

| REVISIONS: DATED ELECTRONICALLY

THIS SHEET HAS BEEN SIGNED, SEALED AND TIMOTHY D. CROCKETT MO LICENSE - 2004000775

31. SO 156 MART STORAGE

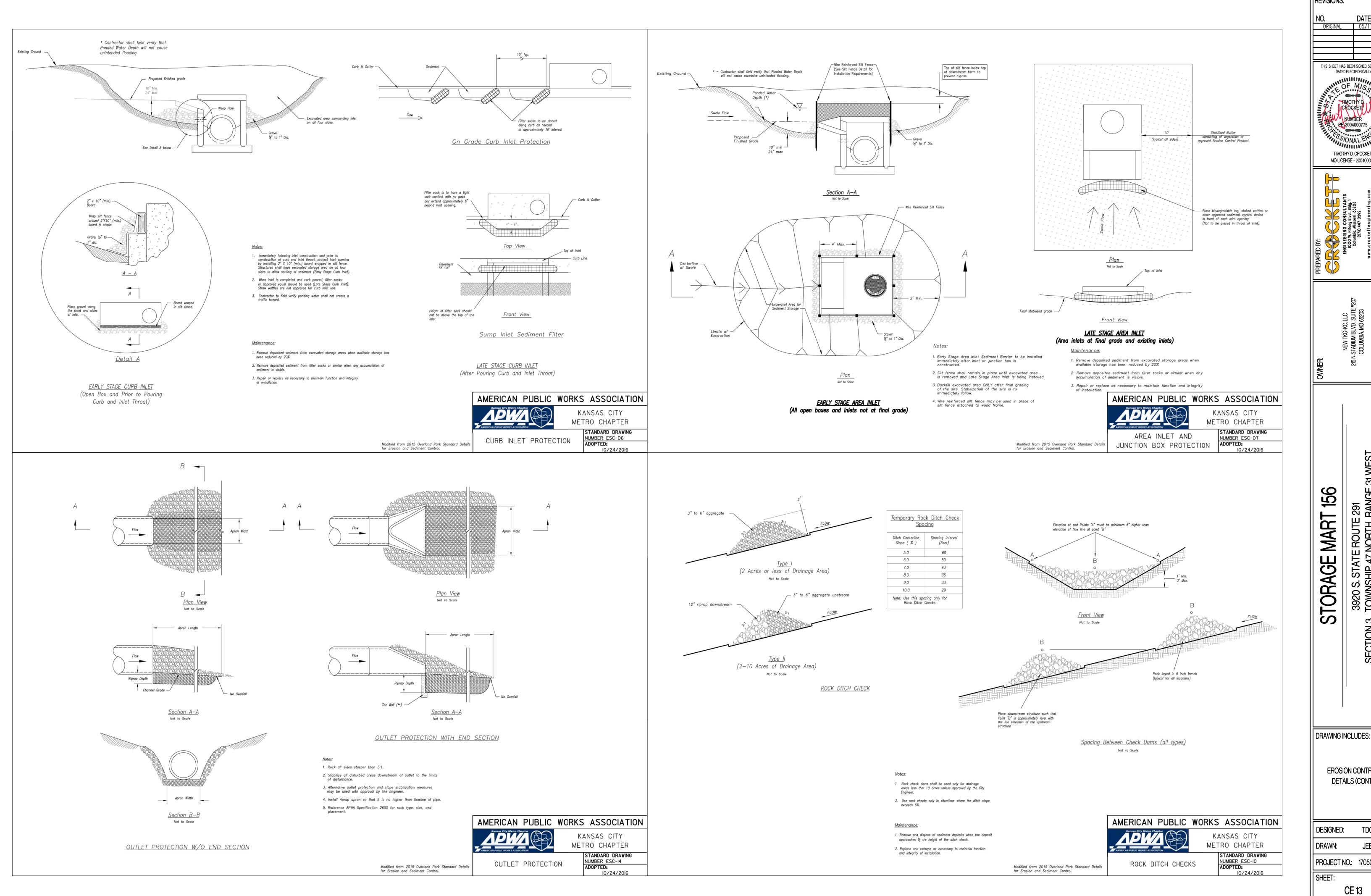
73, SUN

DRAWING INCLUDES:

EROSION CONTROL DETAILS

DESIGNED: TDC DRAWN: JEE PROJECT NO.: 170504

SHEET:



| REVISIONS: THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY TIMOTHY D. CROCKETT MO LICENSE - 2004000775

3920 S. STATE ROUTE 291 CTION 3, TOWNSHIP 47 NORTH, RANGE 31 W LEE'S SUMMIT, JACKSON COUNTY, MISSOL

EROSION CONTROL DETAILS (CONT.)

DESIGNED: TDC JEE PROJECT NO.: 170504

	E OFFINAL STATE OF THE STATE OF
S87'32'55"E 198.39' EX. 10' UTILITY ESMT.	
29.29 29.29	EX. 15' SAN. SEWER ESMIT. OETVT OETVT OETVT OETVT OETVT OETVT OETVT
M87.32'20'W 186.71	20' LANDSCAPE BUFFER

LANDSCAPE COMPLIANCE:							
LANDSCAPE REQUIREMENTS	REQUIREMENTS	PROPOSED					
1 TREE PER 30' OF STREET FRONTAGE	STREET FRONTAGE = 284' 284/30 = 10 TREES	10 TREES					
1 SHRUB PER 20' OF STREET FRONTAGE	STREET FRONTAGE = 284' 284/20 = 15 TREES	15 SHRUBS					
STREET FRONTAGE GREEN STRIP	20'	20'					
2 SHRUBS PER 5,000 SQ.FT. OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT	55,449 SQ.FT16,651 SQ.FT. = 38,798 SQ.FT./5,000 x 2 = 16 SHRUBS	16 SHRUBS					
1 TREE PER 5,000 SQ.FT. OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT	55,449 SQ.FT16,651 SQ.FT. = 38,798 SQ.FT./5,000 = 8 TREES	8 TREES					
1 SHADE TREE PER 500 SQ.FT. OF BUFFER AREA 1 ORNAMENTAL TREE PER 750 SQ.FT. OF BUFFER AREA 1 EVERGREEN TREE PER 300 SQ.FT. OF BUFFER AREA 1 SHRUB PER 200 SQ.FT. OF BUFFER AREA	BUFFER AREA = 3,740 SQ.FT. 3,750/500 = 8 SHADE TREES 3,750/750 = 5 ORNAMENTAL TREES 3,750/300 = 13 EVERGREEN TREES 3,750/200 = 19 SHRUBS	8 SHADE TREES 5 ORNAMENTAL TREES 13 EVERGREEN TREES 19 SHRUBS					
12 SHRUBS PER 40 L.F. OF PARKING AREA = 1 SHRUB PER 3.33 L.F.	24/3.33 = 7 SHRUBS	7 SHRUBS					

THE PLANT LIST IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL PLANT COUNTS AND IF A DISCREPANCY EXISTS THE PLAN SHALL GOVERN.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE

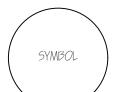
OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. THE LANDSCAPE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR

TO ANY EXCAVATION. LANDSCAPE CONTRACTOR TO RECEIVE SITE GRADED TO +/-0.10 FOOT OF FINISHED GRADE. PLANTING BACK FILL MIX IS TO CONSIST OF 80% NATIVE TOPSOIL, AND 20% ORGANIC MATTER.

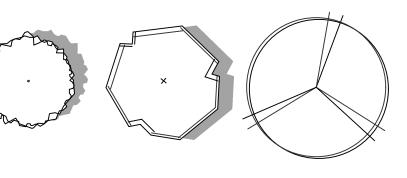
SHRUB BEDS, BERMS, AND TREE WELLS ARE TO BE MULCHED WITH 3-4" DYED HARDWOOD MULCH. ALL SEEDED AREAS WITH A SLOPE OF 2:1 OR GREATER SHALL BE CONTROLLED WITH EROSION CONTROL NETTING.
ALL BED AND LAWN AREAS SHALL BE IRRIGATED WITH POP—UP SPRAY HEADS.
ALL LAWN AREAS TO BE SODDED WITH TALL FESCUE SOD.

LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF TWELVE MONTHS. ALL PLANTING BEDS AND TREE RINGS TO BE SEPERATED FROM TURF AREAS BY 'V' TRENCHING. ALL PLANT MATERIAL MUST MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

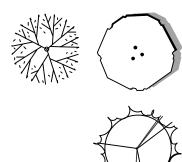
PLANT SCHEDULE



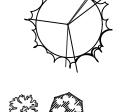
QUANTITY - TYPE OF PLANT - EXAMPLES OF PLANTS - SIZE PLANTED



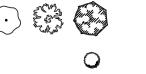
20 - SHADE TREE - RED MAPLE, RED OAK, WHITE OAK, ETC - 3"CAL. (MIN.)



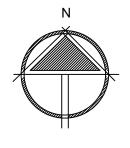
II - ORNAMENTAL TREE - DECIDUOUS HOLLY, REDBUD, GREEN HAWTHORNE, ETC - 3'' CAL. (MIN.)

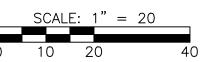


13 - EVERGREEN TREE - EASTERN RED CEDAR, LACEBARK PINE, ETC - 8' H (MIN.)



30 - FLOWERING SHRUB - BLACK HAW VIBURNUM (FOR BUFFER), WILD HYDRANGEA, NINEBARK, ETC - 5 GAL 45-EVERGREEN SHRUB - SKY ROCKET JUNIPER, DWARF ARBORVITAE, ETC - 5 GAL







2450 TRAILS WEST AVENUE COLUMBIA, MO 65202 (573) 445-4465

WWW.ROSTLANDSCAPING.COM

5 DEVELOPMENT GE OAD (T)

5.17.19 DATE: DESIGNER: JP SCALE: 1"=20'-0"

REVISIONS:

SHEET NUMBER:

PROJECT NUMBER:

REPRODUCTION OF THESE PLANS IN WHOLE OR PART OR THE REPRODUCTION OF DERIVATIVE WORKS THEREOF WITHOUT THE WRITTEN PERMISSION OF ROST INC IS PROHIBITED. USE OF THESE PLANS IS LIMITED TO THE CONSTRUCTION OF THIS PROJECT ONLY. USE OF THESE PLANS FOR ANY PURPOSE OTHER THAN USE ON THIS PROJECT IS STRICTLY PROHIBITED.

Site Lighting Design Drawings for

Storage Mart Addition

3920 South State Route 291 Lee's Summit, Jackson County, Missouri

GENERAL MEP SPECIFICATIONS

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND UNDERSTAND ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENTS. EACH CONTRACTOR IS RESPONSIBLE FOR ALL WORK ASSOCIATED WITH HIS TRADE REGARDLESS OF WHERE THE WORK IS DEPICTED IN THE DRAWINGS OR SPECIFICATIONS.

COORDINATED IN FIELD. THE CONTRACTOR SHALL INCLUDE THIS COORDINATION IN HIS SCOPE AND INCLUDE ALL COSTS OF MODIFYING THE LAYOUT AS REQUIRED IN HIS BID.

2. THE LAYOUT OF SYSTEMS SHOWN ON PLANS ARE APPROXIMATE AND WILL NEED TO BE

- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PARTS AND LABOR TO PRODUCE A COMPLETE AND FULLY OPERATIONAL SYSTEM UNLESS STATED OTHERWISE ON
- 4. ALL MATERIALS TO BE NEW, FIRST CLASS, AND INSTALLED PER MANUFACTURE'S PUBLISHED
- 5. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH LOCALLY ADOPTED CODES AND
- 6. CONTRACTOR IS RESPONSIBLE FOR TO COORDINATE EQUIPMENT LOCATIONS AND SYSTEM ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION.
- 7. CONTRACTOR TO GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE THE PROJECT IS TURN OVER TO THE OWNER, UNLESS NOTED OTHERWISE.
- 8. CONTRACTOR IS TO INCLUDE IN HIS SCOPE THE COST OF ALL PERMITS, INSPECTIONS, METERING, AND TAPS ASSOCIATED WITH HIS WORK.
- 9. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, CUTTING, CORING, PATCHING, AND BACKFILL REQUIRED TO COMPLETE HIS WORK, UNLESS NOTED OTHERWISE.
- 10. THESE PLANS ARE NOT TO BE SCALED. SEE ARCHITECTURAL PLANS FOR DIMENSIONS. WHERE THERE IS A CONFLICT BETWEEN ARCHITECTURAL DIMENSIONS AND MEP DIMENSION, ARCHITECTURAL SHALL GOVERN.
- 11. SEE DISCIPLINE SHEETS FOR ADDITIONAL DISCIPLINE SPECIFIC SPECIFICATIONS.

ELECTRICAL SPECIFICATIONS

 GENERAL 1.1. THE ENTIRE ELECTRICAL SYSTEM SHALL BE CONTINUOUSLY GROUNDED. EVERY BRANCH

CONDUIT SHALL INCLUDE A GREEN GROUND CONDUCTOR SIZED PER NEC. 1.2. ARC-FAULT CIRCUITS SHALL BE RUN WITH A DEDICATED NEUTRAL AS REQUIRED BY

PROVIDE PERMANENT ARC-FLASH LABEL AFFIXED TO EVERY DISCONNECT AND PANEL. 1.4. PROVIDE TYPE WRITTEN PANEL SCHEDULE FOR EACH PANEL.

2. MATERIALS 2.1. CONDUIT & CONDUCTORS

- 2.1.1. ALL CONDUCTORS SIZES INDICATED ON PLANS ARE COPPER UNLESS NOTED
- ABOVE GRADE CONDUCTORS SHALL BE THHN COPPER. BELOW GRADE CONDUCTORS SHALL BE XHHW-2. MINIMUM CONDUCTOR SIZE SHALL BE #12 UNLESS NOTED OTHERWISE. 120V, 20 AMP
- CIRCUITS WITH CONDUCTOR LENGTH GREATER THAN 100' SHALL BE MINIMUM #10. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR MEASURING ACTUAL CONDUCTOR LENGTH AND INCREASING CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP AS REQUIRED BY NEC.
- RIGID GALVANIZED OR SCHEDULE 40 PVC CONDUIT SHALL BE USED FOR SERVICE WIRING, BELOW GRADE INSTALLATIONS, OR WHERE EXPOSED TO WEATHER.
- IN APPLICATIONS OTHER THAN THOSE LISTED IN 2.1.4, EMT OR MC CABLE IS ACCEPTABLE. WHERE CONDUCTORS ARE PROTECTED FROM DAMAGE, ENCLOSED IN BUILDING MATERIALS, AND CONSTRUCTION IS OF A PERMITTED TYPE, NM CABLE MAY BE USED.
- 2.2. DEVICES CONTRACTOR TO PROVIDE J-BOXES, COVER PLATES, AND ANY ACCESSORIES REQUIRED
- TO PROVIDE A COMPLETE SYSTEM. SEE ARCHITECTURAL PLANS FOR DEVICE COLORS. DUPLEX RECEPTACLES SHALL BE TAMPER RESISTANT, 20 AMP, EQUAL TO LEVITON
- TOGGLE WALL SWITCHES SHALL BE EQUAL TO LEVITON CS120-2
- DIMMER SWITCHES SHALL BE TESTED WITH FIXTURES AND LAMPS FOR COMPATIBILITY.

REFERENCED CODES IN EFFECT

2014 NATIONAL ELECTRIC CODE

2015 INTERNATIONAL ENERGY CONSERVATION CODE

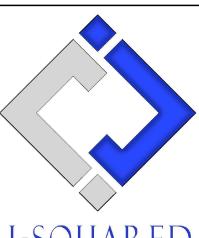
SHEET INDEX

2. EL101

SITE LIGHTING COVER SHEET 1. EL001

SITE LIGHTING PLAN

MO Certificate of Authority # 2018029680



ISSUE TITLE	DATE
PERMIT SET	05 - 17 - 2019

Addition

Storage

SITE LIGHTING **COVER SHEET**

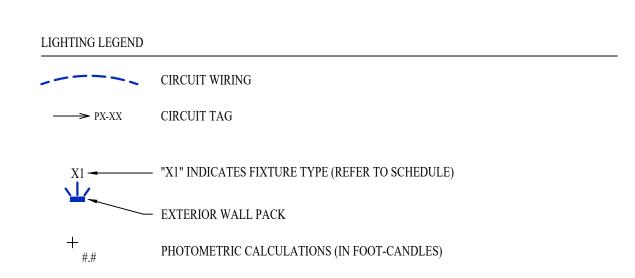
EXTERIOR LIGHT FIXTURE SCHEDULE										
TAG	MANUFACTURER (OR EQUAL)	MODEL NUMBER (OR EQUAL)	DESCRIPTION	MOUNTING	LUMEN OUTPUT	CCT (°K)	CRI	VOLTS	WATTS	NOTES
WP1	MCGRAW-EDISON	GWC-AF-02-LED-E1-T4FT-P	WALL PACK	EXTERIOR WALL	12874	4000	70	120	113	MOUNTED ON EXTERIOR WALL, TOP OF FIXTURE AT 15' ABOVE FINISHED GRADE. WITH PHOTOCELL
WP2	MCGRAW-EDISON	GWC-AF-02-LED-E1-SL3-P	WALL PACK	EXTERIOR WALL	12424	4000	70	120	113	MOUNTED ON EXTERIOR WALL, TOP OF FIXTURE AT 15' ABOVE FINISHED GRADE. WITH PHOTOCELL
NOTES:		_								

1. VERIFY LIGHT FIXTURE FINISHES WITH OWNER / ARCHITECT PRIOR TO INSTALLATION

SITE PHOTOMETRIC SUMMARY										
AREA	AVERAGE	MAXIMUM	MININUM	MAX / MIN	AVG/ MIN					
NEW PARKING	1.94 fc	5.1 fc	0.3 fc	17.0:1	6.47:1					

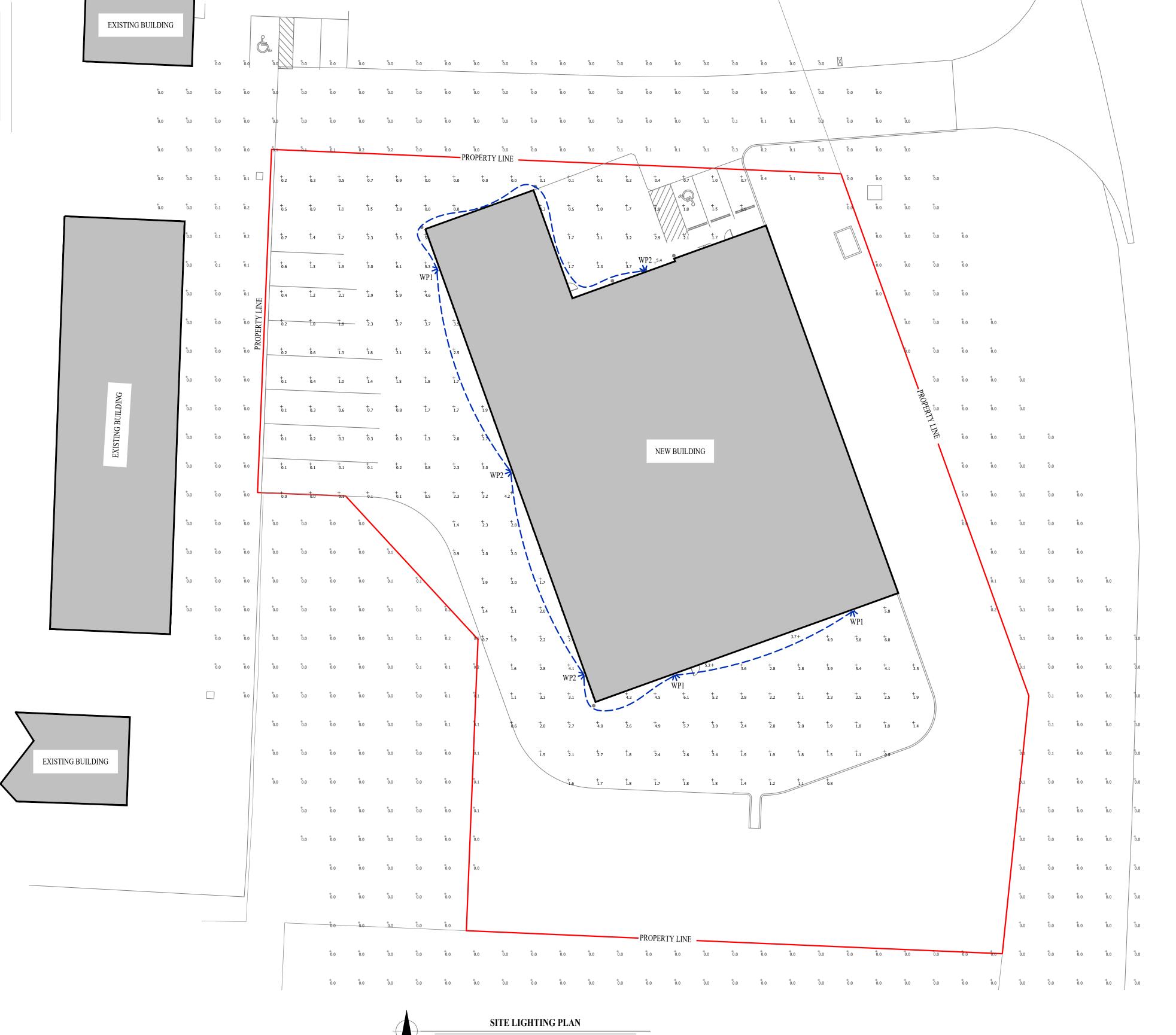
NOTES:

CALCULATIONS BASED ON 95% OF DATA POINT SOURCES, LOWER 2.5% & UPPER 2.5% OF DATA POINTS OMITTED



SITE LIGHTING PLAN GENERAL NOTES:

- 1. SITE PHOTOMETRIC VALUES SHOWN HAVE BEEN CALCULATED PER SPECIFIED LIGHT FIXTURES AT INDICATED MOUNTING HEIGHTS. ANY CHANGES OR ALTERATIONS TO LIGHTING LAYOUT SHOWN WILL REQUIRE RECALCULATING SITE PHOTOMETRICS AND WILL THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR / EQUIPMENT SUPPLIER.
- 2. PHOTOMETRIC CALCULATIONS SHOWN DO NOT INCLUDE EXISTING LIGHT FIXTURE(S), ONLY NEW WALL-PACK FIXTURE(S) SHOWN.

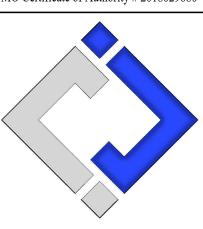


SCALE: 1" = 20'-0"

JAMES P. WATSON

NUMBER
PE-2015017071

James Watson, P.E. May 17, 2019 PE-2015017071 MO Certificate of Authority # 2018029680



J-SQUAREL

ENGINEERING
630 North Morley Street, Suite 102
Moberly, Missouri 65270

573 - 234 - 4492 phone www.j-squaredeng.com

J2 PROJECT No: J20038

J2 DESIGN: JAP

ISSUE TITLE DATE

PERMIT SET 05 - 17 - 2019

Storage Mart Addition

SHEET TITLE

SITE LIGHTING PLAN

SHEET NUMBER

EL101

