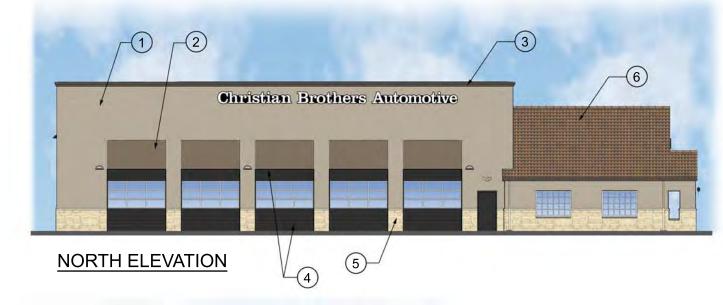


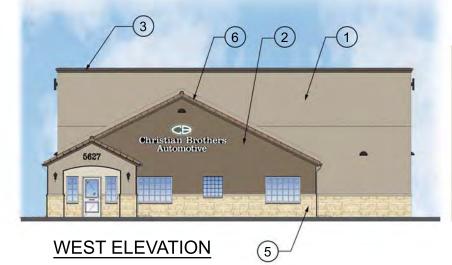
	PC-1	PAINTED STUCCO	SW 6100 PRACTICAL BEIGE BY SHERWIN WILLIAMS
	PC-2	PAINTED STUCCO	SW 6095 TOASTY BY SHERWIN WILLIAMS
	PC-3	PAINTED STUCCO	SW 6090 JAVA BY SHERWIN WILLIAMS
	PC-4	BLACK (PRE-PAINTED)	COLOR BLACK BY CLOPAY COMMERCIAL MODEL 3200
	M-1	SPLIT FACE STONE VENEER	SPLIT FACE VENEER IN RIVERA BEIGE BY SOURCE STONE
-	M-2	CLAY ROOF TILE	B333-R "RUSTIC SMOKE BLEND" VINTAGE EARTH TONE BLEND BY MCA SUPERIOR CLAY ROOF TILE



COLOR / MATERIAL PALETTE : COLOR MATERIAL

1.	"PRACTICAL BEIGE" BY SHERWIN WILLIAMS SW 6100	STUCCO / MEDIUM FINISH
2.	"TOASTY" BY SHERWIN WILLIAMS SW 6095	STUCCO / MEDIUM FINISH
3.	"JAVA" BY SHERWIN WILLIAMS SW 6090	STUCCO / FASCIA AND CORNICE
4.	"BLACK" BY CLOPAY COMMERCIAL	BAY DOORS-MODEL 3200 EXT. DOORS
5.	"RIVIERA BEIGE" BY STONE SOURCE	SPLIT FACE VENEER

 B333-R "RUSTIC SMOKE BLEND" CLAY ROOF TILES VINTAGE EARTH TONE BLEND BY MCA SUPERIOR CLAY ROOF TILE



1. "PRACTICAL BEIGE" BY SHERWIN WILLIAMS SW 6100 STUCCO / MEDIUM FINISH - PAINTED

- 2. "TOASTY" BY SHERWIN WILLIAMS SW 6095 STUCCO / MEDIUM FINISH - PAINTED
- 3. "JAVA" BY SHERWIN WILLIAMS SW 6090 STUCCO / FASCIA AND CORNICE



STEWART + REINDERSMA ARCHITECTURE 5450 E. HIGH STREET, SUITE 200 PHOENIX, AZ 85054 P: (480) 515-5123



NEW AUTOMOTIVE SERVICE BUILDING

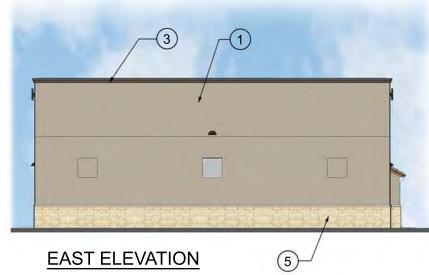
COLOR BOARD 1 OF 2

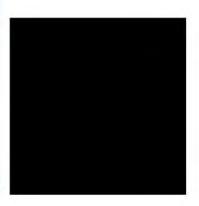


COLOR / MATERIAL PALETTE : COLOR MATERIAL

1.	"PRACTICAL BEIGE" BY SHERWIN WILLIAMS SW 6100	STUCCO / MEDIUM FINISH
2.	"TOASTY" BY SHERWIN WILLIAMS SW 6095	STUCCO / MEDIUM FINISH
3.	"JAVA" BY SHERWIN WILLIAMS SW 6090	STUCCO / FASCIA AND CORNICE
4.	"BLACK" BY CLOPAY COMMERCIAL	BAY DOORS-MODEL 3200 EXT. DOORS
5.	"RIVIERA BEIGE" BY STONE SOURCE	SPLIT FACE VENEER

B333-R "RUSTIC SMOKE BLEND" CLAY ROOF TILES 6. VINTAGE EARTH TONE BLEND BY MCA SUPERIOR CLAY ROOF TILE





4. "BLACK" BY CLOPAY COMMERCIAL **BAY DOORS-MODEL 3200**



5. "RIVIERA BEIGE" BY STONE SOURCE SPLIT FACE VENEER



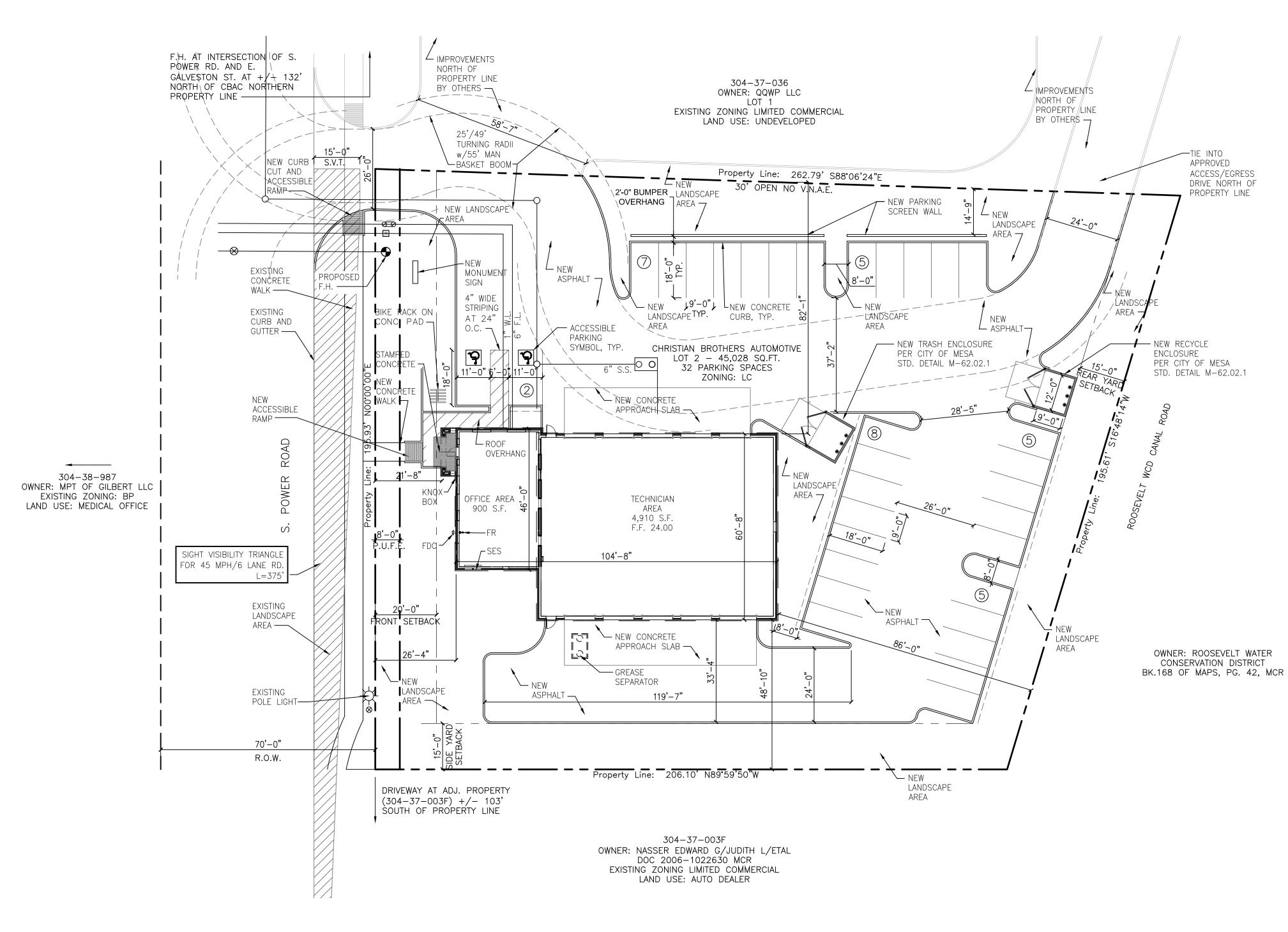
6. B333-R "RUSTIC SMOKE BLEND" BY MCA SUPERIOR CLAY ROOF TILE

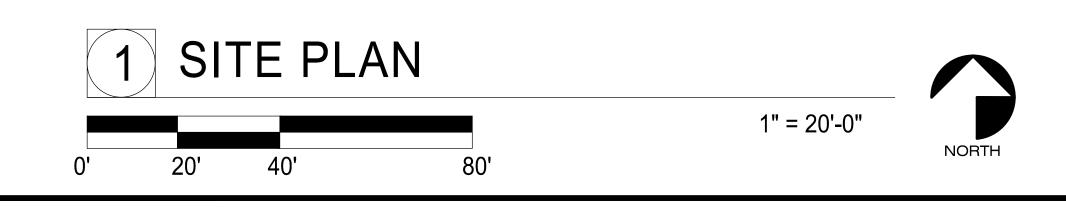


NEW AUTOMOTIVE SERVICE BUILDING

300 STEWART + REINDERSMA ARCHITECTURE 5450 E. HIGH STREET, SUITE 200 PHOENIX, AZ 85054 P: (480) 515-5123

COLOR BOARD 2 OF 2





SITE DATA

JIL DAIA					
SITE SUMMARY:	APN: 304-37-037 S/T/R: 30 1S 7E				
TENANT:	COMMERCIAL TENANT CHRISTIAN BROTHERS AUTOMOTIVE				
ADDRESS:	5627 SOUTH POWER ROAD MESA, AZ 85212				
LEGAL DESCRIPTION:	LOT 2, THELANDER ACRES, ACCORDING TO BOOK 1378 OF MAPS, PAGE 20, RECORDS OF MARICOPA COUNTY, ARIZONA				
OWNER:	CHRISTIAN BROTHERS AUTOMOTIVE 17725 KATY FREEWAY, SUITE 200 HOUSTON, TX 77074 EMAIL: JWAKEFIELD@CBAC.COM				
SCOPE:	AUTOMOBILE SERVICING FACILITY				
PROJECT DESCRIPTION:	NEW 6,033 SQ. FT. AUTOMOTIVE SERVICING				
SITE AREA:	45,028 S.F. (1.034 ACRES)				
PROPOSED USE:	VEHICLE REPAIR, BUSINESS (NO BODY OR F LIGHT AUTOMOTIVE REPAIR	ENDER WORI			
ZONE:	LC				
ALLOWABLE BUILDING AREA:	CONSTRUCTION TYPE: VB OCCUPANCY GROUPS: S-1, MOTOR VEHICLE REPAIR & B, OFFICE SPACE BASIC ALLOWABLE AREA: 9000 SQ. FT. IBC 2012, TABLE 503				
MAXIMUM BUILDING HEIGHT:	30'				
BUILDING AREA:	TOTAL OCCUPIED BUILDING AREA: TOTAL BUILDING FOUNDATION AREA: DUMPSTER FOUNDATION AREA:	5,810 S.F 6,033 S.F 352 S.F			
	LOT COVERAGE:	13.82%			
<u>BUILDING SETBACKS:</u> FRONT: SIDE YARD OFF ACCESS AISLE: SIDE YARD: REAR YARD:	20'-0" 20'-0" 15'-0" 15'-0"				
PARKING LOT LANDSCAPE: PARKING LOT AREA: LANDSCAPE AREA REQUIRED: LANDSCAPE AREA PROVIDED C LANDSCAPE AREA PROVIDED C TOTAL LANDSCAPE PROVIDED:	DFF-SITE: 1,639 S.F.	I			
OFF-STREET PARKING REQUIRI	<u>ED:</u>				

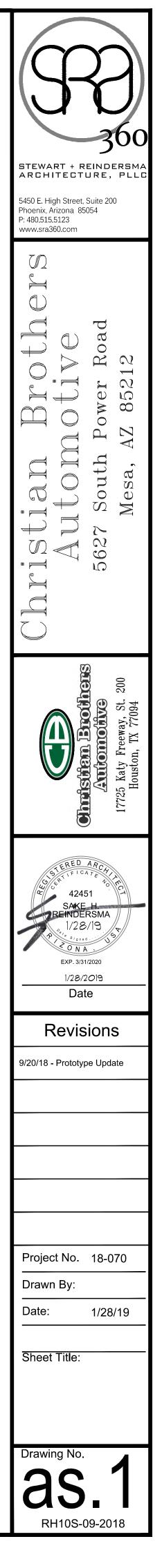
REQUIRED: PROVIDED:

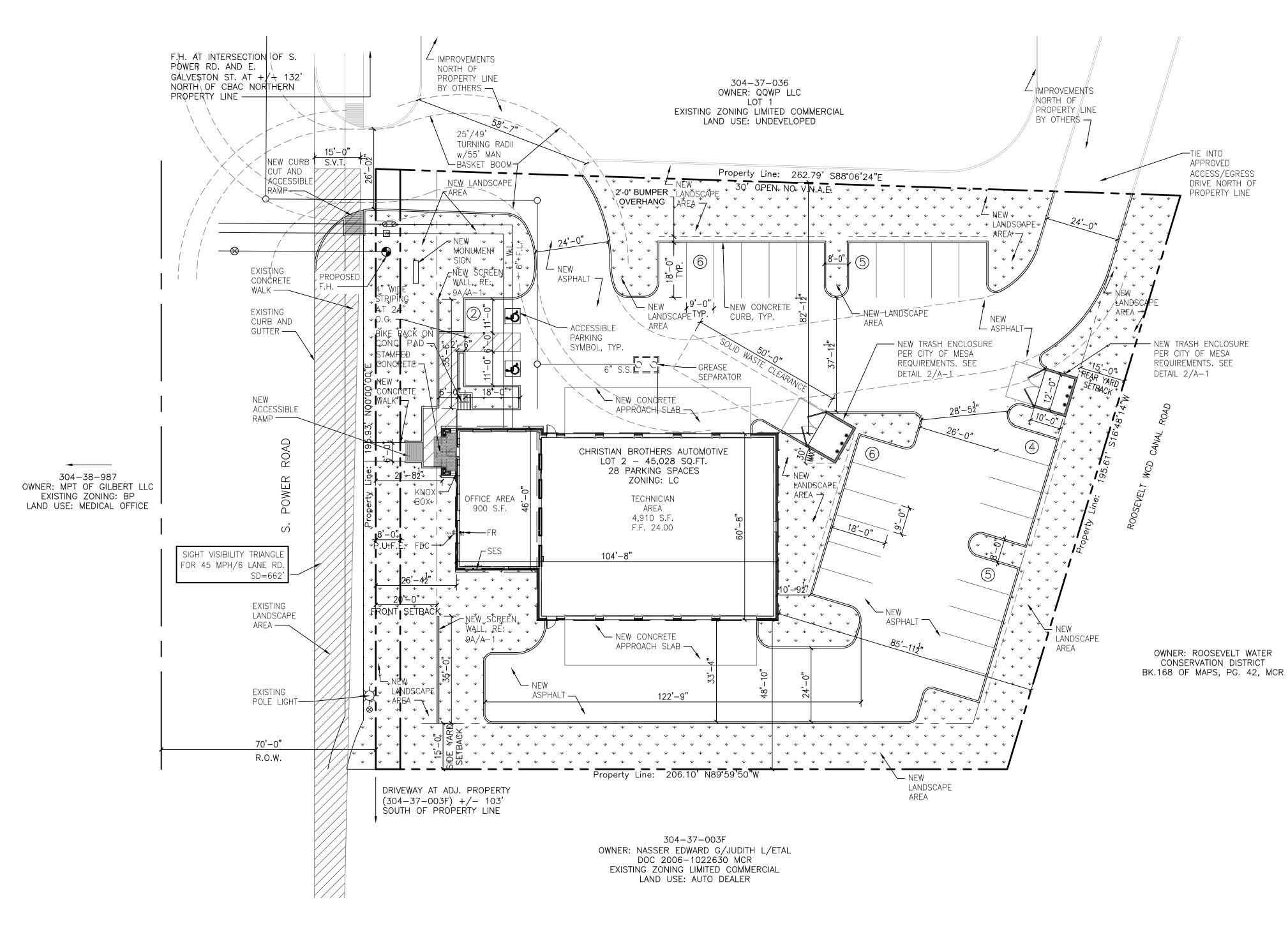
1 SPACE PER 375 S.F. = 16 SPACES 32 SPACES, INCLUDING 2 ACCESSIBLE

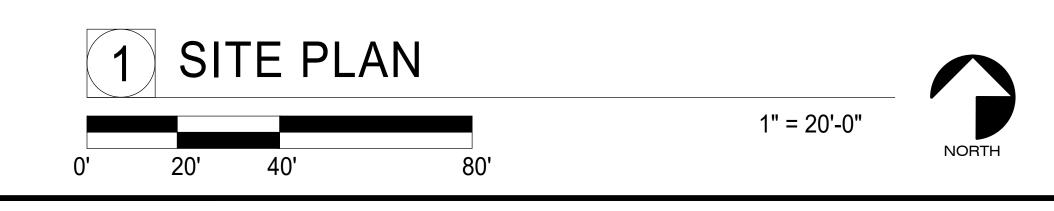
CODE SUMMARY & ADOPTING ORDINANCES: ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF MESA LOCAL ORDINANCES AND CODES.











SITE DATA

SHEDATA					
SITE SUMMARY:	APN: 30 S/T/R: 30				
TENANT:		RCIAL TENANT AN BROTHERS AUTOMOTIVE			
ADDRESS:	5627 SOUTH POWER ROAD MESA, AZ 85212				
LEGAL DESCRIPTION:	LOT 2, THELANDER ACRES, ACCORDING TO BOOK 1378 OF MAPS, PAGE 20, RECORDS OF MARICOPA COUNTY, ARIZONA				
OWNER:	CHRISTIAN BROTHERS AUTOMOTIVE 17725 KATY FREEWAY, SUITE 200 HOUSTON, TX 77074 EMAIL: JWAKEFIELD@CBAC.COM				
SCOPE:	AUTOMO	DBILE SERVICING FACILITY			
PROJECT DESCRIPTION:	NEW 6,0	33 SQ. FT. AUTOMOTIVE SERVICING			
SITE AREA:	45,028 S	.F. (1.034 ACRES)			
PROPOSED USE:		E REPAIR, BUSINESS (NO BODY OR FEN UTOMOTIVE REPAIR	IDER WORK		
ZONE:	LC				
ALLOWABLE BUILDING AREA:	CONSTRUCTION TYPE: VB OCCUPANCY GROUPS: S-1, MOTOR VEHICLE REPAIR & B, OFFICE SPACE BASIC ALLOWABLE AREA: 9000 SQ. FT. IBC 2012, TABLE 503				
MAXIMUM BUILDING HEIGHT:	30'				
BUILDING AREA:	TOTAL B	OCCUPIED BUILDING AREA: BUILDING FOUNDATION AREA: TER FOUNDATION AREA:	5,810 S.F 6,033 S.F 352 S.F		
BUILDING SETBACKS: FRONT: SIDE YARD OFF ACCESS AISLE: SIDE YARD: REAR YARD:	LOT COV 20'-0" 20'-0" 15'-0" 15'-0"		13.82%		
PARKING LOT LANDSCAPE: PARKING LOT AREA: LANDSCAPE AREA REQUIRED: LANDSCAPE AREA PROVIDED C LANDSCAPE AREA PROVIDED C TOTAL LANDSCAPE PROVIDED:	FF-SITE:	22,404 S.F. 2,240 S.F. (10% OF PARKING AREA) 16,725 S.F. 751 S.F. 17,476 S.F.			
OFF-STREET PARKING REQUIRI	ED:				

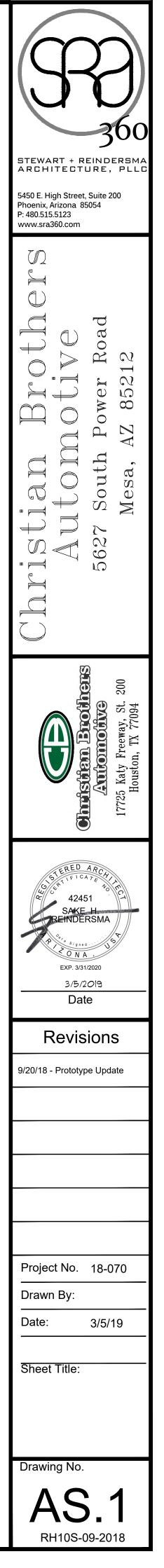
REQUIRED: PROVIDED:

1 SPACE PER 375 S.F. = 16 SPACES 28 SPACES, INCLUDING 2 ACCESSIBLE

CODE SUMMARY & ADOPTING ORDINANCES: ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF MESA LOCAL ORDINANCES AND CODES.







PLANTING SPECIFICATIONS

GENERAL

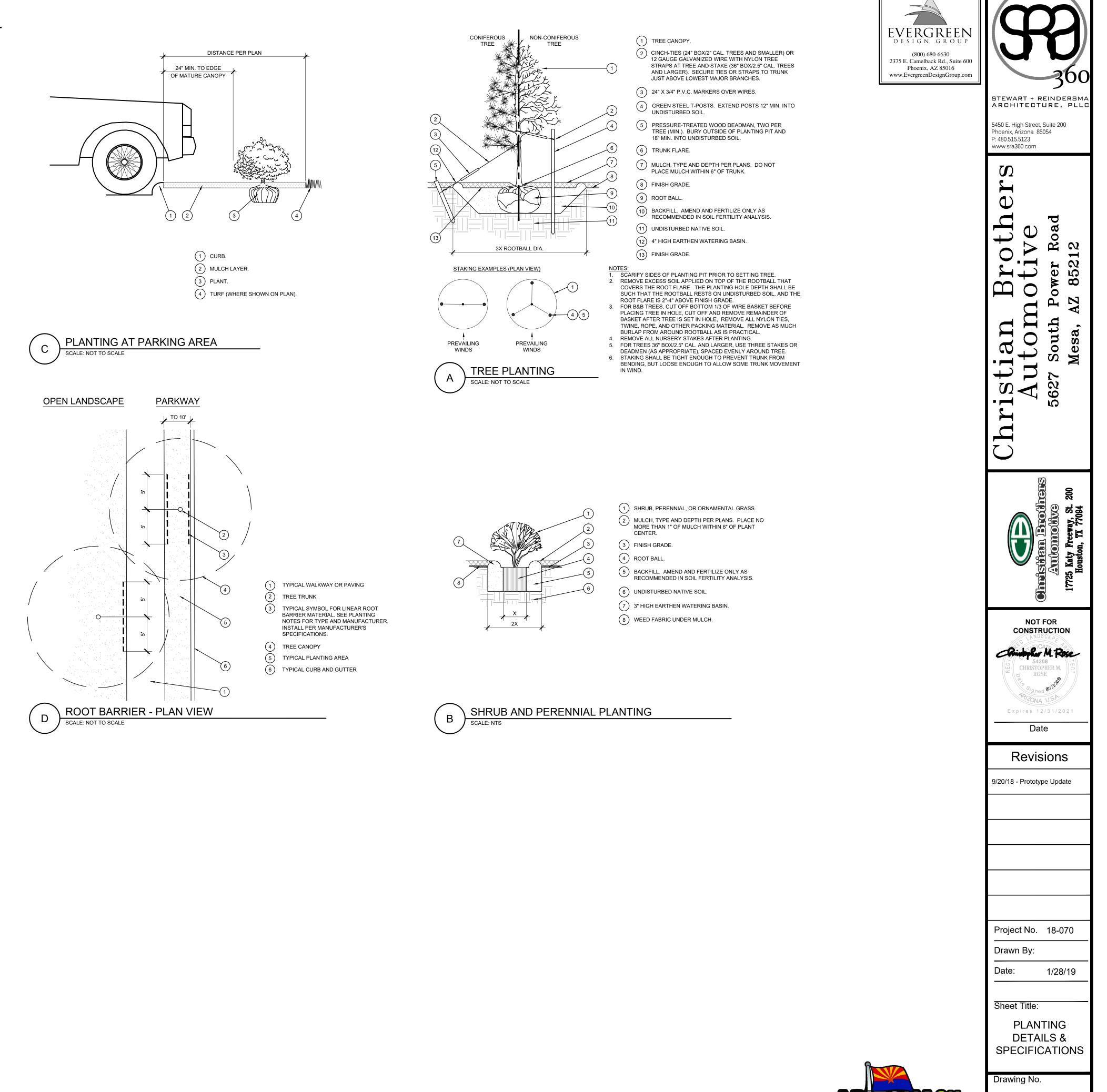
- A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR
- ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
- A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID CONTRACTOR'S LICENSE ISSUED BY THE
- APPROPRIATE LOCAL JURISDICTION. B. SCOPE OF WORK
 - WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS, LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND
 - REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS.
 - THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF ANY WORK

PRODUCTS

- A. ALL MANUFACTURED PRODUCTS SHALL BE NEW. B. CONTAINER AND BALLED-AND-BURLAPPED PLANTS
- FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR CLIMACTIC CONDITIONS.
- 2. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS
- J-SHAPED ROOTS ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY, EVEN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL
- ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
- CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE
- INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER. MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL
- ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED.
- SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE
- ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD. SEED: PROVIDE BLEND OF SPECIES AND VARIETIES AS NOTED ON THE PLANS, WITH MAXIMUM
- PERCENTAGES OF PURITY, GERMINATION, AND MINIMUM PERCENTAGE OF WEED SEED AS INDICATED ON PLANS. EACH BAG OF SEED SHALL BE ACCOMPANIED BY A TAG FROM THE SUPPLIER INDICATING THE COMPOSITION OF THE SEED TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN ½ INCH, FOREIGN MATTER,
- PLANTS, ROOTS, AND SEEDS, COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE: SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE
- FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A QUALIFIED SOIL-TESTING AGENCY (SEE BELOW). MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A
- TOP DRESSING OF TREES AND SHRUBS. TREE STAKING AND GUYING STAKES: 6' LONG GREEN METAL T-POSTS.
- GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH
- STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

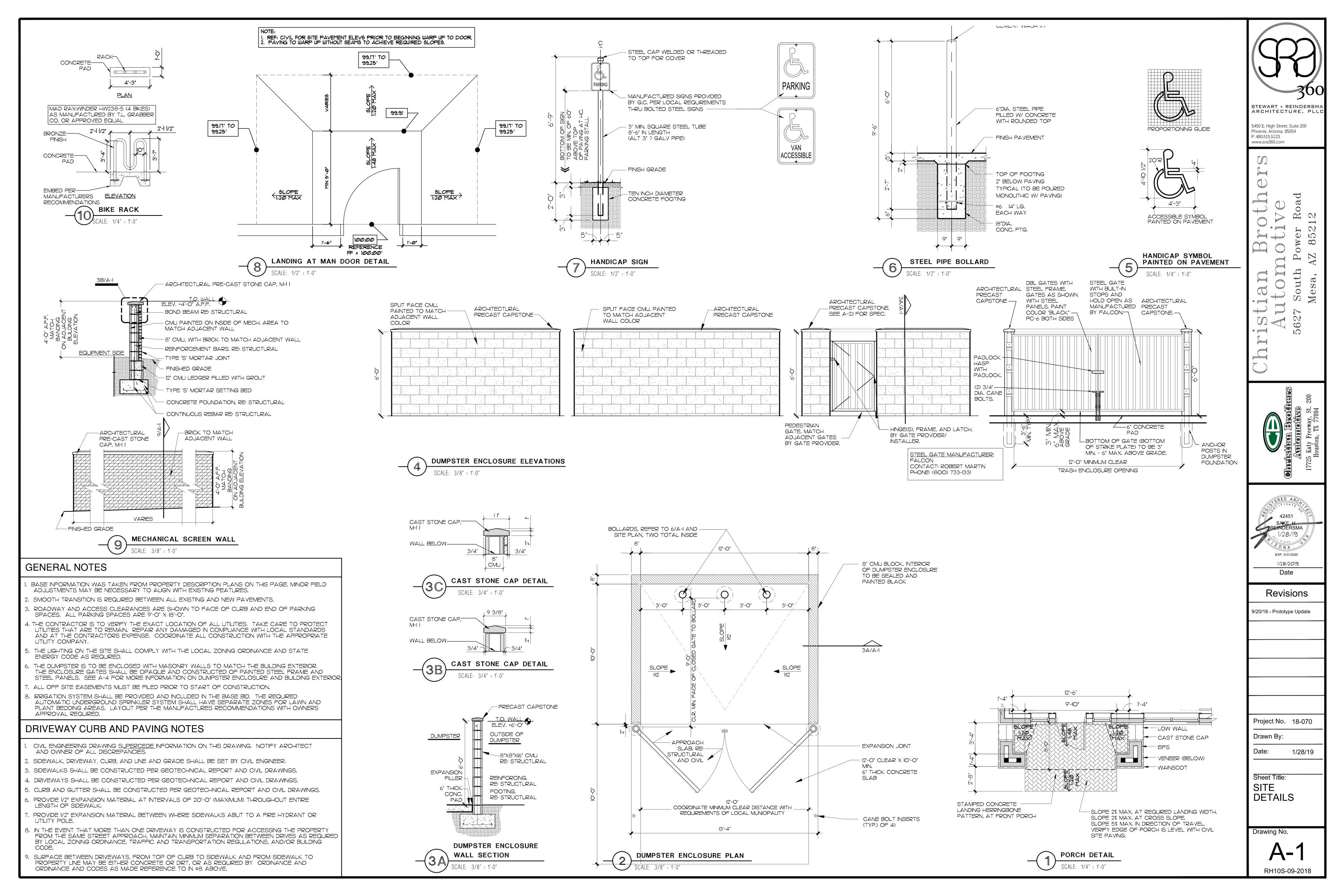
METHODS

- A. SOIL PREPARATION
- 1. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST. 2. SOIL TESTING:
- AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FOR THE FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH. ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. EACH SAMPLE SUBMITTED SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL.
- CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG WITH THE SOIL SAMPLES THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE). GENERAL SOIL PREPARATION AND BACKELL MIXES PRE-PLANT FERTILIZER APPLICATIONS AND ANY OTHER SOIL RELATED ISSUES. THE REPORT
- SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE.
- THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
- FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING: TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING:
- NITROGEN STABILIZED ORGANIC AMENDMENT 4 CU. YDS. PER 1,000 S.F. AMMONIUM PHOSPHATE 16-20-0 - 15 LBS PER 1,000 S.F.
- AGRICULTURAL GYPSUM 100 LBS PER 1,000 S.F. TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP
- 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1,000 S.F.
- 12-12-12 FERTILIZER 10 LBS. PER CU. YD. AGRICULTURAL GYPSUM - 10 LBS. PER CU. YD.
- IRON SULPHATE 2 LBS. PER CU. YD.
- CONTRACTOR SHALL ENSURE THAT THE GRADE IN SOD AREAS SHALL BE 1" BELOW FINISH GRADE BEFORE INSTALLING SOIL AMENDMENTS, AND 2" BELOW FINISH GRADE IN SHRUB AREAS BEFORE INSTALLING SOIL AMENDMENTS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.
- 6. ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.
- B GENERAL PLANTING REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE. TRENCHING NEAR EXISTING TREES: a. CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE GRADE AT THE TRUNK). b. ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ. c. ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS. d. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS. C. TREE PLANTING TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS OUT FROM THE ROOTBALL. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1" DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK, USE STORED TOPSOIL FROM ON-SITE OR IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL. THE TOTAL NUMBER OF TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL ADHERE TO THE FOLLOWING GUIDELINES: #15 CONT. - 24" BOX TREES TWO STAKES PER TREE THREE STAKES PER TREE 36"-48" BOX TREES OVER 48" BOX TREES GUY AS NEEDED MULTI-TRUNK TREES THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. COVER THE INTERIOR OF THE TREE RING WITH MULCH (TYPE AND DEPTH PER PLANS). E. SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST RECOMMENDATIONS. WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING BEDS, COVERING THE ENTIRE PLANTING AREA. CLEAN UP DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION. DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE. INSPECTION AND ACCEPTANCE UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND GUARANTEE PERIODS WILL COMMENCE. K. LANDSCAPE MAINTENANCE THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED, MOWING AND AERATION OF LAWNS, WEEDING, RESEEDING AREAS WHICH HAVE NOT GERMINATED WELL, TREATING FOR INSECTS AND DISEASES, REPLACEMENT OF MULCH, REMOVAL OF ITTER, REPAIRS TO THE IRRIGATION SYSTEM DUE TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER, WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL, HEALTHY STAND OF GRASS AT NO ADDITIONAL COST TO THE OWNER. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR: a. THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE. c. SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. HYDROMULCHED AREAS SHALL SHOW ACTIVE. HEALTHY GROWTH. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED OR RESEEDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED. WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, SEEDED/HYDROMULCHED AREAS, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY. AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



LP-2

RH10S-09-2018



DESCRIPTION

The Impact Elite family of wall luminaires is the ideal complement to site design. Incorporating modular LightSquares technology, the Impact Elite luminaire provides outstanding uniformity and energy-conscious illumination. Combined with a rugged construction, the Impact Elite luminaire is the ideal facade and security luminaire for zones surrounding schools, office complexes, apartments and recreational facilities. UL/cUL listed for wet locations.

McGraw-Edison

Catalog #	ISWAF800LEDE1SL4BK	Туре
Project		F
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Heavy-wall, die-cast aluminum housing and removable hinged door frame for precise tolerance control and repeatability. Hinged door inset for clean mating with housing surface and secured via two captive fasteners. Optional tamper-resistant Torx[™] head fasteners offer vandal resistant access to the electrical chamber.

Optics

Choice of 10 patented, highefficiency AccuLED Optics[™] distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K, 5000K and 5700K CCT.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation, greater than 0.9 power factor, less than 20% harmonic distortion, and are suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common - and differential - mode surge protection. LightSquares feature an IP66 enclosure rating and maintain greater than 90% lumen maintenance at 60,000 hours per IESNA TM-21. Emergency egress options for -20°C ambient environments and occupancy sensor available.

Quarter Sphere

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" mechanism for quick installation. Secured with two captive corrosion resistant black oxide coated allen head set screws concealed but accessible from bottom of fixture.

Finish

Cast components finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

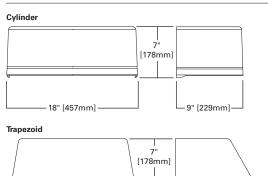
Five-year warranty.



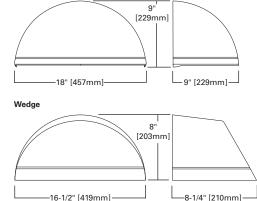




DIMENSIONS

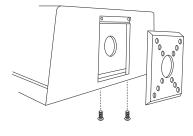


-9" [229mm]-



HOOK-N-LOCK MOUNTING

-16-1/2" [419mm]-





*www.designlights.org



ISC/ISS/IST/ISW IMPACT ELITE LED

1 LightSquare Solid State LED

WALL MOUNT LUMINAIRE

CERTIFICATION DATA UL/cUL Listed LM79 / LM80 Compliant IP66 LightSquare DesignLights Consortium® Qualified* ISO 9001

ENERGY DATA

Electronic LED Driver >0.9 Power Factor <20% Total Harmonic Distortion 120-277V/50 & 60Hz, 347V/60Hz, 480V/60Hz -40°C Minimum Temperature 40°C Ambient Temperature Rating

SHIPPING DATA Approximate Net Weight:

18 lbs. (8 kgs.)

БЧП

POWER AND LUMENS

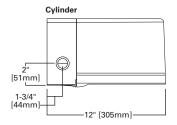
1 LightSqu	uare (AF)		Cylinder (ISC) and Quarter Sphere (ISS)					Trapezoid (IST) and Wedge (ISW)					
(Drive Current (mA)) 350 450 600 800					1000	1200	350	450	600	800	1000	1200	
Power (Wa	atts) 120-277	'V 20.3	25.5	33.4	43.9	55.1	66.2	20.3	25.5	33.4	43.9	55.1	66.2
0	120V	0.17	0.22	0.29	0.38	0.48	0.56	0.17	0.22	0.29	0.38	0.48	0.56
Current (A	277V	0.09	0.10	0.13	0.17	0.21	0.25	0.09	0.10	0.13	0.17	0.21	0.25
Power (Wa	atts) 347V or	· 480V 23.3	28.7	36.6	49.5	60.7	70.1	23.3	28.7	36.6	49.5	60.7	70.1
	347V	0.07	0.08	0.11	0.15	0.18	0.21	0.07	0.08	0.11	0.15	0.18	0.21
Current (A) 480V	0.05	0.06	0.08	0.11	0.13	0.16	0.05	0.06	0.08	0.11	0.13	0.16
Optics				•									
To	Lumens	2,33	6 2,934	3,827	4,791	5,663	6,444	2,498	3,136	4,091	5,122	6,054	6,889
T2	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
To	Lumens	2,38	5 2,994	3,906	4,889	5,779	6,577	2,504	3,144	4,101	5,133	6,068	6,905
T3 -	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
	Lumens	2,36	0 2,963	3,866	4,839	5,720	6,509	2,530	3,177	4,145	5,188	6,133	6,979
T4FT	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
T4W	Lumens	2,38	6 2,996	3,908	4,892	5,783	6,581	2,500	3,139	4,095	5,126	6,059	6,895
1400	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL2	Lumens	2,25	7 2,834	3,697	4,628	5,470	6,225	2,413	3,030	3,953	4,948	5,849	6,656
5L2	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL3	Lumens	2,22	0 2,787	3,636	4,552	5,380	6,122	2,365	2,970	3,874	4,849	5,732	6,523
5L3	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
SL4	Lumens	2,11	2,649	3,456	4,326	5,113	5,818	2,234	2,805	3,660	<mark>4,581</mark>	5,415	6,162
514	BUG Rating	B0-U0	G1 B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B <mark>1-U1-G2</mark>	B1-U1-G2	B1-U1-G2
SLL/SLR	Lumens	1,99	0 2,498	3,259	4,080	4,823	5,488	2,154	2,705	3,529	4,418	5,222	5,942
JLL/JLN	BUG Rating	B1-U0	G1 B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2	B1-U1-G2
RW	Lumens	2,38	0 2,988	3,898	4,880	5,768	6,564	2,465	3,095	4,037	5,054	5,974	6,798
nvv	BUG Rating	B2-U0	G0 B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B2-U0-G0	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1	B3-U1-G1

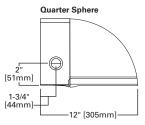
LUMEN MAINTENANCE

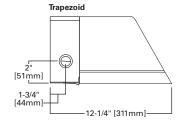
Current	Ambient	25000	50000	60000	100000	Theoretical
	Temperature	Hours*	Hours*	Hours*	Hours*	L70 (Hours)*
Up to 1.2A	Up to 40°C	>95%	>91%	>90%	>83%	20,4000

*Data calculated based on TM-21 calculator.

THRUWAY BACK BOX







Lumen Multiplier

1.02

1.01

1.00

0.99

LUMEN MULTIPLIER

Ambient

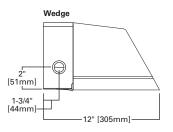
Temperature

10°C

15°C

25°C

40°C





Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

ORDERING INFORMATION

Sample Number: ISC-AF-1200-LED-E1-T3-BZ

Product Family 1	Light Engine	Drive Current	Lamp Type	Voltage	Distribution	Color	
ISC=Impact Elite LED Small Cylinder ISS=Impact Elite LED Small Quarter Sphere IST=Impact Elite LED Small Trapezoid ISW=Impact Elite LED Small Wedge	AF=(1) LightSquare	350=Drive Current Factory Set to 350mA 450=Drive Current Factory Set to 450mA 600=Drive Current Factory Set to 600mA 1000=Drive Current Factory Set to 1000mA 1200=Drive Current Factory Set to 1200mA ²	(LED=Solid) State (Light (Emitting) (Diodes)	E1=Electronic (120-277V) 347=347V ² 480=480V ^{2.3}	T2=Type II T3=Type III T4FT=Type IV Forward Throw T4W=Type IV Wide SL2=Type II w/Spill Control SL3=Type II w/Spill Control SLE=90° Spill Light Eliminator Left SLR=90° Spill Light Eliminator Right RW=Rectangular Wide Type I	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	
Options (Add as Suffix)	I			Accessories (Order Separately) 17			
7030=70 CRI / 3000K CCT ⁴ 7050=70 CRI / 5000K CCT ⁴ 8030=80 CRI / 5000K CCT ⁴ 9ER7=NEMA 7-PIN Twistloc P=Button Type Photocontro HA=50°C High Ambient ⁷ AHD145=After Hours Dim, 5 AHD245=After Hours Dim, 7 AHD255=After Hours Dim, 8 MS/DIM-LXX=Motion Sense LWR-LW=LumaWatt Pro Wir BBB=Battery Pack with Back CWB=Cold Weather Battery LCF=LightSquare Trim Plate HSS=Factory Installed Hous ULG=Uplight Glow ^{5,6} TR=Tamper Resistant Hardw X=Driver Surge Protection (I (Available in 120, 208, Hours, 50% ⁸ Hours, 50% ⁸ Hours, 50% ⁸ Hours, 50% ⁸ or for Dimming Operati reless Sensor, Wide Ler eless Sensor, Narrow L (Box (Specify 120V or 2 Pack with Back Box (Sj Matches Housing Finis e Side Shield ¹⁵		MA1254-XX=Th MA1255-XX=Th MA1256-XX=Th MA1257-XX=Th	ircuit Module Replacement ruway Back Box - Impact Elite Tra ruway Back Box - Impact Elite Cy ruway Back Box - Impact Elite Qu ruway Back Box - Impact Elite We ess Configuration Tool for Occup	linder larter Sphere edge		

NOTES:

NoTES:
1. Standard 400K CT and greater than 70 CRI.
2. Not available with ULG option.
3. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
4. Exentended lead times apply.
5. Not available with UR-XX or MS/DIM-LXX.
7. Suitable for 50°C provided no options other than motion sensor are included and driver output set to 1.A or less.
8. Requires the use of P photocontrol or the PERP photocontrol receptace with photocontrol accessory. Not available with 350mA drive current. See After Hours Dim supplemental guide for additional information.
9. Specify lens in place of XX. Round to next highest option based on mounting height. Available options are 08, 20 and 40W.
10. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
11. Includes integral photocell.

 Includes Integral photocell.
 LumaWatt Pro wireless sensors are factory installed and requiring network components in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information.
 LED standard integral battery pack is rated for minimum operating temperature 32°F (0°C). Operates downlight for 90-minutes.
 LED cold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates downlight for 90-minutes.
 Dold weather integral battery pack is rated for minimum operating temperature -4°F (-20°C). Operates downlight for 90-minutes.
 Only for use with SL2, SL3 and SL4 distributions. The LightSquare trim plate is painted black when the HSS option is selected.
 Removes additional surge module.
 Specify color in place of XX. 11. Includes integral photocell.



STERNBERG

6900/6600/66 HERITAGE

Small Scale Commercial Fixtures

**

SPECIFICATIONS

6930	6915

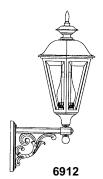


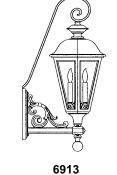


6935

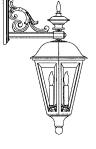
Cat. No.	vv	н	EXt.^	Outlet	Max.** INC	Max. HID	Max. CF
6930	13"	27"			200W	100W†	42W†
6915	13"	38"	16 ¹ /2"	26 ¹ /2"	200W	100W††	42W††
6913	13"	301/2"	16 ¹ /2"	27	200W	100W††	32W††
6912	13"	32 ¹ /2"	16 ¹ /2"	26 ¹ /2"	200W	100W ^{††}	42W††
6918	13"	30"	16 ¹ /2"	5"	200W	100W ^{††}	32W††
6927	13"	65" w/	36" cha	in	200W	100W†	32W†
6935	13"	25 ¹ /2"			200W	100W ^{††}	42W††
6630†	10"	19"			100W	50W†	26W†
6615	10"	30"	101/2"	15"	100W	50W††	32W††
6616	10"	19"	10 ¹ /2"	15"	100W	50W††	32W††
6617	10"	19 ¹ /2"	101/2"	7 ¹ /2"	100W	50W††	32W††
6627	10"	57" w /	/36" cha	iin	100W	50W††	26W
6635	10"	19"			100W	50W††	26W††
66BU	7"	14"	8"	9"	60W		
66LF	7"	20"	8"	9"	60W		

* Add 2" to 4" depending on Ballast Box requirement. ** 3 Light Cluster is 25 watt max lamp per socket. 66 Series not available with 3 Light Cluster. † Remote Ballast required if HID or CF. †† Ballast Box required. 66 & 6600 Series not available with Frosted Chimney or Refractor.



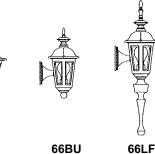


6927



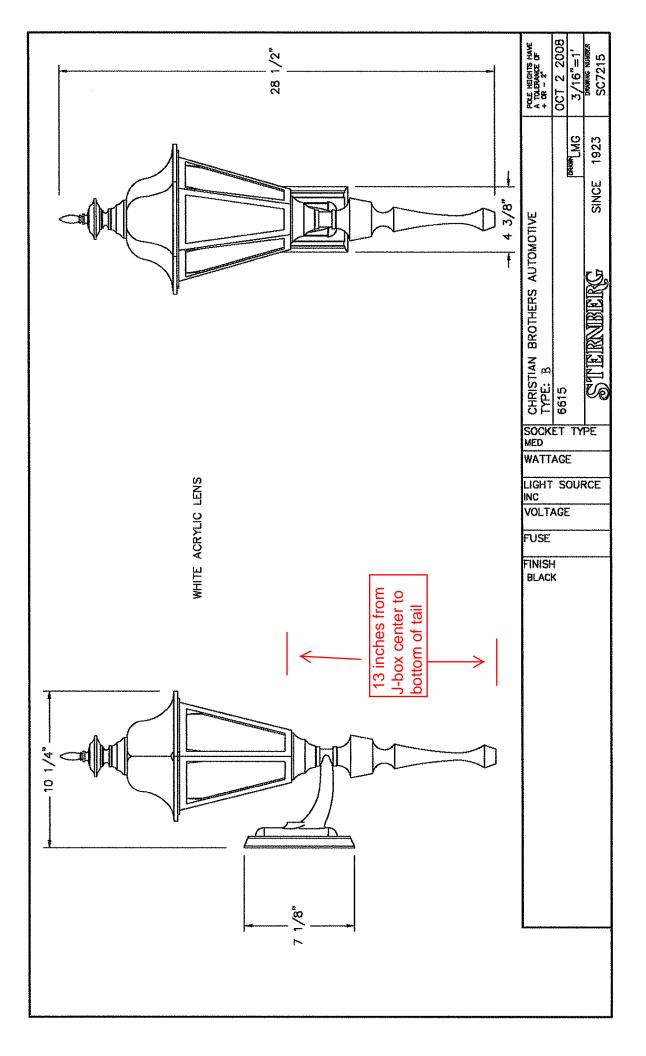
6918







555 Lawrence Ave. Roselle, IL 60172 • 847-588-3400 • Fax 847-588-3440 www. sternberglighting.com Email: info@sternberglighting.com 5-08



DESCRIPTION

8-inch LED recessed narrow, medium, or wide beam downlight specially designed for LED technology. Two-stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Offered with 1000-20,000 lumens with color temperatures of 2700K, 3000K, 3500K, 4000K, 5000K available in 80, 90 or 97 CRI. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

SPECIFICATION FEATURES

Lower Shielding Reflector Self-flanged, spun .060" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

Plaster Frame / Collar

Die cast aluminum 1-1/2" deep collar accommodates ceiling materials up to 2".

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above and below the ceiling.

Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring. Thermal

Aluminum heat sink conducts heat away from the LED module for improved performance and longer life.

LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80, 90 or 97 CRI. D2W[™] – dim-to-warm shifts CCT

from 3000K to 1850K as fixture dims mimicking halogen sources.

Driver

Combination 0-10V/trailing edge driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture. 1000 - 7000 lumen utilize one driver. Catalog #LD840D010 / ER8B30408040/
8LBM1H/LGSKT8IP65/HB26TypeProjectLCommentsDatePrepared byImage: Comment set of the set o

8000-12,000 utilize two drivers, 15,000-20,000 lumen utilizes three drivers.

Code Compliance

Thermally protected and cULus listed for protected wet locations. cCSAus certified. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/ RFI emissions per FCC 47CFR Part 18 Class B consumer limits. IC rated up to 2000 lumens. 3000 lumens and above are non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards. 8000 lumen and above are marked spacing and must follow spacing requirements.

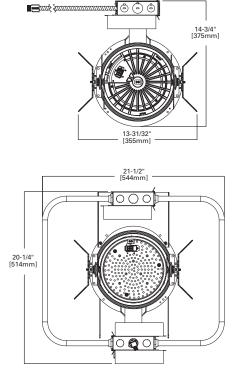
Warranty

5-year warranty.

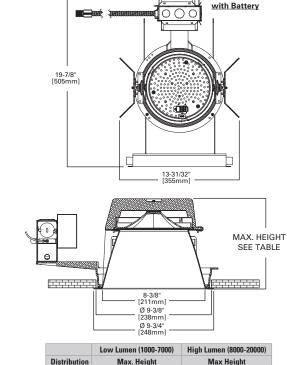


LD8B ER8B 8LB 1,000-20,000 Lumen LED

8-Inch Narrow, Medium, or Wide Downlight New Construction







	Low Lumen (1000-7000)	High Lumen (8000-20000)			
istribution	Max. Height	Max Height			
Narrow	7-25/32"	9-3/4"			
Medium	7-5/16"	9-9/32"			
Wide	6-11/16"	8-11/16"			
Shallow	4-26/32"	6-26/32"			







Portfolio

ORDERING INFORMATION

SAMPLE NUMBER: LD8B	50D010IEMBOD				
Housing	Lumens ¹	Driver		Color Control ⁹	Voltage
LD8B=LED Downlight 8" Nominal Aperture LD8BCP=LED Downlight 8" Nominal Aperture, Chicago Plenum	10=1000 lumens 15=1500 lumens 20=2000 lumens 30=3000 lumens 50=5000 lumens 60=6000 lumens 80=8000 lumens ⁸ 90=9000 lumens ⁸ 100=10000 lumens ⁸ 150=15000 lumens ⁸ 175=17500 lumens ⁸ 200=20000 lumens ⁸	D010TR=0-10V 120-27 DE010=0-10V Dimmin D5LT=Fifth Light® (D DMX=DMX Dimming DL2=Lutron® Hi-Lum DL3=Lutron® Hi-Lum DL4=Lutron Ecosyste 1000 - 3000 Lumen DLV=Low voltage dim lumen and below	g, 1% to 100%, 120V-277V 77V or 120V Line Voltage Dimming, 1% to 100%, 120V-277V rg, 0% to 100%, 120V-277V ALL) Dimming, 0% to 100%, 120V-277V , 0% to 100%, 120V-277V ⁷ e Forward Phase Dimming, 1% to 100%, 120V Only e 3 Wire Dimming, 1% to 100%, 120V-277V m dimming 1% to 100%, 120V-277V anning driver (1-100%) for use with DLVP system (3000 1 ^{3,2} 00, 12,000 15,000, 17,500 and 20,000 Lumen ling Edge Dimming, 5% to 100%, 120V-277V (120V Only for	4000, 6000 & 9000 lumens D2W-2 drivers for 4000 and 6000 lumen. 3 drivers for 9000 lumen.	 Blank=120-277 7000 lumei and below. D2W below 3000 lumens 1=120V 8000 lumen and above. D2W and DMX above 4000 lumens. 2=277V 8000 lumen and above. D2W and DMX above 4000 lumens. 3=347V step down transformer
Control Options			Options		
SWPD1=Factory Installed (includes Control Mod 0-10V driver) ^{2, 7} LWTPD1=Factory Installed with 0-10V driver) ^{2, 7}	dule, Sensor, Cable and	Tile Mount (use with	EMBOD=Bodine® Emergency Module with Remote Test Sw EM7=7W Emergency Module with Remote Test Switch ^{3, 4} EM14=14W Emergency Module with Remote Test Switch ^{3, 4} IEMBOD=Bodine® Emergency Module with Integral Test Switch ^{3, 4} IEM14=14W Emergency Module with Integral Test Switch ^{3, 4} IEM14=14W Emergency Module with Integral Test Switch ^{3, 4} IEM14=14W Low Voltage Emergency Module with Remote Te EMV14=14W Low Voltage Emergency Module with Integral Test IEM77=7W Low Voltage Emergency Module with Integral Test IEM71=14W Low Voltage Emergency Module with Integral Test	witch ³ 4 est Switch ^{3,4} e Test Switch ^{3,4} ēst Switch ^{3,4}	

SAMPLE NUMBER: ER8B30408035

	Power Module	Lumen Levels ¹	Color		
\rightarrow	ER8B=8" LED Module	1020=1000, 1500, 2000 lumens 3040=3000 or 4000 lumens, 3000 IC Rated 5070=5000, 6000, or 7000 lumens 80120=8000, 9000, 10000, or 12000 lumens 150200=15000 or 20000 lumens	80 CRI 8027= 80CRI, 2700K 8030= 80CRI, 3000K 8035= 80CRI, 3500K 8040= 80CRI, 4000K 8050= 80CRI, 5000K	90 CRI 9027= 90CRI, 2700K 9030= 90CRI, 3000K 9035= 90CRI, 3500K 9040= 90CRI, 4000K 9050= 90CRI, 5000K	97 CRI 9727= 97CRI, 2700K 9730= 97CRI, 3000K
		Dim 2 Warm 109030D2W=1000 Lumen, 90 CRI, Dim 2 Warm, IC Ra 159030D2W=1500 Lumen, 90 CRI, Dim 2 Warm, IC Ra 209030D2W=2000 Lumen, 90 CRI, Dim 2 Warm, IC Ra 309030D2W=3000 Lumen, 90 CRI, Dim 2 Warm 609030D2W=6000 Lumen, 90 CRI, Dim 2 Warm 909030D2W=9000 Lumen, 90 CRI, Dim 2 Warm	ited		

SAMPLE NUMBER: 8LBM1LI

	Trim	Distribution ⁵	Flange	Finish	Options		
\uparrow	8LB=8" Reflector	N=Narrow Spun Aluminum M=Medium Spun Aluminum W=VVide Spun Aluminum S=Shallow Spun Aluminum	0=White PolymerTrim Ring 1=Self-flanged ¹⁰ 2=White Painted Self-flanged	LI=Specular Clear H=Semi-Specular Clear WMH=Warm Haze WH=Wheat GPH=Graphite Haze B=Specular Black MW=Matte White	E=Integral Emergency Test Switch Hole ⁶		
	Accessories		Notes: 1 Nominal Lumens will vary de	apanding on selected color, driver and	reflector finish		
* *	LGSKT8IP65=IP65 Gask HSA8=Slope adapter fo Bar Hangers HB26=C-channel Bar Ha HB50=C-channel Bar Ha Transformers H347=347 to 120V Step H347200=347 to 120V St Connected Lighting Sys PORLWTPD1=LumaWat	r 8" aperture housings ¹¹ Inger, 26" Long, Pair Inger, 50" Long, Pair Down Transformer, 75VA tep Down Transformer, 200VA stems tt Pro Wireless Sensor kit (use with 0-10V), field installed ²	 Nominal Lumens will vary depending on selected color, driver and reflector finish. Refer to system specifications for additional information, features, and benefits. Order either factory installed option or accessory. Not available with Chicago Plenum. ULus listed only Beam angles are nominal with Ll finish trims. See chart. Only available with Narrow, Medium and Wide Spun Aluminum trims. Required for use with al IEMBOD, IEM7, IEM14, IEMV7 and IEMV14 housings. DMX fixtures default to full on upon loss of DMX signal Product is marked spacing and must be installed with the following minimum spacing -Center of luminaire to side of building member: 18" -Minimum overhead: 1/2" 				
		ilemount Daylight Sensor (Includes Control Module, Sensor, ile Mount, use with 0-10V Driver) Field Installed ²	-20,000 Lumens minimum o 9 Field required for D2W 4000 10 Flange is the same finish as	, 6000 and 9000 lumens only.			
			11 Consult accessory specificat	ion sheet for ordering information.			



Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

NOMINAL BEAM ANGLES WITH LI FINISH								
	Narrow Medium Wide Shallow							
1000-7000	15	40	73	86				
8000-12000	30	44	73	86				
15000-20000	15000-20000 34 46 73 8							

ENERGY DATA

Sound Rating: Class A standards
(Values at non-dimming line voltage)
Minimum Starting Temperature: -20°C (-4°F)
EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer)
Power Factor: >0.90
Input Frequency: 50-60Hz

1000 Lu	1000 Lumen D010					
Input Power: 11W	THD <14%					
Input Current:0.11A	277V Input Current:0.04A					
1500 Lu	nen D010					
Input Power:15.5 W	THD <13%					
Input Current:0.15A	277V Input Current:0.06A					
2000 Lu	2000 Lumen D010					
Input Power:21.2 W	THD <9%					
Input Current:0.2A	277V Input Current:0.08A					
3000 Lu	nen D010					
Input Power:27.6 W	THD <10%					
Input Current:0.25A	277V Input Current:0.11A					
4000 Lu	4000 Lumen D010					
Input Power:41.6 W	THD <13%					
Input Current:0.37A	277V Input Current:0.16A					

5000 Lun	5000 Lumen D010TE						
Input Power:57.9 W	THD <14%						
Input Current:0.41A	277V Input Current:0.18A						
6000 Lun	ien D010TE						
Input Power:59.7 W	THD <14%						
Input Current:0.49A	277V Input Current:0.21A						
7000 Lun	ien D010TE						
Input Power:75.8 W	THD <13%						
Input Current:0.6A	277V Input Current:0.25A						
8000 Lu	men D010						
Input Power:73.8 W	THD <13%						
Input Current:0.61A	277V Input Current:0.26A						
9000 Lu	men D010						
Input Power:86.9 W	THD <13%						
Input Current:0.83A	277V Input Current:0.32A						

10000 Lumen D010TE						
Input Power:115.4 W	THD <13%					
Input Current:0.83A	277V Input Current:0.36A					
12000 Lumen D010TE						
Input Power:119.4 W	THD <13%					
Input Current:0.98A	277V Input Current:0.42A					
15000 Lumen D010TE						
Input Power:173.7 W	THD <13%					
Input Current:1.25A	277V Input Current:0.42A					
17500 Lum	en D010TE					
Input Power:179.1 W	THD <13%					
Input Current:1.47A	277V Input Current:0.63A					
20000 Lumen D010TE						
Input Power:227.4 W	THD <13%					
Input Current:1.8A	277V Input Current:0.77A					

COLOR METRIC SUMMARY

80)27	80)30	8035		8035 8040		8050	
R_f	93.2	R_f	83.4	R_f	83.7	R_f	83.3	R_f	82.5
R_g	94.1	R_g	94.4	R_g	94.8	R_g	94	R_g	94.3
CRI	81.3	CRI	82.4	CRI	9.1	CRI	83.7	CRI	94.2
R_9	0.7	R_9	4.5	R_9	9.1	R_9	9.9	R_9	11.9

90)27	90)30	9035		9040		9050	
R_f	92	R_f	91.6	R_f	90.9	R_f	89.4	R_f	88.4
R_g	98.4	R_g	98.6	R_g	98.3	R_g	96.6	R_g	96.8
CRI	93.4	CRI	93.2	CRI	93.3	CRI	91.8	CRI	91
R_9	59.3	R_9	60.2	R_9	63.1	R_9	58	R_9	55.2

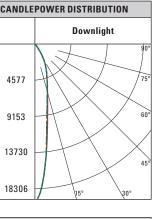
97	127	1	9730		
R_f	95		R_f	94.2	
R_g	100.1		R_g	99.6	
CRI	98		CRI	98.5	
R_9	93.9		R_9	94.7	



Eaton 1121 Highway 74 South Peachtree City, GA 30269 P: 770-486-4800 www.eaton.com/lighting

PHOTOMETRY

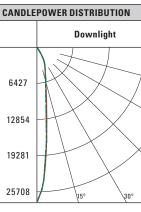
NARROW	(15° BEAM)	
Test Number		
Housing	LD8B50D010	
Module	ER8B50835	
Trim	8LBN0H	
Lumens	4986	
Efficacy	94.1 Lm/W	
SC	0.32	



N	CONE	DF LIGH	т									
90° /75°	0°											
\times	МН	FC	L	W								
60°	4'	1144.4	1.2	1.2								
$\backslash /$	7'	373.7	2.2	2.2								
	9'	226.1	2.8	2.8								
45°	13'	108.3	4	4								
30°	16'	71.5	5	5								

CANDELA	TABLE	ZONALL	UMEN SU	LUMINANO	LUMINANCE		
Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela	Average 0°	
0	18310	0-30	4214	84.5	Degrees	Luminance	
5	14091	0-30	4214	04.3	45	4330	
15	5762	0-40	4883	97.9			
25	3117				55	253	
35	1021	0-60	4983	99.9			
45	99				65	88	
55	5	0-90	4986	100			
65	1				75	143	
75	1	90-180	0	0			
85	0	0.100	4000	100	85	0	
90	0	0-180	4986	100		5	

NARROW	(15° BEAM)						
Test Number							
Housing	LD8B50D010						
Module	ER8B50835						
Trim	ER8B50835 8LBNOLI						
Lumens	5248						
Efficacy	99 Lm/W						
SC	0.25						



CANDLEPOWER DISTRIBUTION

TION	CONE	OF LIGH	Т
ht		Λ	
90° /75°	Ľ		
\searrow	МН	FC	1
60°	4'	1607	1
	7'	524.7	1.
45°	9'	317.4	2
45°	13'	152.1	3.
30°	16'	100.4	4
,			

NE (DF LIGH	т		CANDELA	TABL
	<u> </u>			Degrees Vertical	Cande
0°,	$/ \rangle$	þ		0	25712
1	\square			5	1779
ζ		-		15	5743
				25	3148
1H	FC	L	W	35	879
4'	1607	1	1	45	101
7'	524.7	1.6	1.6	55	7
9'	317.4	2.2	2.2	65	7
				75	4
3'	152.1	3.2	3.2	85	0
6'	100.4	4	4	90	0

TABLE	ZONALL	LUMINANCE		
Candela	Zone	Lumens	% Fixture	Average Average Candela 0°
25712	0-30	4514	86	Degrees Luminance
17790	0-30	4314	00	45 4422
5743	0-40	5134	97.8	
3148				55 382
879	0-60	5238	99.8	
101				65 518
7	0-90	5248	100	
7				75 429
4	90-180	0	0	
0				85 0
0	0-180	5248	100	

MEDIUM	(40° BEAM)
Test Number	
Housing	LD8B50D010
Module	ER8B50835
Trim	8LBM0H
Lumens	5426
Efficacy	102.4 Lm/W
SC	0.8

ER8B50835

107.8 Lm/W

8LBM0LI

5711

0.63

Module Trim

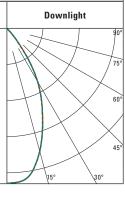
Lumens

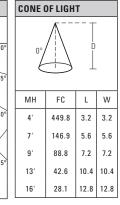
Efficacy

SC

Housing	LD8B50D010		
Test Number			
MEDIUM	(40° BEAM)	CANDLE	P
		7193	
		5395	
sc	0.8	3596	-
Efficacy	102.4 Lm/W		

1798





NE (DF LIGH	Т		CANDELA	TABLI
	<u> </u>			Degrees Vertical	Cande
0°/	$/ \rangle$	þ		0	7197
1	\square			5	7141
ζ		-		15	5914
				25	3883
IH	FC	L	w	35	1774
Ľ	449.8	3.2	3.2	45	244
,.	146.9	5.6	5.6	55	16
a'	88.8	7.2	7.2	65	2
				75	1
3'	42.6	10.4	10.4	85	0
6'	28.1	12.8	12.8	90	0

TABLE	ZONALL	UMEN SU	MMARY	LUMIN	LUMINANCE			
Candela	Zone	Lumens	% Fixture	Avera Cand	ela	Average 0°		
7197	0-30	4078	75.2	Degre	es	Luminance		
7141	0-30	4070	75.2	45		10619		
5914	0-40	5174	95.4					
3883				55		887		
1774	0-60	5422	99.9					
244				65		175		
16	0-90	5426	100					
2				75		143		
1	90-180	0	0	10		140		
0				85		0		
0	0-180	5426	100	00		U		

	CANDLE	CANDLEPOWER DISTRIBUTION		CONE OF LIGHT			CANDELA TABLE			ZONAL L	UMEN SU	LUMINANCE		
		Downlight		<u> </u>	T		Degrees Vertical	Candela		Zone	Lumens	% Fixture	Average Candela	Average 0°
)			0°.	$/ \rangle$	þ		0	9963		0-30	4491	78.6	Degrees	Luminance
			1	1			5	9498		0-30	4451	70.0	45	9546
	2490						15	6587		0-40	5481	96		
	2.00	$ \rangle \rangle \langle \rangle \rangle \langle \rangle $		1			25	3908					55	1435
			MH	FC	L	W	35	1559		0-60	5702	99.8		
	4979	60°	4'	622.7	2.4	2.4	45	219					65	518
		$ \rangle \rangle$	7'	203.3	4.4	4.4	55	27		0-90	5711	100		
	7469		9'	123	5.6	5.6	65	7					75	214
		45°					75	2		90-180	0	0		
			13'	59	8	8	85	0					85	0
	9959	15° 30°	16'	38.9	10	10	90	0		0-180	5711	100	00	U



PHOTOMETRY

SHALLOW (86° BEAM) CANDLEPOWER DISTRIBUTION		CONE OF LIGHT			CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE			
Test Number		Downlight		<u> </u>	T		Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela	Average 0°
Housing LD8B50D010		90°	0°,	/ \	þ		0	3502	0-30	2670	44.2	Degrees	Luminance
Module ER8B50835			1	\square			5	3477	0.00	2070	11.2	45	71087
Trim 8LBS0H	875	75°			-1-		15	3322	0-40	4240	70.2		
Lumens 6035	075						25	3056				55	24682
Efficacy 113.9 Lm/W			MH	FC	L	W	35	2525	0-60	5920	98.1		
SC 1.2	1749	60°	4'	218.9	4.6	4.6	45	1630				65	6100
			7'	71.5	8.2	8.2	55	459	0-90	6035	100		
	2624		9'	43.2	10.6	10.6	65	84				75	2121
		45°					75	18	90-180	0	0		
			13'	20.7	15.4	15.4	85	4				85	1274
	3498	15° 30°	16'	13.7	19	19	90	0	0-180	6035	100	00	1274

SHALLOW (86° BEAM) CANDLEPOWER DISTRIBUTION		CONE OF LIGHT			CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE			
Test Number		Downlight		<u> </u>	T		Degrees Vertical	Candela	Zone	Lumens	% Fixture	Average Candela	Average 0°
Housing LD8B50D010		90°	0°	/1	þ		0	3460	0-30	2850	45.9	Degrees	Luminance
Module ER8B50835			Ĺ	\square			5	3462	0-30	2030	40.0	45	69395
Trim 8LBS0LI	875	15"			1		15	3498	0-40	4513	72.7		
Lumens 6206	075	$\left[\right] \left[\right] \left[\right] $				25	3343	0.10			55	22488	
Efficacy 117.1 Lm/W			MH	FC	L	w	35	2681	0-60	6132	98.8		22.00
SC 1.28	1749	60°	4'	216.3	5	5	45	1591				65	4159
			7'	70.6	8.8	8.8	55	418	0-90	6206	100	00	4100
	2624		9'	42.7			65	57	90-180		0	75	631
	2024	45°				11.4	75	5		0			
			13'	20.5	16.6	16.6	85	2					
	3498	15° 30°	16'	13.5	20.4	20.4	90	0	0-180	6206	100	85	637

Nominal Scaling From 80 CRI 3500K						
CRI	ССТ	Lumen Mult				
80	2700	0.938				
80	3000	0.962				
80	3500	1.000				
80	4000	0.993				
80	5000	1.013				
90	2700	0.784				
90	3000	0.826				
90	3500	0.853				
90	4000	0.891				
90	5000	0.922				
97	2700	0.696				
97	3000	0.737				

Nominal Scaling From 5000 lumen package				
LUMEN PACKAGE	LUMEN MULT			
1000 LUMEN	0.207			
1500 LUMEN	0.280			
2000 LUMEN	0.398			
3000 LUMEN	0.562			
4000 LUMEN	0.799			
5000 LUMEN	1.000			
6000 LUMEN	1.133			
7000 LUMEN	1.368			
8000 LUMEN	1.535			
9000 LUMEN	1.729			
10,000 LUMEN	1.994			
12,000 LUMEN	2.261			
15,000 LUMEN	2.949			
17,500 LUMEN	3.329			
20,000 LUMEN	3.924			





January 28, 2019

RE: Christian Brothers Automotive 5627 South Power Road Mesa, AZ 85212 SRA Project No.: 18-070 Case Number: PRS18-00910

The proposed project is a new single-story light automotive repair facility. The stand-alone building is 5,810 S.F. comprised of two areas. The "cottage" area is for patrons scheduling vehicle service appointments or waiting for repair services to be completed. The "tech" area is comprised of ten service bays (five on each side) used by staff to repair vehicles.

The project site is located in between a new auto car wash to the north and a used auto sales dealership to the south along South Power Road. Christian Brothers Automotive will be designed and constructed as a wood framed building with a locally-sourced stone base wainscot, painted stucco veneer, and clay tile roofing. The facility will also include building mounted signage and will have aluminum and glass storefront windows and doors. The service bays will have sectional overhead doors (not facing South Power Road) for vehicular ingress and egress. Site improvements will include a continuation of the approved shared access drive at the northeast of the property, extensions of utilities to the building pad, a concrete sidewalk linking to the existing South Power Road R.O.W. sidewalk, new parking spaces, a new fully screened dumpster enclosure per City of Mesa guidelines, landscaping, and an irrigation system.

Sincerely,

Stewart + Reindersma Architecture, PLLC

Sake Reindersma, AIA Sr. Partner