQUIDS OR CONSTRUCTION DEBRIS SHALL BE PLACED WITHIN THE CRITICAL ROOT ZONE OF ALL TREES THAT ARE TO BE PRESERVED.
6. NO ATTACHMENTS, INCLUDING BUT NOT LIMITED TO ROPES, NAILS, ADVERTISING POSTERS, SIGNS, FENCES OR WIRES (OTHER THAN THOSE USED FOR BRACING, GUYING OR WRAPPING) SHALL BE ATTACHED TO ANY TREE.
7. NO GASEOUS LIQUIDS OR SOLID SUBSTANCES WHICH ARE HARMFUL TO TREES SHALL BE PERMITTED WITHIN THE TREE PRESERVATION AREA.
8. NO FIRE OR HEAT SHALL BE PERMITTED WITHIN THE TREE PRESERVATION AREA.
9. ALL UTILITIES, INCLUDING SERVICE LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE TREE PRESERVATION PLAN.





TREE PROTECTION DETAIL

TO BE USED ON ALL EXISTING TREES
NO SCALE

NUMBER	BOTANICAL NAME	COMMON NAME	DBH	CONDITION
447	CRATAEGUS CRUS-GALLI	COCKSPUR HAWTHORN	10"	FAIR
463	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
464	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
465	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
476	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
505	CRATAEGUS CRUS-GALLI	COCKSPUR HAWTHORN	12"	POOR
553	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	GOOD
555	GLEDITSIA TRIACANTHOS	HONEY LOCUST	9"	FAIR
598	GLEDITSIA TRIACANTHOS	HONEY LOCUST	21"	GOOD
602	GLEDITSIA TRIACANTHOS	HONEY LOCUST	21"	GOOD
768	TAXODIUM DISTICHUM	BALD CYPRESS	24"	GOOD
769	TAXODIUM DISTICHUM	BALD CYPRESS	24"	FAIR
770	TAXODIUM DISTICHUM	BALD CYPRESS	19"	GOOD
773	BETULA NIGRA	RIVER BIRCH	20"	FAIR
822	MALUS	CRABAPPLE	13"	POOR
874	QUERCUS PALUSTRIS	PIN OAK	17"	POOR
885	PINUS SYLVESTRIS	SCOTS PINE	9"	POOR
886	PINUS SYLVESTRIS	SCOTS PINE	9"	POOR
887	PINUS RESINOSA	RED PINE	11"	POOR
888	PINUS RESINOSA	RED PINE	10"	POOR
889	PINUS RESINOSA	RED PINE	12"	POOR
890	PINUS RESINOSA	RED PINE	9"	POOR
891	PINUS SYLVESTRIS	SCOTS PINE	9"	POOR
892	PINUS SYLVESTRIS	SCOTS PINE	11"	POOR
895	PINUS RESINOSA	RED PINE	18"	FAIR
956	POPULUS	COTTONWOOD	7"	FAIR
1084	BETULA NIGRA	RIVER BIRCH	17"	GOOD
1095	ACER SACCHARINUM	SILVER MAPLE	18"	POOR
1120	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	GOOD
1125	GLEDITSIA TRIACANTHOS	HONEY LOCUST	14"	GOOD
1130	ACER RUBRUM	RED MAPLE	40"	FAIR
1131	ACER SACCHARINUM	SILVER MAPLE	30"	FAIR
1157	RUBINA PSEUDOACACIA	BLACK LOCUST	12"	FAIR
1158	RUBINA PSEUDOACACIA	BLACK LOCUST	10"	FAIR
1159	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1160	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	GOOD
1161	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	GOOD
1162	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1163	RUBINA PSEUDOACACIA	BLACK LOCUST	6"	FAIR
1164	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1170	RUBINA PSEUDOACACIA	BLACK LOCUST	12"	FAIR
1172	RUBINA PSEUDOACACIA	BLACK LOCUST	9"	GOOD
1174	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1175	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	GOOD
1176	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	GPPD
1177	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1181	RUBINA PSEUDOACACIA	BLACK LOCUST	6"	FAIR
1183	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1184	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1185	RUBINA PSEUDOACACIA	BLACK LOCUST	10"	GOOD
1188	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	GOOD
1190	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1191	RUBINA PSEUDOACACIA	BLACK LOCUST	12"	GOOD
2045	ACER SACCHARINUM	SILVER MAPLE	28"	FAIR
2046	PICEA ABIES	NORWAY SPRUCE	14"	FAIR
2047	PICEA ABIES	NORWAY SPRUCE	16"	FAIR
2049	PICEA ABIES	NORWAY SPRUCE	14"	GOOD
2050	PICEA ABIES	NORWAY SPRUCE	16"	GOOD
2051	PICEA ABIES	NORWAY SPRUCE	16"	GOOD
2099	GLEDITSIA TRIACANTHOS	HONEY LOCUST	6"	FAIR
2114	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	GOOD

NOTE:

ALL EXISTING TREES TO BE REMOVED, EXCEPT AS NOTED.

KEY NOTES:

(1) EXISTING TREE TO BE PROTECTED, SEE DETAIL THIS SHEET.

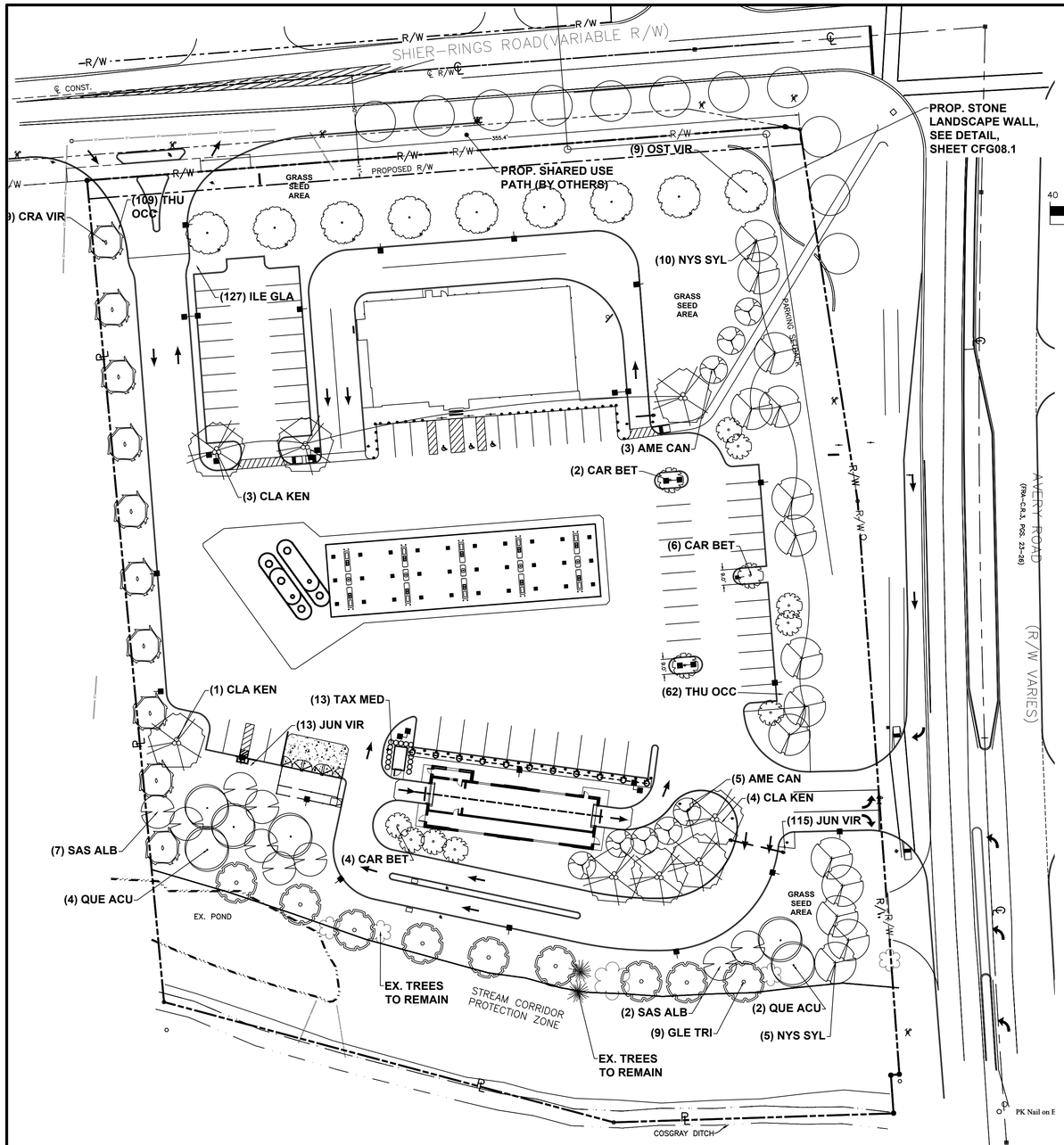
PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

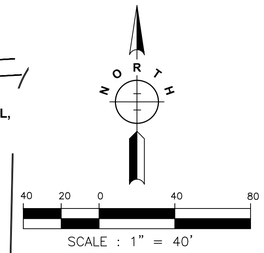
DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
TREE PRESERVATION PLAN

NO.	REVISIONS	DATE

DRAWN BY: RAK
CHECKED BY: TER
SCALE: 1"=30'
DATE: 11-10-2020
SHEET NO. **CFG08.2**

P:\2019\E0H01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG08b Tree Preservation Plan.dwg by: jsampson on 11/10/2020 2:24 PM ~ for PRIME AE





TREE PRESERVATION, REMOVAL AND REPLACEMENT NOTES:

1. COORDINATE ANY STREET TREE REMOVAL FOR ACCESS DRIVE WITH CITY FORESTER, AT 614-410-4701.

2. ALL TREES IN THE CONSTRUCTION AREA NOT SPECIFICALLY DESIGNATED FOR REMOVAL SHALL BE PRESERVED. ALL TREE REMOVAL, RELOCATION AND PRESERVATION WORK SHALL BE SUPERVISED WITH THE INPUT OF A CERTIFIED ARBORIST.

3. FENCING SHALL BE INSTALLED AROUND ALL TREES TO BE PRESERVED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY CHANGE IN THE PROTECTIVE FENCING MUST BE APPROVED BY THE LANDSCAPE INSPECTOR. OWNER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION, ERECTION AND MAINTENANCE OF PROTECTION FENCING, REFER TO TREE PRESERVATION DETAIL.

4. PRESERVED TREES REMAINING ARE TO BE FERTILIZED AND PRUNED (IF NEEDED) TWO YEARS AFTER CONSTRUCTION.

5. OWNER SHALL MONITOR HEALTH AND VIGOR OF EXISTING TREES THROUGHOUT THE COURSE OF CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO NOTIFY A CERTIFIED ARBORIST IF ANY DECLINE IN HEALTHY TREES IS APPARENT. THE ARBORIST SHALL DETERMINE THE REMEDIAL ACTION, IF ANY, TO BE TAKEN.

6. ALL EXISTING TREES NOTED AS FAIR TO POOR HEALTH SHALL BE FERTILIZED YEARLY IN THE SPRING USING A HORTICULTURALLY APPROVED METHOD FOR A PERIOD OF THREE YEARS. AFTER THREE YEARS, THE HEALTH SHALL BE EVALUATED BY A CERTIFIED ARBORIST AND CONTINUING MAINTENANCE RECOMMENDATIONS SHALL BE MADE.

7. ANY TREES REMOVED OR DAMAGED IN TREE PRESERVATION AREAS SHALL BE REPLACED PER CODE.

8. FAILURE TO ABIDE BY THE TERMS OF THE TREE PRESERVATION, REMOVAL AND REPLACEMENT PLANS SHALL BE UNLAWFUL.

TREE REPLACEMENT DATA:

CALIPER INCHES OF TREES (NOT POOR) REMOVED: 551

CALIPER INCHES OF TREES PROPOSED: 221.5

TOTAL REMAINING CALIPER INCHES:* 329.5

* REMAINING CALIPER INCHES TO BE COVERED BY FEE IN LIEU OF REPLACEMENT.

GOOD/FAIR TREES TO BE REPLACED:

NUMBER	BOTANICAL NAME	COMMON NAME	DBH	CONDITION
447	CRATAEGUS CRUS-GALLI	COCKSPUR HAWTHORN	10"	FAIR
463	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
464	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
465	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
476	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	FAIR
553	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	GOOD
555	GLEDITSIA TRIACANTHOS	HONEY LOCUST	9"	FAIR
598	GLEDITSIA TRIACANTHOS	HONEY LOCUST	21"	GOOD
602	GLEDITSIA TRIACANTHOS	HONEY LOCUST	21"	GOOD
768	TAXODIUM DISTICHUM	BALD CYPRESS	24"	GOOD
769	TAXODIUM DISTICHUM	BALD CYPRESS	24"	FAIR
770	TAXODIUM DISTICHUM	BALD CYPRESS	19"	GOOD
773	BETULA NIGRA	RIVER BIRCH	20"	FAIR
895	PINUS RESINOSA	RED PINE	18"	FAIR
956	POPULUS	COTTONWOOD	7"	FAIR
1084	BETULA NIGRA	RIVER BIRCH	17"	GOOD
1120	GLEDITSIA TRIACANTHOS	HONEY LOCUST	12"	GOOD
1125	GLEDITSIA TRIACANTHOS	HONEY LOCUST	14"	GOOD
1130	ACER RUBRUM	RED MAPLE	40"	FAIR
1131	ACER SACCHARINUM	SILVER MAPLE	30"	FAIR
1157	RUBINA PSEUDOACACIA	BLACK LOCUST	12"	FAIR
1158	RUBINA PSEUDOACACIA	BLACK LOCUST	10"	FAIR
1159	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1160	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	GOOD
1161	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	GOOD
1162	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1163	RUBINA PSEUDOACACIA	BLACK LOCUST	6"	FAIR
1164	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1170	RUBINA PSEUDOACACIA	BLACK LOCUST	12"	FAIR
1172	RUBINA PSEUDOACACIA	BLACK LOCUST	9"	GOOD
1174	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1175	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	GOOD
1176	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	GOOD
1177	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1181	RUBINA PSEUDOACACIA	BLACK LOCUST	6"	FAIR
1183	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
1184	RUBINA PSEUDOACACIA	BLACK LOCUST	8"	FAIR
1185	RUBINA PSEUDOACACIA	BLACK LOCUST	10"	GOOD
1190	RUBINA PSEUDOACACIA	BLACK LOCUST	7"	FAIR
2049	PICEA ABIES	NORWAY SPRUCE	14"	GOOD
2050	PICEA ABIES	NORWAY SPRUCE	16"	GOOD
2051	PICEA ABIES	NORWAY SPRUCE	16"	GOOD

REPLACEMENT TREES:

BOTANICAL NAME	QTY.	SIZE	CAL. TOTAL
TREES			
AMELANCHIER CANADENSIS	8	6-7'	20"
CARPINUS BETULUS 'FRANS FONTAINE'	12	2.5" CAL.	30"
CLADRASTIS KENTUKEA	8	2.5" CAL.	20"
CRATAEGUS VIRIDIS 'WINTER KING'	9	2.5" CAL.	22.5"
GLEDITSIA TRAICANTHOS	9	2.5" CAL.	22.5"
NYSSA SYLVATICA	15	2.5" CAL.	37.5"
OSTRYA VIRGINIANA	9	2.5" CAL.	22.5"
QUERCUS ACUTISSIMA	4	3" CAL.	12"
SASSAFRASS ALBIDUM	5	2.5" CAL.	12.5"

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

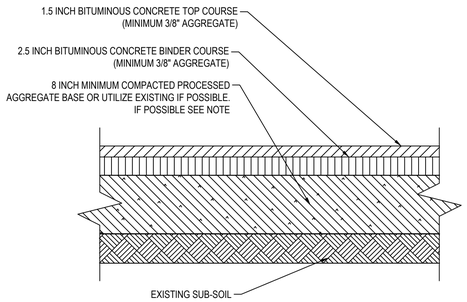
DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
TREE REPLACEMENT PLAN

NO.	REVISIONS	DATE

DRAWN BY: RAK
CHECKED BY: TER
SCALE: 1"=40'
DATE: 11-23-2020
SHEET NO. **CFG08.3**

P:\2019\EOH01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG08a Landscape Plan.dwg by: rkoenig on 11/24/2020 1:58 PM ~ for PRIME AE

NOTE:
FINAL CONCRETE AND PAVING DESIGNS SHALL BE SPECIFIED IN GEOTECHINCAL REPORT TO BE PROVIDED BY CUMBERLAND FARMS. IN ABSENCE OF A GEOTECHNICAL REPORT, CUMBERLAND FARMS SHALL APPROVE FINAL PAVEMENT AND MATERIALS SPECIFICATION, PRIOR TO CONSTRUCTION.



NOTES:
1. THE SOIL MUST HAVE A MOISTURE CONTENT DRY OF OPTIMUM AS DETERMINED BY THE MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D1557.

2. THE SOIL CAN BE COMPACTED TO 98% OF THE MAXIMUM STANDARD PROCTOR DENSITY AS DETERMINED BY THE MOISTURE-DENSITY RELATIONSHIP TEST METHOD ASTM D698.

3. THE SOIL SHALL NOT BE USED IF THE MATERIAL CONTAINS ORGANIC MATTER, RUBBLE, DEBRIS OR ANY OTHER DELETERIOUS MATERIAL.

TYPICAL PAVEMENT SECTION

N.T.S.

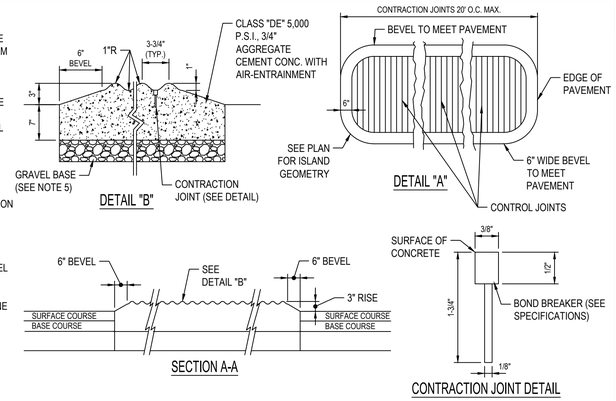
NOTES:

1. CONTRACTION JOINTS ARE TO BE SPACED AT A MAXIMUM OF 20 FEET APART.

2. THE JOINTS ARE TO BE SAWED AND LOCATED IN THE DEPRESSIONS OF THE CORRUGATIONS (SEE DETAIL OF CORRUGATIONS)

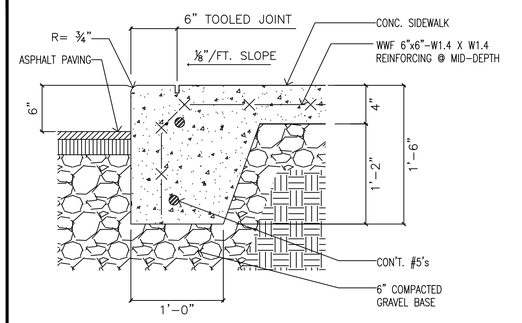
3. END OF CORRUGATED RIDGES TO BE BEVELED.
4. FOR DESCRIPTION OF MATERIAL AND CONSTRUCTION METHODS SEE CONNDOT STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

5. THE DEPTH OF THE GRAVEL IS TO BE SUCH THAT ITS BOTTOM LINE MEETS THE BOTTOM OF THE GRAVEL LINE OF THE CONTIGUOUS PAVEMENT.



SCORED CONCRETE ISLAND

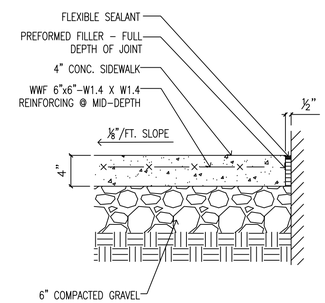
N.T.S.



NOTE:
- BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.

DETAIL @ SIDEWALK & CURB

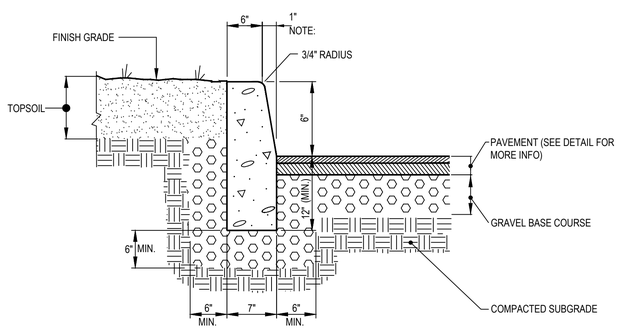
N.T.S.



NOTE:
- BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.

DETAIL @ SIDEWALK / BLD. WALL

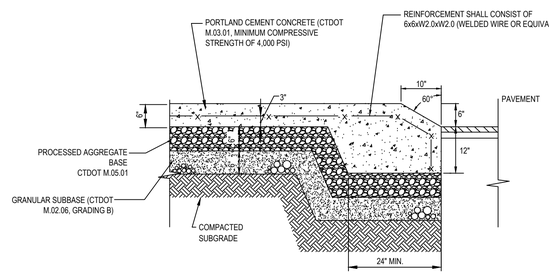
N.T.S.



-CURB SHALL CONSIST OF 4,000 PSI AIR ENTRAINED CONCRETE, EXPOSED EDGES TO HAVE RUBBED FINISH AND SURFACE SHALL BE TREATED WITH A CONCRETE PENETRANT / SEALER.
-THE ENDS OF CURB SECTIONS SHALL BE CHAMFERED 3/4 INCH.
-THE CORNERS OF CURB SECTIONS SHALL MATCH THE ADJACENT CURB IN SIZE, COLOR AND FINISH.
-CURB, CURB CORNERS OR EDGING SHALL BE FITTED TOGETHER AS CLOSELY AS POSSIBLE.
-EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM OF TWENTY FEET (20') ON CENTER USING PREFORMED EXPANSION JOINT FILLER HAVING A THICKNESS OF 1/2 INCH.

CONCRETE CURB DETAIL

N.T.S.



NOTES:

1. SIZE OF PAD TO BE AS INDICATED ON PLANS.

2. CONSTRUCTION JOINTS SHALL BE SPACED NO MORE THAN 10-12 FEET ON CENTER AND SHALL BE EQUALLY SPACED OVER THE LENGTH AND WIDTH OF THE PAD.

3. DOWELS SHALL BE PLACES ACROSS SLAB EXPANSION JOINTS TO LIMIT DIFFERENTIAL SETTLEMENT

4. COMPONENTS SHALL MEET THE CONNECTICUT DEPARTMENT OF TRANSPORTATION (CTDOT) STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCITON FORM 816

5. FINAL CONCRETE AND PAVING DESIGNS SHALL BE SPECIFIED IN GEOTECHINCAL REPORT TO BE PROVIDED BY CUMBERLAND FARMS. IN ABSENCE OF A GEOTECHNICAL REPORT, CUMBERLAND FARMS SHALL APPROVE FINAL PAVEMENT AND MATERIALS SPECIFICATION, PRIOR TO CONSTRUCTION.

MOUNTABLE CONCRETE ISLAND DETAIL

N.T.S.

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
MISCELLANEOUS DETAILS

NO.	REVISIONS	DATE

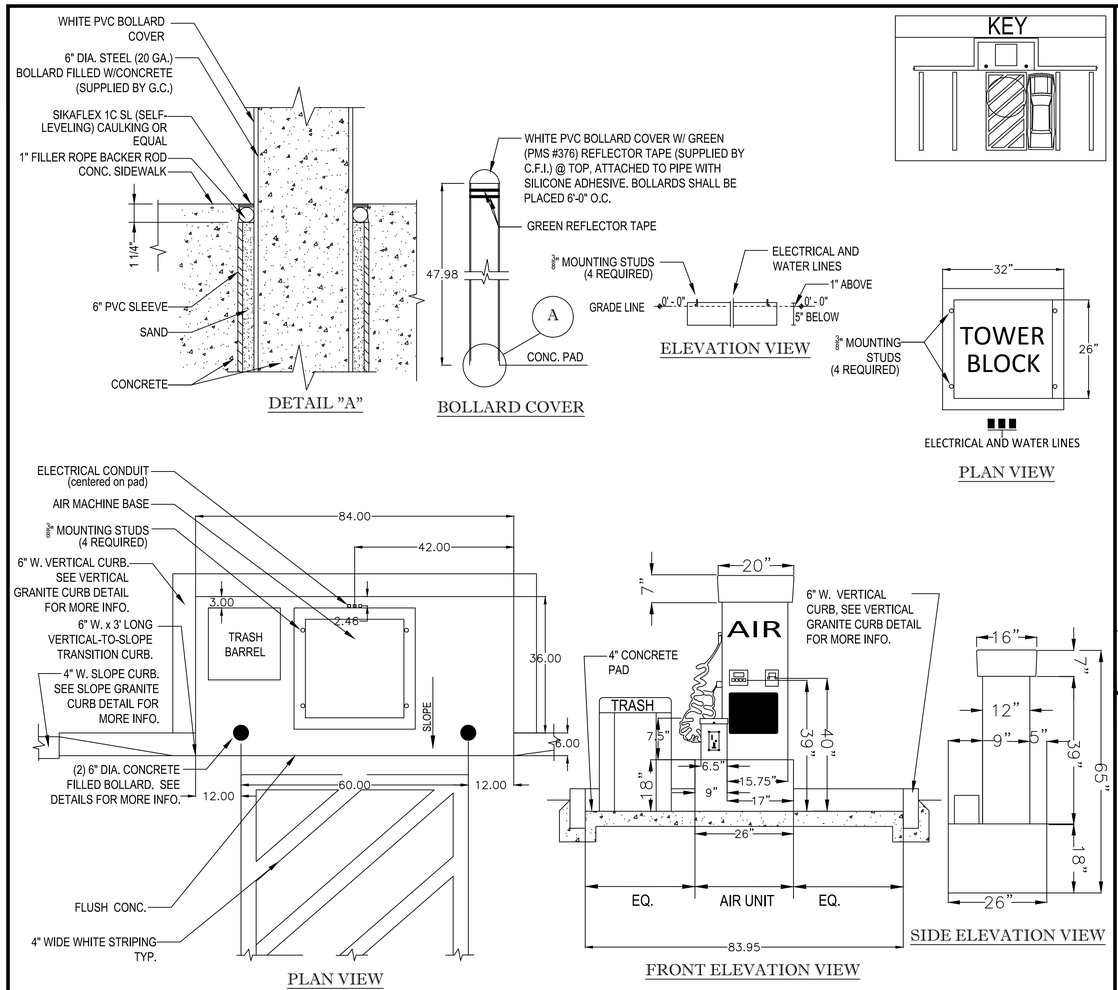
DRAWN BY:	CHECKED BY:
RAK	TER

SCALE: N/A

DATE: 11-10-2020

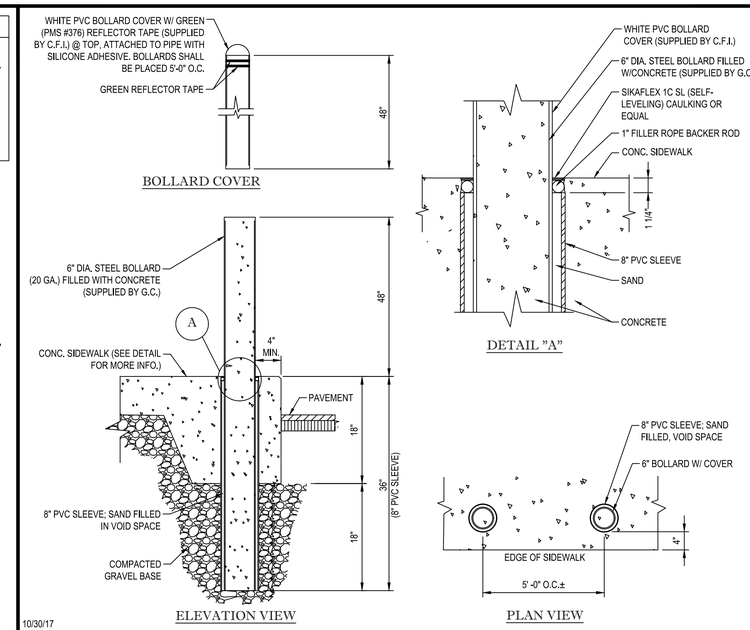
SHEET NO. CFG09.0

P:\2019\E0H01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG09 Construction Details.dwg by: rkoenig on 11/10/2020 2:26 PM ~ for PRIME AE



CSC AIR MACHINE DETAIL

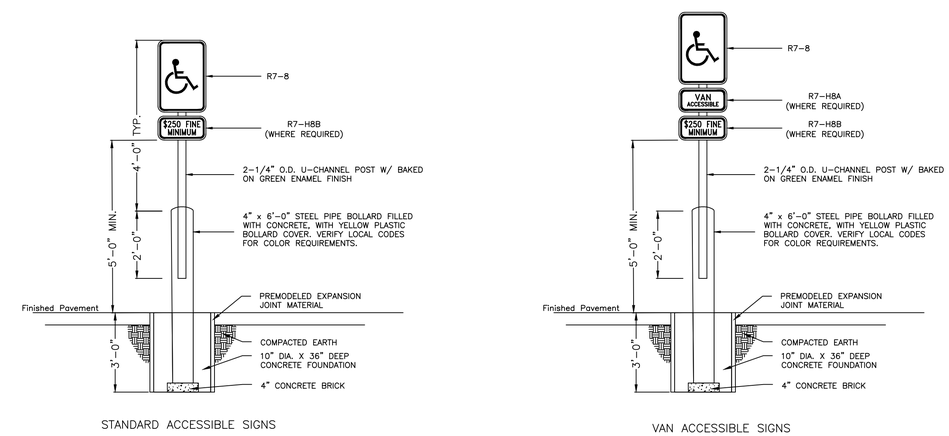
N.T.S.



10/30/17

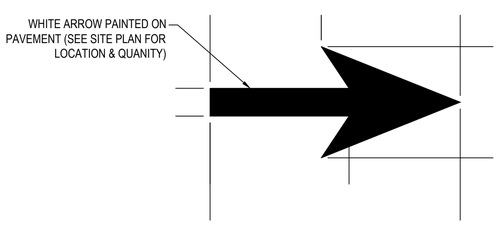
BOLLARD SET IN CONCRETE WALK

N.T.S.



ACCESSIBLE SIGN DETAIL

NOT TO SCALE



NOTE:

ALL PAVEMENT STRIPING AND MARKINGS SHALL CONSIST OF CHLORINATED RUBBER PAINT APPLIED TO A DRY SURFACE WHEN THE TEMPERATURE IS GREATER THAN 40°F. PAINT SHALL BE APPLIED AT A MINIMUM OF 0.015" (15 MIL) FILM THICKNESS

TYPICAL PAINTED ARROW

N.T.S.

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
MISCELLANEOUS DETAILS

NO.	REVISIONS	DATE

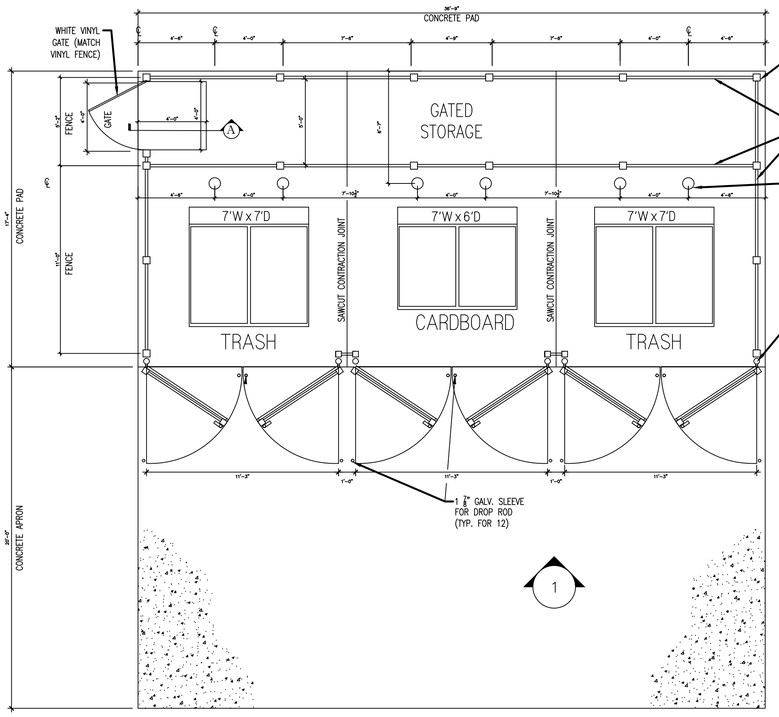
DRAWN BY:	CHECKED BY:
RAK	TER

SCALE: N/A

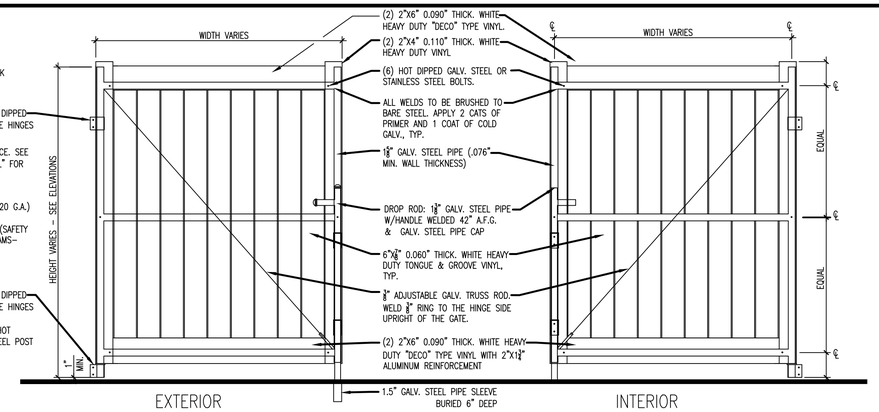
DATE: 11-10-2020

SHEET NO. CFG09.1

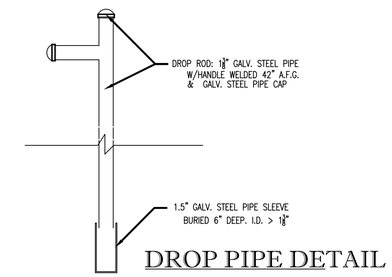
P:\2019\EOH01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG09 Construction Details.dwg by: rkoenig on 11/10/2020 2:26 PM ~ for PRIME AE



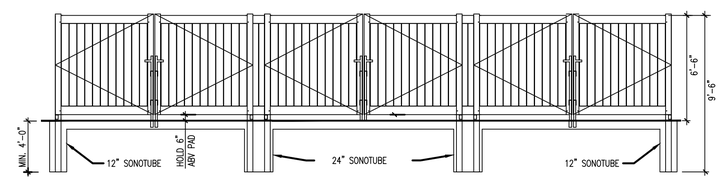
PLAN VIEW



DUMPSTER ENCLOSURE - GATE ELEVATION DETAILS

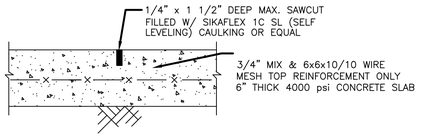


DROP PIPE DETAIL

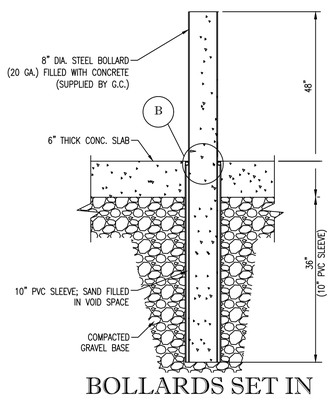


ELEVATION

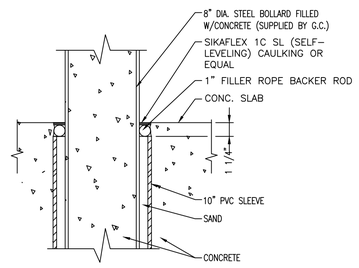
NOTE:
FINAL CONCRETE AND PAVING DESIGNS SHALL BE SPECIFIED IN GEOTECHINCAL REPORT TO BE PROVIDED BY CUMBERLAND FARMS. IN ABSENCE OF A GEOTECHNICAL REPORT, CUMBERLAND FARMS SHALL APPROVE FINAL PAVEMENT AND MATERIALS SPECIFICATION, PRIOR TO CONSTRUCTION.



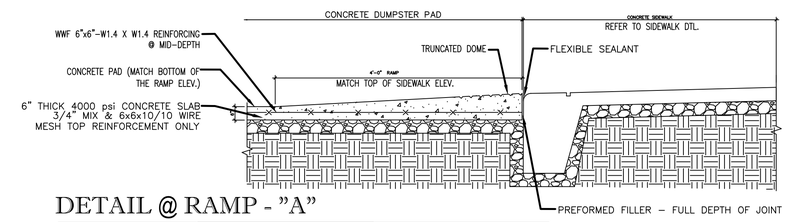
SLAB SECTION



BOLLARDS SET IN CONCRETE



DETAIL "B"



DETAIL @ RAMP - "A"

NOTE:
RAMP IS ONLY REQUIRED WHEN THERE IS A DIFFERENCE IN ELEVATION BETWEEN THE SIDEWALK AND DUMPSTER PAD.

DUMPSTER ENCLOSURE - 36'-9"

N.T.S.

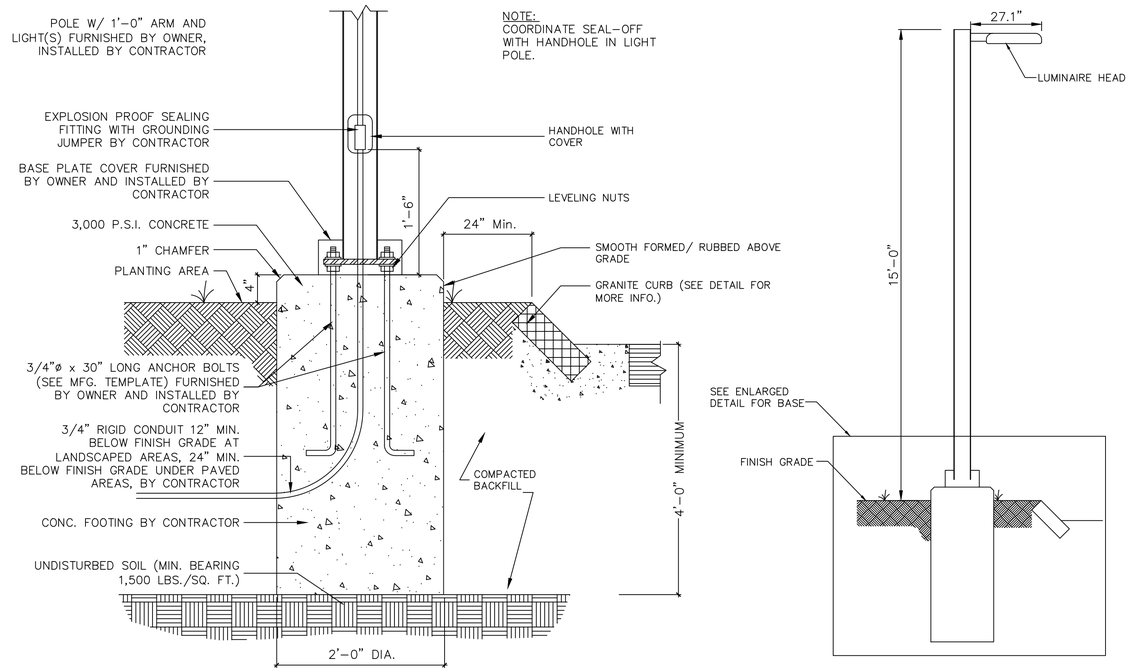
PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
MISCELLANEOUS DETAILS

NO.	REVISIONS	DATE

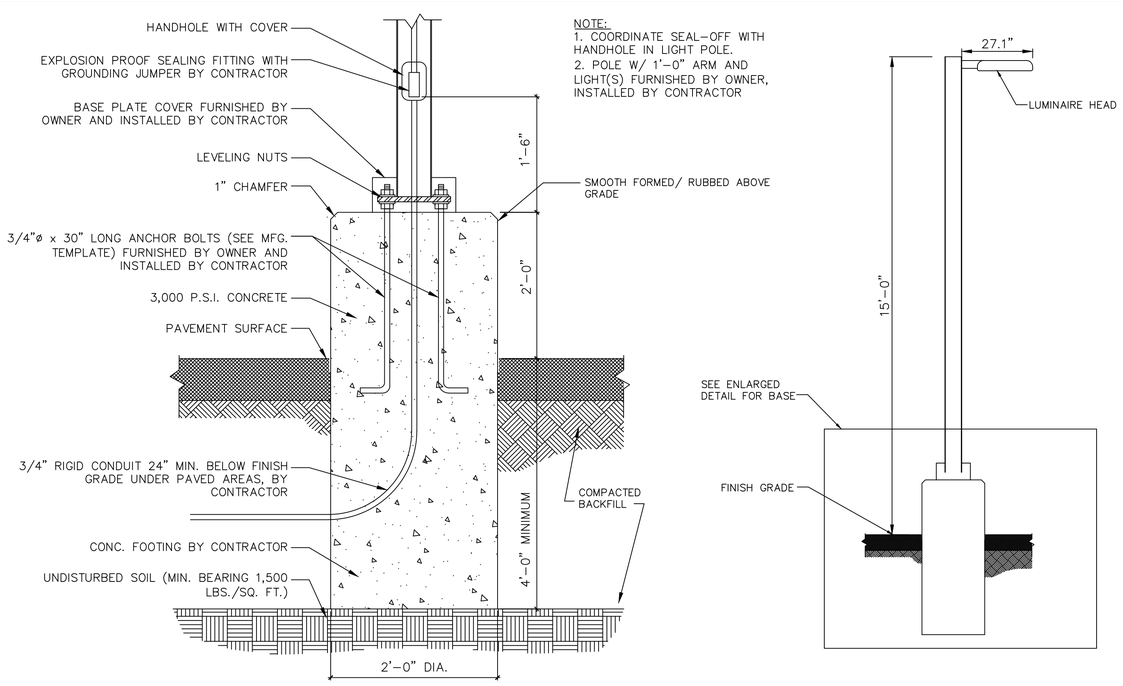
DRAWN BY: RAK
CHECKED BY: TER
SCALE: N/A
DATE: 11-10-2020
SHEET NO. CFG09.2

P:\2019\E0H01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG09 Construction Details.dwg by: rkoenig on 11/10/2020 2:26 PM ~ for PRIME AE



LIGHT POLE DETAIL AT LANDSCAPED AREAS

N.T.S.



LIGHT POLE DETAIL AT PAVED AREAS

N.T.S.

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
MISCELLANEOUS DETAILS

NO.	REVISIONS	DATE

DRAWN BY:	CHECKED BY:
RAK	TER

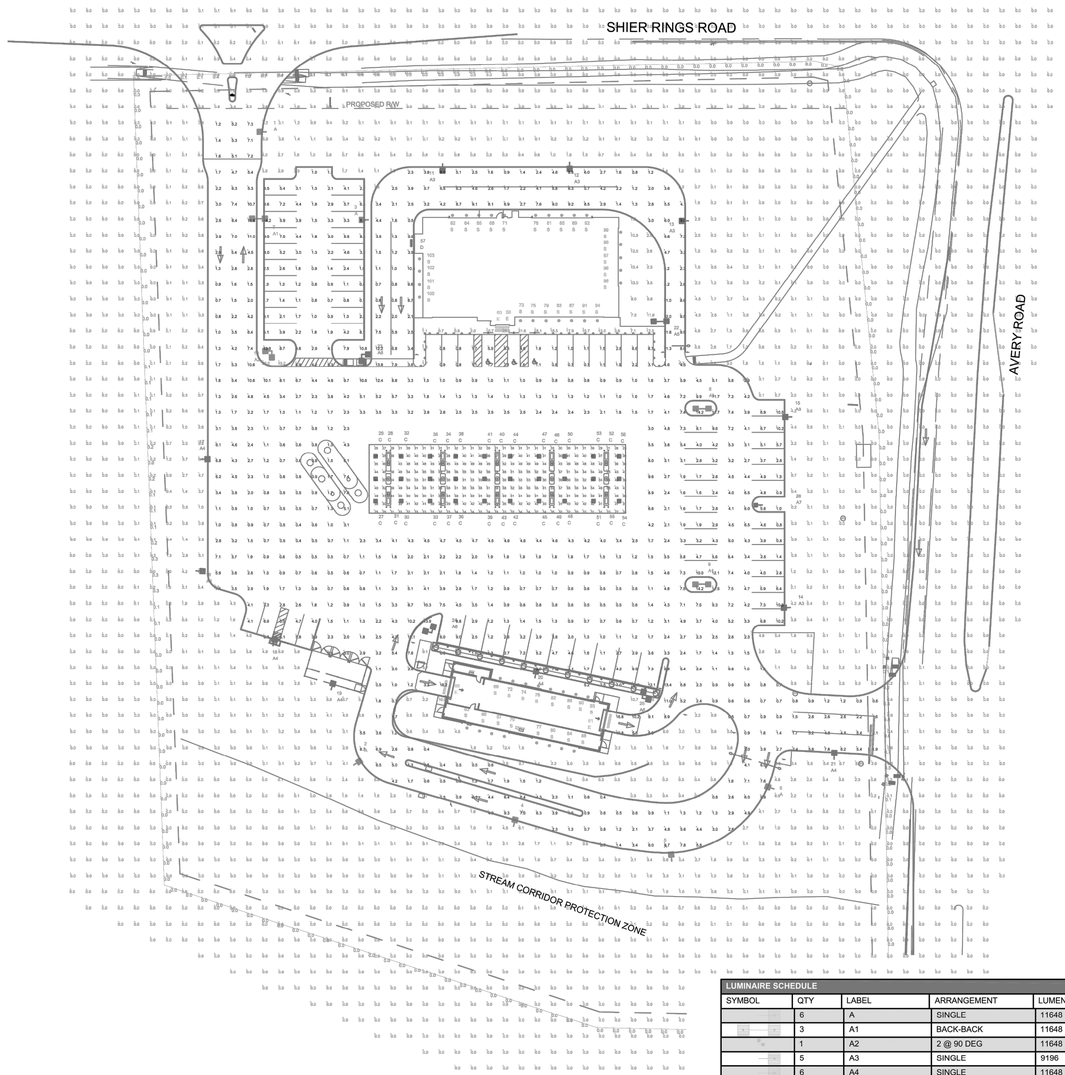
SCALE: N/A

DATE: 11-10-2020

SHEET NO. CFG09.3

P:\2019\EOH01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG09 Construction Details.dwg by: rkoenig on 11/10/2020 2:26 PM ~ for PRIME AE

P:\2019\E0H01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG10 Lighting.dwg by: rkoenig on 11/10/2020 2:43 PM ~ for PRIME AE



red leonard associates
1340 Kemper Meadow Dr. | Cincinnati, OH 45240 | 513-574-9500
www.redleonard.com

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A	15
2	A	15
3	A	15
4	A	15
5	A	15
6	A	15
7	A1	15
8	A1	15
9	A1	15
10	A2	15
11	A3	15
12	A3	15
13	A3	15
14	A3	15
15	A3	15
16	A4	15
17	A4	15
18	A4	15
19	A4	15
20	A4	15
21	A4	15
22	A5	15
23	A6	15
24	A6	15
25	A6	15
26	A7	15
27	C	15
28	C	15
29	C	15
30	C	15
31	C	15
32	C	15
33	C	15
34	C	15
35	C	15
36	C	15
37	C	15
38	C	15
39	C	15
40	C	15
41	C	15
42	C	15
43	C	15
44	C	15
45	C	15
46	C	15
47	C	15
48	C	15
49	C	15
50	C	15
51	C	15

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
52	C	15
53	C	15
54	C	15
55	C	15
56	C	15
57	D	12
58	E	10
59	E	12
60	E	12
61	E	10
62	S	12
63	S	10
64	S	12
65	S	12
66	S	10
67	S	10
68	S	12
69	S	10
70	S	10
71	S	12
72	S	10
73	S	12
74	S	10
75	S	12
76	S	12
77	S	10
78	S	10
79	S	12
80	S	10
81	S	12
82	S	10
83	S	12
84	S	10
85	S	12
86	S	10
87	S	12
88	S	10
89	S	12
90	S	10
91	S	12
92	S	12
93	S	10
94	S	12
95	S	12
96	S	12
97	S	12
98	S	12
99	S	12
100	S	12
101	S	12
102	S	12
103	S	12

NOTES:
- ALL AREA LIGHTS ON NEW 15 FT. POLE.

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
CANOPY	43.20	59	23	1.88	2.57
PAVED AREA	3.52	18.2	0.4	8.80	45.50
PROPERTY LINE	0.06	1.0	0.0	N.A.	N.A.
UNDEFINED	0.46	29.3	0.0	N.A.	N.A.

LUMINAIRE SCHEDULE										
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	6	A	SINGLE	11648	1.030	B3-U0-G3	86	516	Cree Inc	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	3	A1	BACK-BACK	11648	1.030	B3-U0-G3	86	516	Cree Inc	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	1	A2	2 @ 90 DEG	11648	1.030	B3-U0-G3	86	172	Cree Inc	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	5	A3	SINGLE	9196	1.030	B1-U0-G2	86	430	Cree Inc	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9 + OSQ-BLSMF
	6	A4	SINGLE	11648	1.030	B2-U0-G2	86	516	Cree Inc	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	1	A5	BACK-BACK	11648	1.030	B2-U0-G2	86	172	Cree Inc	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	3	A6	2 @ 90 DEG	11648	1.030	B2-U0-G2	86	516	Cree Inc	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	1	A7	SINGLE	8950	1.030	B1-U0-G2	86	86	Cree Inc	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9 + OSQ-BLSMF
	30	C	SINGLE	13251	1.030	B3-U0-G1	134	4020	CREE, INC.	CAN-304-SL-RS-06-E-UL-WH-700-57K-DIM
	1	D	SINGLE	3600	1.000	B2-U1-G1	41	41	Cree Inc	ST3-SF-04-H-40K-L-10V
	4	E	SINGLE	7200	1.000	B3-U1-G1	80	320	Cree Inc	ST3-SF-08-H-40K-L-10V
	42	S	SINGLE	2407	1.030	B2-U0-G0	37.5	1575	Cree Inc	KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA

REV.	BY	DATE	DESCRIPTION
R1	TAS	8/21/2020	UPDATED SITE PLAN
R2	TAS	9/22/2020	REVISED FIXTURE TYPES AND ADDED BUILDING LIGHTS
R3	TAS	10/5/2020	UPDATED SITE PLAN
R4	TAS	11/6/2020	REMOVED SECOND DRIVE THRU LANE
R5	TAS	11/9/2020	UPDATED FIXTURE SCHEDULE

TurkeyHill
EG America
A subsidiary of EG Group

PERSONS USING THIS PROGRAM ARE ADVISED THAT THIS PROGRAM MAY CONTAIN ERRORS WHICH RED LEONARD ASSOCIATES, INC. OR ITS SOFTWARE PROVIDER HAVE NOT OBSERVED. IN ADDITION, THE ACCURACY OF THE RESULTS OF THE LAYOUT OF LIGHTING AND ESTIMATING MATERIAL QUANTITIES IS NOT INTENDED TO REMOVE THE NEED FOR THE USER TO ASSURE THE COMPLETENESS OF ANY BILL OF MATERIAL AND THAT THE LAYOUT OR USE OF LUMINAIRES IS IN FULL ACCORDANCE WITH ALL LOCAL, STATE, OR FEDERAL STATUTES, REGULATIONS OR OTHER RULES OR LAWS. THE INFORMATION OF ANY INSURANCE GROUP, ORGANIZATION OR COMPANY REGARDING LUMINAIRES AND THEIR APPLICATION FOR INFORMATIONAL AND ILLUSTRATION PURPOSES ONLY. ALL PRODUCT, SERVICE AND CORPORATE NAMES ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS. PRODUCT SPECIFICATIONS AND QUANTITIES MAY VARY. THESE DOCUMENTS ARE THE PROPERTY OF RED LEONARD ASSOCIATES, INC. AND ARE TO BE RETURNED UPON REQUEST. ANY REPRODUCTION OF THESE DOCUMENTS BY ANY PERSON OTHER THAN AN AUTHORIZED REPRESENTATIVE OF RED LEONARD ASSOCIATES, INC. IS STRICTLY PROHIBITED.

ILLUMINATION RESULTS SHOWN ON THIS LIGHTING APPLICATION ARE BASED ON PROJECT PARAMETERS PROVIDED BY THE MANUFACTURER LISTED, USED IN CONJUNCTION WITH LUMINAIRE TEST PROCEDURES CONDUCTED UNDER LABORATORY CONDITIONS. ACTUAL PROJECT CONDITIONS DIFFERING FROM THESE PARAMETERS MAY AFFECT FIELD RESULTS. THE CUSTOMER IS RESPONSIBLE FOR VERIFYING COMPLIANCE WITH ANY APPLICABLE ELECTRICAL, LIGHTING, OR ENERGY CODE.

SCALE: 1" = 40'
DWG SIZE: D
LAYOUT BY: FNE
DATE: 5/8/2020

PROJECT NAME:
TURKEY HILL #728
DUBLIN, OH
DRAWING NUMBER:
RL-6783-S1-R5

rla

CFG10.0

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
SITE LIGHTING PLAN

NO.	REVISIONS	DATE

DRAWN BY:	CHECKED BY:
RAK	TER

SCALE: **N/A**

DATE: 11-10-2020

SHEET NO. **CFG10.0**

P:\2019\EOH01ES-19521-Turkey Hill Avery Shire Rings Rd\500-CAD\590-Other\Civil\593-Print Sheets\CFG10 Lighting.dwg by: rkoenig on 11/10/2020 2:43 PM ~ for PRIME AE

PRODUCT	QTY	LABEL	DESCRIPTION
AREA	6	A	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	3	A1	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	1	A2	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9
	5	A3	OSQ-DA-BK-OSQ-A-NM-3ME-B-57K-UL-BK-Q9 + OSQ-BLSMF
	6	A4	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	1	A5	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	3	A6	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9
	1	A7	OSQ-DA-BK-OSQ-A-NM-4ME-B-57K-UL-BK-Q9 + OSQ-BLSMF

PRODUCT	QTY	LABEL	DESCRIPTION
CANOPY	30	C	CAN-304-SL-RS-06-E-UL-WH-700-57K-DIM

PRODUCT	QTY	LABEL	DESCRIPTION
LINEAR	1	D	ST3-SF-04-H-40K-L-10V
	4	E	ST3-SF-08-H-40K-L-10V

PRODUCT	QTY	LABEL	DESCRIPTION
SOFFIT	42	S	KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium

Rev. Date: V24 02/25/2020

Product Description

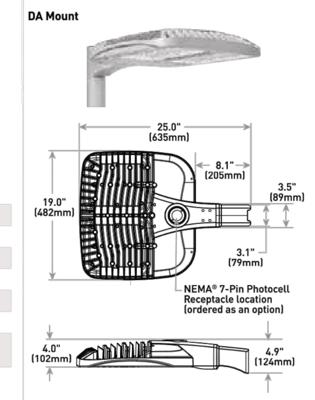
The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. The 'B' Input power designator is a suitable upgrade for HID applications up to 250 Watt, and the 'K' Input power designator is a suitable upgrade for HID applications up to 400 Watt.
Applications: Parking lots, walkways, campuses, car dealerships, office complexes, tunnels, underpasses, and internal roadways

Performance Summary

- Utilizes Cree TrueWhite® Technology on 5000K Luminaires
- NanoOptic® Precision Delivery Grid™ optic
- Assembled in the U.S.A. of U.S. and imported parts
- **Initial Delivered Lumens:** Up to 17,291
- **Efficacy:** Up to 136 LPW
- **CRI:** Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)
- **CCT:** 3000K, 4000K, 5000K, 5700K
- **Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/5 years on Synapse wireless control accessories/1 year on luminaire accessories

† See http://creelighting.com/warranty for warranty terms

DA Mount



Weight
28.9 lbs. (13.1kg)

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** OSQ-B-AASV + **Luminaire:** OSQ-A-NM-2ME-B-40K-UL-SV

Mount (Luminaire must be ordered separately)*	
OSQ-	
OSQ-B-AA Adjustable Arm **OSQ-DA** Direct Arm **OSQ-M-TSP** Transportation Mount (stainless steel; do not specify color) **OSQ-TM** Trunnion Mount	**Color Options:** **SV** Silver **BZ** Bronze **BK** Black **WH** White

* Reference EPA and pole configuration suitability data beginning on page 9

Luminaire (Mount must be ordered separately)

Product	Version	Mounting	Optic	Input Power Designator	CCT	Voltage	Color Options	Options
OSQ	A	NM						
OSQ	A	**NM** No Mount	**Asymmetric:** **2ME*** Type II Medium; **3ME*** Type III Medium; **4ME*** Type IV Medium. **Symmetric:** **5ME** Type V Medium; **5SH** Type V Short; **WSN** Wide Sign; **15D** 15° Flood; **25D** 25° Flood; **40D** 40° Flood; **60D** 60° Flood	**B** 86W; **K** 130W; **Z** 53W	**30K** 3000K, 70 CRI; **40K** 4000K, 70 CRI; **50K** 5000K, 90 CRI; **57K** 5700K, 70 CRI	**UL** Universal 120-277V; **UH** Universal 347-480V - Available with B & K Input Power Designators only	**BK** Black; **BZ** Bronze; **SV** Silver; **WH** White	**PML** Programmable Multi-Level, up to 40' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt; **PML2** Programmable Multi-Level, 10-30' Mounting Height - Refer to PML spec sheet for details - Intended for downlight applications at 0° tilt; **Q9/Q6/Q5/Q4/Q3/Q2/Q1** Field Adjustable Output - Must select Q9, Q6, Q5, Q4, Q3, Q2, or Q1 - Offers full range adjustability - Refer to pages 11-12 for power and lumen values - Available with B & K Input Power Designators only - Not available with PML or PML2 options; **R** NEMA® 7-Pin Photocell Receptacle - 7-pin receptacle per ANSI C136.41 - Intended for downlight applications with maximum 45° tilt - Factory connected 0-10V dim leads - 18" (457mm) seven-conductor cord exits luminaire - Requires photocell or shorting cap by others; **RL** Rotate Left - LED and optic are rotated to the left - Refer to RR/RL configuration diagram on page 13 for optic directionality; **RR** Rotate Right - LED and optic are rotated to the right - Refer to RR/RL configuration diagram on page 13 for optic directionality

* Available with Backlight Shield when ordered with field-installed accessory (see table above)

CREE TRUEWHITE TECHNOLOGY — CREE LIGHTING

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium

Product Specifications

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS
- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high-performance heat sink
- Convenient interlocking mounting method on direct arm mount. Mounting adaptor is rugged die cast aluminum and mounts to 3" (76mm) or larger square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers
- Mounting for the adjustable arm mount adaptor is rugged die cast aluminum and mounts to 2" (51mm) IP, 2.375" (60mm) O.D. tenon
- Adjustable arm mount can be adjusted 180° in 2.5° increments
- Transportation mount is constructed of 316 stainless steel and mounts to surface with (4) 3/8" fasteners by others
- Trunnion mount is constructed of A500 and A1011 steel and is adjustable from 0-180° in 15° degree increments. Trunnion mount secures to surface with (1) 3/4" bolt or (2) 1/2" or 3/8" bolts
- Includes 18" (340mm) 18/5 or 16/5 cord exiting the luminaire. When ordered with R option, 18" (340mm) 18/7 or 16/7 cord is provided
- Designed for uplight and downlight applications
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, and white are available
- **Weight:** OSQ-DA: 28.9 lbs. (13.1kg); OSQ-B-AA: 28.4 lbs. (12.9kg); OSQ-M-TSP: 42 lbs. (19.1kg); OSQ-TM: 32.6 lbs. (14.8kg)

ELECTRICAL SYSTEM
- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Consult factory if in-luminaire fusing is required
- Designed with 0-10V dimming capabilities. Controls by others
- Refer to Dimming spec sheet for details
- **Maximum 10V Source Current:** 1.0mA

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without R option
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards with AA, DA, TM, and TSP mounts
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- DLC and DLC Premium qualified versions available with 70 CRI. Some exceptions apply. Please refer to https://www.designlights.org/search/ for most current information
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and direct or transportation mounts only. Please refer to https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/ for most current information
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

SYNAPSE® SIMPLYSNAP INTELLIGENT CONTROL
The Synapse SimplySNAP platform is a highly intuitive connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based interface that runs on smartphones, tablets, and PCs. The Twist-Lock Lighting Controller (TL7-B2) and Site Controller (SS450-002) take the OSQ Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

Electrical Data*

Input Power Designator	System Watts 120-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
B	86	0.73	0.43	0.37	0.32	0.25	0.19
K	130	1.09	0.65	0.56	0.49	0.38	0.28
Z	53**	0.46	0.26	0.22	0.19	N/A	N/A

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/-10%
** Available with UL voltage only

OSQ Series Ambient Adjusted Lumen Maintenance[1]

Ambient	Optic	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Reported[2] LMF	100K hr Reported[2] LMF
5°C (41°F)	Asymmetric	1.04	1.03	1.01	0.99	0.97
	Symmetric	1.05	1.04	1.03	1.03	1.02
10°C (50°F)	Asymmetric	1.03	1.02	1.00	0.98	0.96
	Symmetric	1.04	1.03	1.02	1.01	1.00
15°C (59°F)	Asymmetric	1.02	1.01	0.99	0.97	0.95
	Symmetric	1.02	1.02	1.01	1.00	0.99
20°C (68°F)	Asymmetric	1.01	1.00	0.98	0.96	0.94
	Symmetric	1.01	1.01	1.00	0.99	0.98
25°C (77°F)	Asymmetric	1.00	0.99	0.97	0.95	0.93
	Symmetric	1.00	0.99	0.98	0.98	0.97

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

Accessories

Field-Installed			
Backlight Shield OSQ-BLSMF - Front facing optics; OSQ-BLSMR - Rotated optics	**Hand-Held Remote** XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	**Bird Spikes** OSQ-MED-BRDSPK	**Shorting Cap** XA-XSLSHRT

Synapse Wireless Control Accessories	
Twist-Lock Lighting Controller TL7-B2 - Suitable for 120-277V (UL) voltage only - Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle - Not for use with PML or Q options - Provides On/Off switching, dimming, power metering, digital sensor input, and status monitoring of luminaires. **SimplySNAP Central Base Station** CBSSW-450-002 - Includes On-Site Controller (SS450-002) and 5-button switch - Indoor and Outdoor rated	**SimplySNAP On-Site Controller** SS450-002 - Verizon® LTE-enabled - Designed for indoor applications. **Building Management System (BMS) Gateway** BMS-GW - Required for BACNET integration. **Outdoor Antennas (Optional, for increased range, 8dB gain)** KIT-ANT420SM - Kit includes antenna, 20' cable and bracket; KIT-ANT360 - Kit includes antenna, 30' cable and bracket; KIT-ANT600 - Kit includes antenna, 50' cable and bracket

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

304 Series™

LED Recessed Canopy Luminaire

Product Description

Luminaire housing is constructed from rugged die cast aluminum components (RS Mount) or die cast and extruded aluminum components (RD Mount). LED driver is mounted in a sealed weathertight center chamber that allows for access from below the fixture. Luminaire mounts directly to the canopy deck and is secured in place with die cast aluminum trim frame. Luminaire housing is provided with factory applied foam gasket that provides a watertight seal between luminaire housing and canopy deck. Suitable for use in single or double skin canopies with 16" (406 mm) wide panels. Designed for canopies of 19-22 gauge (maximum 0.040" (1 mm) thickness).
Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

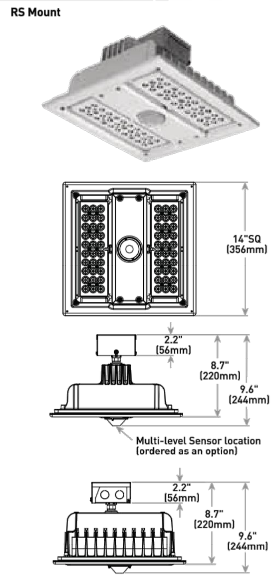
- Patented NanoOptic® Product Technology
- Assembled in the U.S.A. of U.S. and imported parts
- **CRI:** Minimum 70 CRI
- **CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard
- **Limited Warranty†:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

† See http://lighting.cree.com/warranty for warranty terms

Accessories

Field-Installed
Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

RS Mount



Weight
22.0 lbs. (9.9kg)

Ordering Information

Example: CAN-304-5M-RS-04-E-UL-SV-350

Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
CAN-304				E				
CAN-304	**5M** Type V Medium; **5S** Type V Short; **PS** Petroleum Symmetric; **SL** Sparkle Petroleum	**RS** Recessed Single Skin; **RD** Recessed Double Skin	**04**; **06**	**E**	**UL** Universal 120-277V; **UH** Universal 347-480V	**BK** Black; **BZ** Bronze; **SV** Silver; **WH** White	**350** 350mA; **525** 525mA; **700*** 700mA	**DIM** 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current; **F** Fuse - When code dictates fusing use time delay fuse - Refer to PML spec sheet for availability with PML options; **PML** Programmable Multi-Level - Refer to PML spec sheet for details; **40K** 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

* 60 LED luminaire requires marked spacing: 48" x 24" x 6" (1,219mm x 610mm x 152mm); 48" (1,219mm) center-to-center of adjacent luminaires, 24" (610mm) luminaire center to side building member, 6" (152mm) top of luminaire to overhead building member

Rev. Date: V2 10/26/2018

US: lighting.cree.com T (800) 236-6800 F (262) 504-5415
Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

CREE

304 Series™ LED Recessed Canopy Luminaire

Product Specifications

CONSTRUCTION & MATERIALS
- RS Mount luminaire housing is constructed from rugged die cast aluminum and incorporates integral, high performance heatsink fins specifically designed for LED canopy applications
- RD Mount luminaire housing is constructed from rugged die cast aluminum and features high performance extruded aluminum heatsinks specifically designed for LED canopy applications
- LED driver is mounted in a sealed weathertight center chamber that allows for access from below the luminaire
- Field adjustable drive current between 350mA, 525mA and 700mA on Non-IC rated luminaires
- Luminaire housing provided with factory applied foam gasket and provides for a watertight seal between luminaire housing and canopy deck
- Mounts directly to the canopy deck and is secured in place with a die cast aluminum trim frame
- RS mount includes integral junction box which allows ease of installation without need to open luminaire
- Suitable for use in single (RS Mount) or double (RD Mount) skin canopies with 16" (406mm) wide panels
- Designed for canopies of 19-22 gauge (maximum 0.040" (1mm) thickness)
- See 228 Series™ canopy luminaires for canopies using 12" (305mm) deck sections
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available

ELECTRICAL SYSTEM
- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral weathertight electrical box with terminal strips (12Ga-20Ga) for easy power hookup
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **10V Source Current:** 0.15mA

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus Listed
- Suitable for wet locations
- Meets FCC Part 15 standards for conducted and radiated emissions
- Enclosure rated IP66 per IEC 60529
- 10kV surge protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- DLC qualified when ordered with PS or SL optics and 525 or 700mA drive current. Please refer to www.designlights.org/QPL for most current information
- RoHS Compliant. Consult factory for additional details
- Meets Buy American requirements within ARRA
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
350mA							
04	46	0.39	0.24	0.22	0.21	0.15	0.12
06	69	0.57	0.34	0.30	0.27	0.21	0.16
525mA							
04	71	0.59	0.35	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
700mA							
04	94	0.79	0.46	0.40	0.36	0.28	0.21
06	135	1.14	0.65	0.57	0.50	0.40	0.29

* Electrical data at 25°C (77°F)

304 Series™ Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial LMF	25K hr Projected[2] LMF	50K hr Projected[2] LMF	75K hr Calculated[3] LMF	100K hr Calculated[3] LMF
5°C (41°F)	1.04	0.99	0.97	0.95	0.93
10°C (50°F)	1.03	0.98	0.96	0.94	0.92
15°C (59°F)	1.02	0.97	0.95	0.93	0.91
20°C (68°F)	1.01	0.96	0.94	0.92	0.90
25°C (77°F)	1.00	0.95	0.93	0.91	0.89

[1] Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions
[2] In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)
[3] In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip)

US: lighting.cree.com T (800) 236-6800 F (262) 504-5415
Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

CREE

Stylus™ Linear Series

Stylus™ LED Surface Specification Grade Luminaire

Rev. Date: V5 05/05/2020

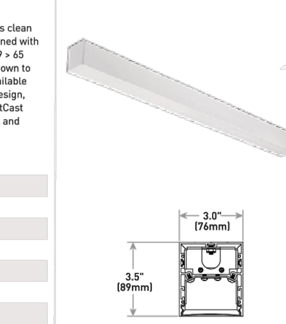
Product Description

The Stylus Linear Series is a full range linear specification portfolio. Its sleek minimalistic design provides clean uniform lines of light for any application such as: offices, healthcare, education and interior design. Designed with Cree TrueWhite® Technology, the Stylus Linear Series offers premium color quality with a CRI > 90 and R9 > 65 ideal for optimally displaying objects like produce, fabric, and artwork. With smooth full-range dimming down to 1%, the Stylus Linear Series allows each space with the appropriate light level needed for any activity. Available in up to 72 feet of continuous rows of seamless light in two-foot increments. Being versatile for lighting design, it is configurable in straight linear rows or geometric patterns, and compatible with Cree Lighting's SmartCast Technology, Lutron Vive, and Lutron EcoSystem controls systems. Specifiable in three colors: white, black and graphite, the Stylus Linear Series is perfect for any application.
Applications: Surface applications for new construction and upgrade

Performance Summary

- Utilizes Cree TrueWhite® Technology (90 CRI)
- **Initial Delivered Lumens:** 400-1,150 lumens per foot
- **Efficacy:** Up to 119 LPW
- **CRI:** 90+ CRI Standard, Optional 80+ CRI
- **R9:** > 65 (90 CRI)
- **CCT:** 3000K, 3500K, 4000K
- **Input Voltage:** 120-277 VAC or 347 VAC
- **L_{70} Lifetime:** > 100,000 hours at 35°C
- **Limited Warranty†:** 10 years on luminaire; 5 years on SmartCast® and Lutron controls; up to 5 years for SmartCast® accessories
- **Limited Warranty Emergency Back Up (EB) Battery and Generator Transfer Device:** 1 Year. Test regularly in accordance with local codes
- **Dimensions with End Caps:** H 3.5" (89mm) x W 3.0" (76mm) x L up to 72.25' (22.02m)
- **Weight:** 2.6 LB/FT (1.2kg)
- **Dimming:** 0-10V dimming to 1%, DALI dimming to 5%, SmartCast® Technology dimming to 5%, Lutron EcoSystem dimming to 5%, Lutron Vive dimming to 5%
- Assembled in the U.S.A. of U.S. and imported parts

† See http://creelighting.com/warranty for warranty terms. For SmartCast accessories, consult SmartCast spec sheets for details on warranty terms.



Accessories

Field-Installed		
SmartCast® Technology Configuration Tool CCT-CWC-1 - One required per project when SC5 control is selected; **SmartCast® Technology Face Plates** CFP-1-WH - Matching face plate, 1-gang, white; CFP-2-WH - Matching face plate, 2-gang, white; CFP-3-WH - Matching face plate, 3-gang, white	**SmartCast® Technology Wireless Dimmer** CWD-CWC-WH; **SmartCast® Technology Wireless Switch** CWS-CWC-WH; **SmartCast® Technology Wireless Plug Load Controller** CPLC-JB-CWC; **SmartCast Touchscreen Control** CSC-TS-A-BK	**SmartCast Wireless Gateway with Wi-Fi** CSC-GW-CWC-W - Required with SmartCast; **Touchscreen Control SmartCast Wall Plug Power Supply** CSC-WPS-120V - For use with SmartCast Wireless Gateway with Wi-Fi; **SmartCast 10V Zone Controller** CSC-ZC-10V-CWC - Intelligent sensing and control of 0-10V luminaires

Ordering Information

Example: ST3-SF-02-L-30K-L-10V-WH

Product	Mount	Length	Plan*	Downlight Output	CRI	CCT	Voltage	Downlight Option	Controls	Color	Options
ST3	SF										
ST3 Stylus 3" Linear	**SF** Surface Mount	**02** - 2' increments up to 72'	**Blank** Linear; **S_** Square; **R_X_** Rectangle; **U_X_X_** U Shape; **L_X_** L Shape; **C_** Custom	**L** Low (90 CRI 400 Lumens/FT & 80 CRI 510 Lumens/FT); **M** Medium (90 CRI 650 Lumens/FT & 80 CRI 830 Lumens/FT); **H** High (90 CRI 900 Lumens/FT & 80 CRI 1150 Lumens/FT)	**Blank** 90 CRI; **8** 80 CRI	**30K** 3000K; **35K** 3500K; **40K** 4000K	**Blank** 120-277 Volt; **34** 347 Volt	**L** Lambertian; **W** Wall Wash / Asymmetric Optic	**10V** 0-10V dimming to 1%; **DAL** DALI dimming to 5% - Not available with 2' lengths or 347V; **SC5** SmartCast Wireless control and integral sensors. - Dimming to 5% - Not available in 2' lengths; **LDE5** Lutron EcoSystem (5-Series EcoSystem Driver 5% Dimming); **VDO** Lutron Vive (5% Dimming) - Not available in 2', 10', and 12' section lengths - Not available for corners	**WH** White; **BK** Black; **GR** Graphite	**EB** 10W Emergency Battery Backup** - 120-277V only - Standard 1EB/Run; for additional emergency units per run, consult sales - Illuminates first 4' of fixture - Not available in 2' fixtures; **GT** Generator Transfer Device** - 120/277V only - Not available in 2' fixtures

* Refer to page 3 for Plan Diagram for Corners.
** GT and EB cannot be used together.

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

Stylus™ LED Surface Specification Grade Luminaire

Product Specifications

SMARTCAST® TECHNOLOGY
SmartCast® Technology is the most intuitive and easiest to install intelligent light solution on the market. SmartCast® Technology delivers up to 70% energy savings at up to half the cost of other solutions. Luminaires combine best-in-class light with onboard sensors and intelligence to deliver a better light experience. Extreme energy productivity, code compliance and a better light experience without any extra design, installation or setup work.

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS
- 6063 marine grade extruded aluminum housing
- Matte acrylic lens
- Bead suspended acrylic lens
- Textured powder coat paint with a matte white, black or graphite finish
- Includes one 5/8" mounting hole at each end of the luminaire, and a 1-1/2" plugged hole in the center for wiring
- End caps are extruded aluminum and come installed on individually mounted luminaires (2'-12')
- One set of end caps is included to accommodate runs from 14'-72'
- Continuous rows include quick connect wiring harnesses for ease of installation. Alignment pins between luminaires create seamless appearance and straighter rows
- **Weight:** 2.6 lbs./ft.; for GTD, add 0.50 lbs. each; for EB, add 2.8 lbs. each

OPTICAL SYSTEM
- Multiple lumen intensities to provide the correct level of illumination within each space
- High efficiency diffuser designed to minimize glare and provide uniform light distribution

ELECTRICAL SYSTEM
- **Power Factor:** > 0.9 at full load
- **Input Power:** Stays constant over life
- **Input Voltage:** 120-277V or 347V, 50/60Hz
- **Operating Temperature Range:** -20°C - +35°C (-4°F - +95°F); minimum operating temperature with EB14 option is 0°C (32°F)
- **Total Harmonic Distortion:** < 20% at full load

10V DIMMING AND CONTROL
- Continuous dimming to 1% with 0-10V DC control protocol
- **10V Source Current:** 0.60mA maximum up to 12'
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Reference www.creelink.com/exLink.asp?70982140Z58R34I26620963 for recommended dimming controls and wiring diagrams
- Luminaires with DALI, SmartCast, Lutron EcoSystem and Lutron Vive dim to 5%

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus listed
- Suitable for damp locations
- Designed for indoor use only
- Suitable for continuous row mounting
- Not intended for use in environments containing airborne corrosive agents such as chemical solvents, cleaners, or cutting fluids
- UL924 (EB option). Maximum mounting height: 15.0' (4.6m)
- RoHS compliant. Consult factory for additional details
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Meets Buy American requirements within ARRA
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

SmartCast® Technology

INTEGRAL MOTION SENSOR
- Passive infrared (PIR)
- Coverage area: Please refer to the PIR motion sensor coverage table
- Not intended to be mounted higher than 20 ft.
- **Operation:**
  - Grouped with a wall control: Luminaire will operate in vacancy mode (manual-on/auto-off)
  - Not grouped with a wall control: Luminaire will operate in occupancy mode (auto-on/auto-off)
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Configuration Tool

AMBIENT LIGHT SENSOR
- Sensor response matches response of human eye
- Not intended to be mounted higher than 20 ft. (6.1m)
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Configuration Tool
- Daylight harvesting calibration performed automatically during OneButton™ Setup

INTEGRAL ENVIRONMENTAL SENSOR
The sensor enables multiple Internet of Things applications based on SmartCast API.
- T, P and H: The sensor allows measurement of temperature, pressure and humidity outside the device.

Sensor	Operating Range (For 0-35C)
Temperature	0-35C
Humidity	10-90% r.H.
Pressure	200hPa-1100hPa

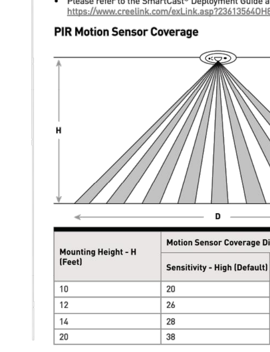
- Indoor-air-quality: The VOC-gas sensor is capable of measuring the sum of VOCs/contaminants in the surrounding air. Sensing applications include - outgassing from paint, garbage, high VOC levels due to exhaled breath and/or sweating. The data is reported in indoor air quality index *IAQ) ranging from 0 (clean air) to 500 (heavily polluted air).

INTEGRAL WIRELESS COMMUNICATION
- 2.4GHz wireless mesh technology with AES 128-bit encryption
- Self assigns to quietest channel during OneButton™ Setup
- **Range:**
  - 30 ft. (9.1m) in typical commercial applications
  - 300 ft. (91.4m) open air without obstructions
- **Network:** 250 devices max.
- **Space:** 100 devices max. per group
- FCC and IC certifications

LUMINAIRE
- Luminaires operate at full intensity until OneButton™ Setup is initiated by the Cree Configuration Tool
- Independent wireless control of direct and indirect lights through SmartCast wall dimmers and SmartCast Touchscreen
- 10-year power fail memory of settings

DEPLOYMENT
- Please refer to the SmartCast® Deployment Guide at https://www.creelink.com/exLink.asp?23613564OH88E44I39771048

PIR Motion Sensor Coverage



Mounting Height - H (Feet)	Motion Sensor Coverage Diameter - D (Feet): Sensitivity - High (Default)	Sensitivity - Medium	Sensitivity - Low
10	20	10	8
12	26	14	12
14	28	15	13
20	38	Not Recommended	Not Recommended

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

KR Series

KR6™ LED Specification Downlight – Round 6"

Rev. Date: V14 03/10/2020

Product Description

The KR6™ LED specification downlight features Cree TrueWhite® Technology and delivers beautiful, high-quality light with efficacy up to 76 lumens per watt. Designed for new construction applications, the KR Series is available in a variety of color temperatures, round and square trims with high-quality anodized aluminum reflector finishes, a sloped ceiling adaptor accessory, and a variety of dimming options including Cree Lighting's Sunset Dimming Technology which provides rich, warm light that transitions from 2700K to 1800K as naturally as an incandescent source.

Performance Summary

- Utilizes Cree TrueWhite® Technology
- **Initial Delivered Lumens:** 700-5,300 lumens; Delivered lumen output is typical when using a SSGC type reflector
- **Input Power:** 13-87 watts
- **Emergency Performance:** Up to 1,210 Lumens; 10W; Minimum 90 Minutes
- **CRI:** 90
- **CCT:** 2700K, 3000K, 3500K, 4000K, 5000K
- **Controls:** Triac Dimming to 5%, 0/1-10V Dimming to 10%, and Lutron EcoSystem® Dimming to 1%
- **Limited Warranty†:** 10 years on KR6™ luminaire/1 year on accessories
- **Limited Warranty Emergency Back Up (EB) Battery:** 1 Year Battery Back Up. Test regularly in accordance with local codes

† See http://creelighting.com/warranty for warranty terms

Accessories

Field-Installed		
Sloped Ceiling Adaptor KRKS6**WW ** 0-35 (order in 5 degree increments)	**C-Channel Hanger Bars** RBH30C - Pair of 30" (762mm) rigid 3/4" x 1/2" (19mm x 13mm) C-Channel bars; RBH24C-1 - Pair of 24" (610mm) x 1-1/2" (38mm) x 1/2" (13mm) standard C-Channel bars	**T-Bar Clips** RARC7 - Set of four - For use with RBH24C-1 hanger bars; **Beauty Ring** KR6TA - White beauty ring to cover pan head fasteners on KR6T reflector

Ordering Information

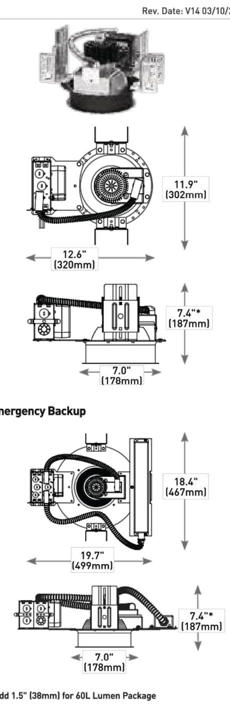
Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Housing:** KR6-20L-35K-120V-10V + **Reflector:** KR6T-SSGC-FF

Reflector (Housing must be ordered separately)

Series	Reflector Finish	Flange Finish	Options
KR6T			
KR6T Standard Trim - Reflector attaches to housing with pan head fasteners and keyhole slots	**SSGC** Soft Satin Glow, Clear	**FF** Matches Reflector; **WF** White Paint	**WW** Wall Wash

Housing (Reflector must be ordered separately)

Series	Size	Reflector	Lumen Package	Optic	CCT	Voltage	Controls	Options
KR6								
KR	**6** 6 inch	**Blank** Round	**9L** 13W, 700 Lumens – 54 LPW; **13L** 18W, 1,100 Lumens – 61 LPW; **20L** 30W, 1,700 Lumens – 57 LPW; **30L** 39W, 2,550 Lumens – 65 LPW; **40L** 44W, 3,350 Lumens – 76 LPW; **60L** 87W, 5,300 Lumens – 61 LPW - Available on 120V and 277V only	**Blank** 70° Beam Angle	**27K** - 2700K - 9L thru 40L only; **30K** 3000K; **35K** 3500K; **40K** 4000K; **50K** 5000K - Available on 40L and 60L only	**120V** 120 Volts; **277V** 277 Volts; **347V** 347 Volts	**Blank** - For standard control offering refer to control availability chart on page 4; **10V** 0/1-10V Dimming - Refer to control availability chart on page 4; **LES** Lutron EcoSystem® Dimming - Refer to control availability chart on page 4	**WD** Sunset Dim - 9L and 13L @ 27K with Triac Dimming only; **EB7** Emergency Backup - Minimum 90 minutes - 120V, 277V only - Minimum operating temperature: 0°C (32°F)



* Add 1.5" (38mm) for 60L Lumen Package

US: creelighting.com T (800) 236-6800
Canada: creelighting-canada.com T (800) 473-1234

CREE LIGHTING

KR6™ LED Specification Downlight – Round 6"

Product Specifications

CREE TRUEWHITE® TECHNOLOGY
A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIAL
- Low brightness parabolic spun Alzak aluminum cone, 0.06" (2mm) thick with polished radius and continuous self-flange
- Soft Satin Glow Clear finish, standard
- 2" (51mm) aperture throat to accommodate all standard and up to 3" (76mm) thick ceilings and provide flexibility in mounting within grid
- Provided with quick mounting brackets for optional carrying channels
- Light engine, optics, and driver accessible from below ceiling

ELECTRICAL SYSTEM
- **Power Factor:** > 0.9 for 120V and 277V
- **Total Harmonic Distortion:** < 20% at full load
- **Input Power:** 120, 277V, or 347V, 50/60Hz
- **Operating Temperature Range:** -18°C - +40°C (0°F - +104°F); minimum operating temperature with EB7 option is 0°C (32°F)
- **10V Source Current:** 9L & 13L: 0.15mA; 20L-40L: 2.2mA; 60L: 0.11mA

CONTROLS
- For standard control offering refer to control availability chart on page 4
- Triac dimming to 5%
- Continuous dimming to 10% with 0-10V DC control protocol
- **10V Source Current:** 9L & 13L: 0.15mA; 20L-40L: 2.2mA
- For use with Class 2 dimming systems only
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- Lutron EcoSystem® Dimming to 1%
- Reference http://creelighting.com/products/indoor/new-construction-downlights/kr-series for recommended dimming controls and wiring diagrams

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus Listed
- Suitable for thru-wiring 8#12AWG-90°C
- Suitable for damp locations
- Designed for indoor use only
- Thermally protected Type NON-IC in accordance with Article 410 of the NEC and UL 1598
- Requires minimum 90°C supply conductors
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- EnergyStar® certified with the exception of 9L, 13L and 50K CCT. Please refer to https:www.energystar.gov/productfinder/product/certified-light-fixtures/results for most current information
- RoHS compliant. Consult factory for additional details
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

KR Series Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial Delivered Lumens	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Estimated[3] LMF	100K hr Estimated[3] LMF
5°C (41°F)	9L, 13L	1.04	1.04	1.04	1.04	1.04
	20L	1.04	1.04	1.04	1.04	1.04
	30L	1.04	1.03	1.03	1.03	1.03
	40L, 60L	1.04	1.01	1.00	1.00	1.00
10°C (50°F)	9L, 13L	1.03	1.03	1.03	1.03	1.03
	20L	1.03	1.03	1.03	1.03	1.03
	30L	1.03	1.02	1.02	1.02	1.02
	40L, 60L	1.03	1.00	0.99	0.99	0.99
15°C (59°F)	9L, 13L	1.02	1.02	1.02	1.02	1.02
	20L	1.02	1.02	1.02	1.02	1.02
	30L	1.02	1.01	1.01	1.01	1.01
	40L, 60L	1.02	0.99	0.98	0.98	0.98
20°C (68°F)	9L, 13L	1.01	1.01	1.01	1.01	1.01
	20L	1.01	1.01	1.01	1.01	1.01
	30L	1.01	1.00	1.00	1.00	1.00
	40L, 60L	1.01	0.98	0.97	0.97	0.96
25°C (77°F)	9L, 13L	1.00	1.00	1.00	1.00	1.00
	20L	1.00	1.00	1.00	1.00	1.00
	30L	1.00	0.99	0.99	0.99	0.99
	40L, 60L	1.00	0.96	0.96	0.96	0.95
30°C (86°F)	9L, 13L	0.99	0.99	0.99	0.99	0.99
	20L	0.99	0.98	0.98	0.98	0.98
	30L	0.99	0.98	0.98	0.98	0.98
	40L, 60L	0.99	0.96	0.95	0.95	0.94
35°C (95°F)	9L, 13L	0.98	0.98	0.98	0.98	0.98
	20L	0.98	0.97	0.97	0.97	0.97
	30L	0.98	0.97	0.97	0.97	0.97
	40L, 60L	0.98	0.95	0.94	0.94	0.94

[1] Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.
[3] Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

Installation
- Recommended ceiling cutout 6.5" (165mm)

Note: 30L and 40L versions require marked spacing: 24" (600mm) x 12" (300mm) x ½" (12mm). 24" (600mm) luminaire to luminaire, 12" (300mm) luminaire to side wall, ½" (12mm) above luminaire
60L versions require marked spacing: 48" (1219mm) x 24" (600mm) x 1" (25mm). 48" (1219mm) luminaire to luminaire, 24" (600mm) luminaire to side wall, 1" (25mm) above luminaire

US: creelighting.com T (800) 236-6800
Canada: creelighting-canada.com T (800) 473-1234

CREE LIGHTING

REDLEONARD ASSOCIATES
513.574.9500 | REDLEONARD.COM

PERSONS USING THIS PROGRAM ARE ADVISED THAT THIS PROGRAM MAY CONTAIN ERRORS WHICH RED LEONARD ASSOCIATES, INC. OR ITS SOFTWARE PROVIDER HAVE NOT OBSERVED. IN ADDITION, THE USE OF THIS PROGRAM TO AID IN LAYOUT OF LIGHTING AND ESTIMATING MATERIAL QUANTITIES IS NOT INTENDED TO REMOVE THE RESPONSIBILITY OF THE USER TO VERIFY THE COMPLETENESS OF ANY BILL OF MATERIAL AND THAT THE LAYOUT OR USE OF LUMINAIRES IS IN FULL ACCORDANCE WITH ALL LOCAL, STATE, OR FEDERAL STATUTES, REGULATIONS OR OTHER REQUIREMENTS, OR THE REQUIREMENTS OF ANY INSURANCE GROUP, ORGANIZATION OR CARRIER REGARDING LUMINAIRES AND THEIR APPLICATION.

FOR INFORMATIONAL AND ILLUSTRATION PURPOSES ONLY. ALL PRODUCT, SERVICE AND CORPORATE NAMES ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS. PRODUCT SPECIFICATIONS AND QUANTITIES MAY VARY. THESE DOCUMENTS ARE THE PROPERTY OF RED LEONARD ASSOCIATES, INC. ANY USE OF THESE DOCUMENTS WITHOUT THE WRITTEN CONSENT OF JAYME J. LEONARD OF RED LEONARD ASSOCIATES, INC. IS STRICTLY PROHIBITED.

TURKEY HILL #728
6233 AVERY RD.
DUBLIN, OH
RL-6783-S1-R5

CFG10.1

PRIME AE
8415 PULSAR PLACE | SUITE 300
COLUMBUS, OH 43240
P 614-839-0250 | F 614 839 0251

DUBLIN, OH
ENGINEERING PLANS
FOR
TURKEY HILL
6233 AVERY ROAD
SITE LIGHTING DETAILS

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
RAK	TER

SCALE: N/A

DATE: 11-10-2020

SHEET NO. CFG10.1