

RADIUSDC INDIANAPOLIS 2 - ALLPOINTS 18

SMITH ROAD (S COUNTY ROAD 900 E) AND ALLPOINTS PARKWAY
PLAINFIELD, HENDRICKS COUNTY, IN 46123

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CIVIL ENGINEER

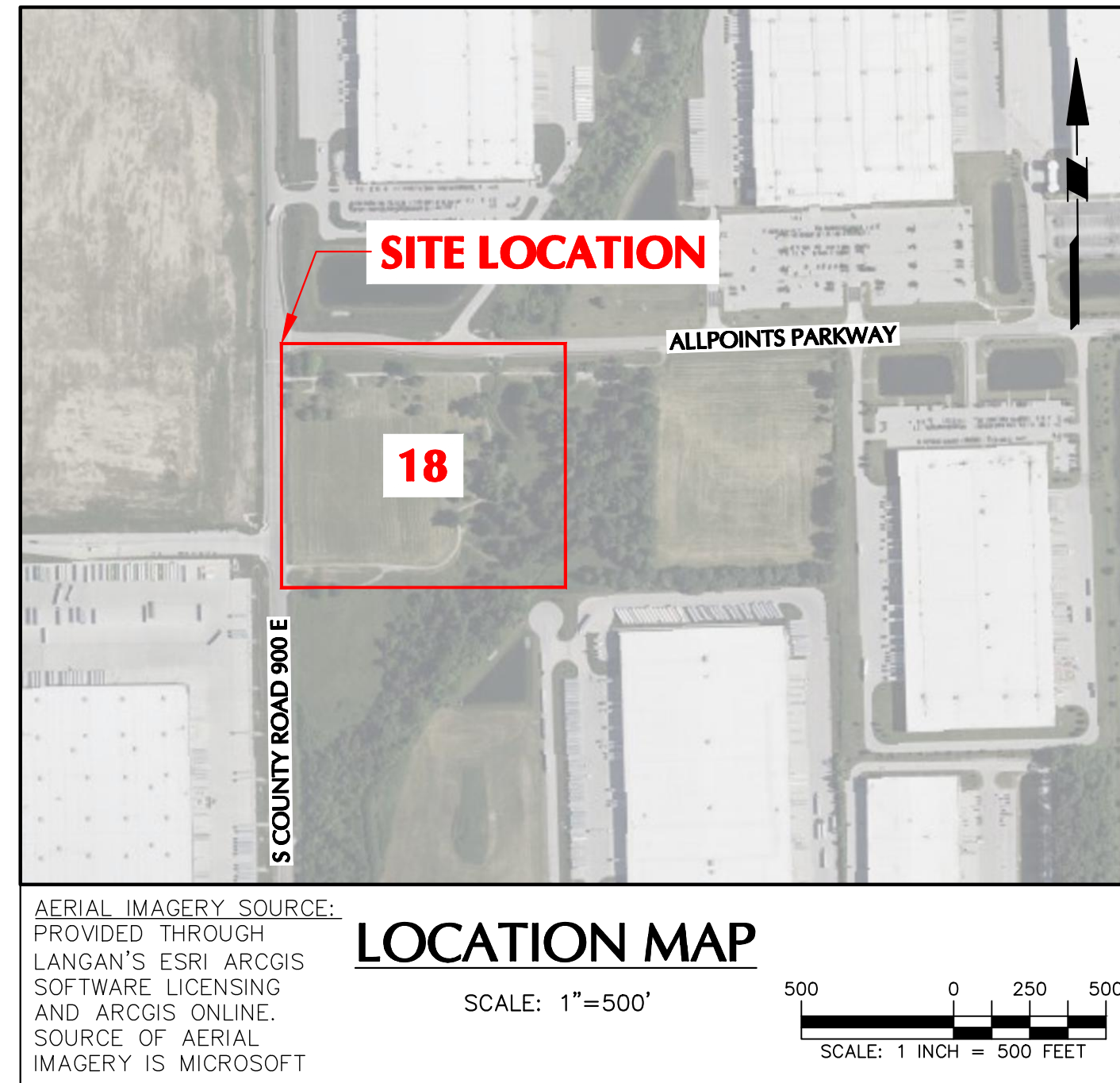
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BASIS OF BEARINGS

MERIDIAN IS REFERENCED TO INDIANA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83, PER GPS OBSERVATIONS IN JULY, 2025.

DATUM

VERTICAL DATUM IS NAVD 88 OBTAINED FROM GNSS OBSERVATIONS ON 09/10/2025

BENCHMARK

BM 301 - BRASS PLUG ON A LIGHT POLE LOCATED AT THE NORTHEAST CORNER OF ALLPOINTS PKWY & SMITH ROAD. - ELEV. 810.80

BM 302 - BRASS PLUG ON A LIGHT POLE LOCATED ON THE SOUTH SIDE OF ALLPOINTS PKWY, APPROX. 390' EAST OF THE ENTRANCE DRIVE TO 1301 SMITH ROAD - ELEV. 808.04

BM 303 - BRASS PLUG ON THE 1ST LIGHT POLE WEST OF THE WEST ENTRANCE DRIVE TO 9431 ALLPOINTS PKWY, ON THE SOUTH SIDE OF THE ALLPOINTS PKWY. - ELEV. 812.86

UTILITY INFORMATION

DESIGN TICKET 25090307793
DIG TICKET 25090307793-00A

DRAWING LIST

DRAWING NO.	DRAWING TITLE	DATE REVISED
CS001	COVER SHEET	12/12/2025
CS100	OVERALL PLAN	12/12/2025
CS101	SITE PLAN	12/12/2025
CG101	GRADING AND DRAINAGE PLAN	12/12/2025
CU101	UTILITY PLAN	12/12/2025
LL101	LIGHTING PLAN	12/12/2025
LL501	LIGHTING NOTES & DETAILS	12/12/2025
LP101	PLANTING PLAN	12/12/2025
LP501	PLANTING NOTES & DETAILS	12/12/2025



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Project

**RADIUSDC
INDIANAPOLIS 2**

PLAINFIELD

HENDRICKS COUNTY INDIANA

Drawing Title

COVER SHEET

Project No.

411000401

Date

12/12/2025

Drawn By

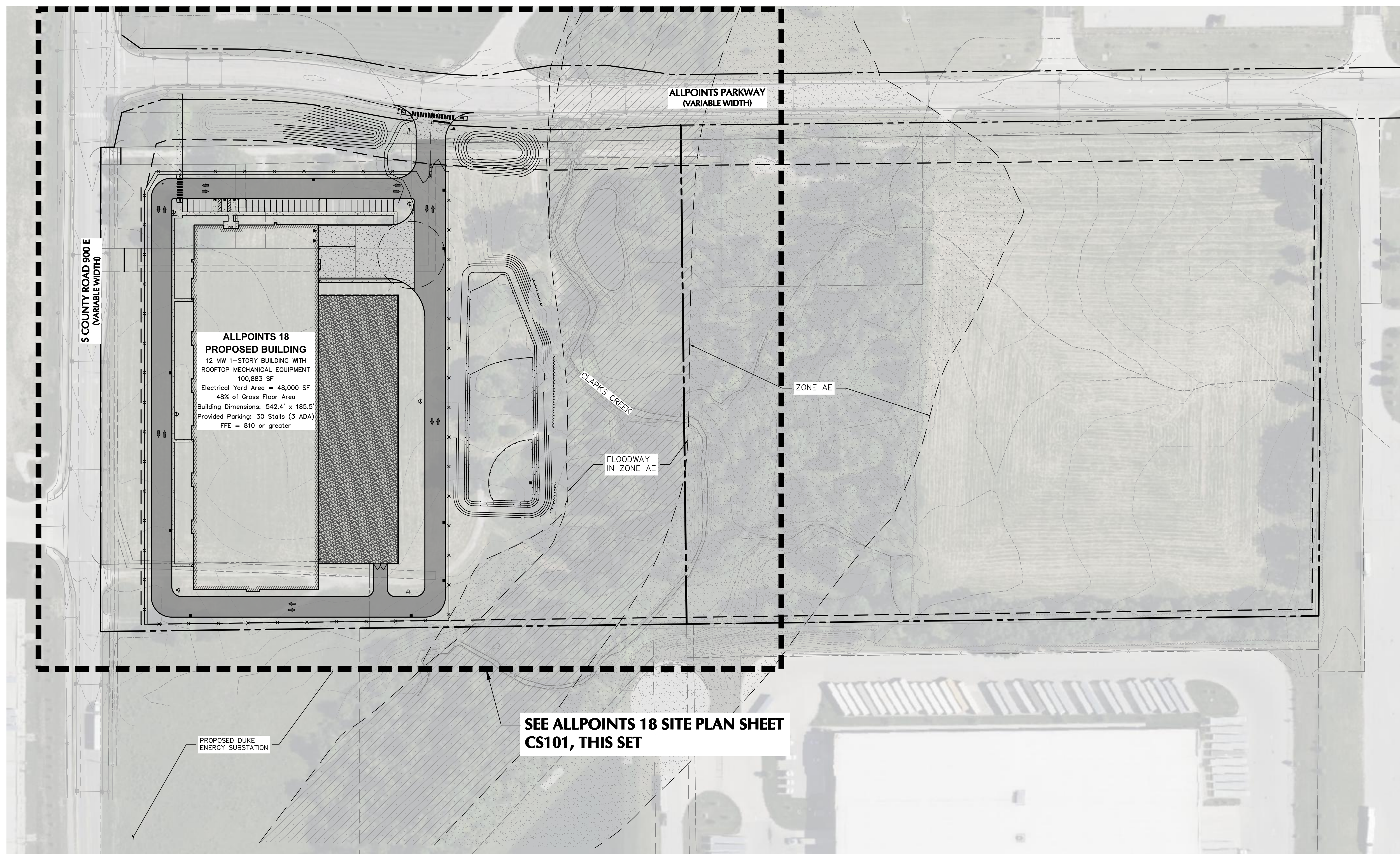
ZWH

Checked By

TH

Drawing No.

CS001



**ALLPOINTS 18
PROPOSED BUILDING**
12 MW 1-STORY BUILDING WITH
ROOFTOP MECHANICAL EQUIPMENT
100,883 SF
Electrical Yard Area = 48,000 SF
48% of Gross Floor Area
Building Dimensions: 542.4' x 185.5'
Provided Parking: 30 Stalls (3 ADA)
FFE = 810 or greater

ALLPOINTS PARKWAY
(VARIABLE WIDTH)

S COUNTY ROAD 900 E
(VARIABLE WIDTH)

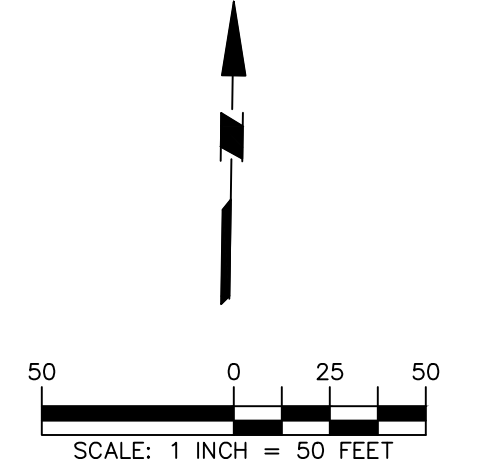
CLARK'S CREEK

ZONE AE

FLOODWAY
IN ZONE AE

PROPOSED DUKE
ENERGY SUBSTATION

SEE ALLPOINTS 18 SITE PLAN SHEET
CS101, THIS SET



Project No. 411000401

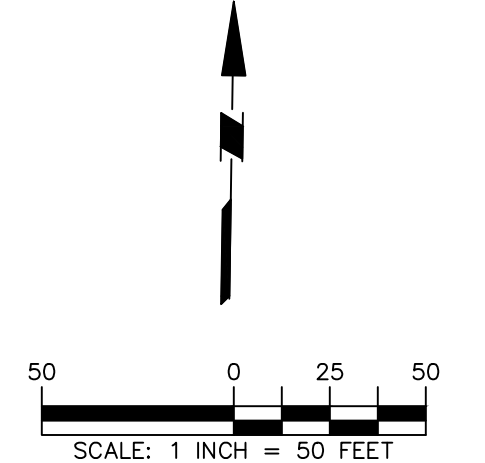
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Project
**RADIUSDC
INDIANAPOLIS 2**
PLAINFIELD
HENDRICKS COUNTY INDIANA

Drawing Title
OVERALL PLAN

Project No. 411000401	Drawing No. CS100
Date 12/12/2025	
Drawn By ZWH	
Checked By TH	

LEGEND	
PROPERTY LINE	---
BUILDING SETBACK LINE	--- ---
BUILDING LINE	
DOOR LOCATION	⌒
DOCK ENTRANCE	▼
CURB LINE	==
FENCE	* * *
SIGN	⌒
STOP BAR	—
STANDARD DUTY CONCRETE PAVEMENT/CONCRETE WALK	[Pattern]
HEAVY DUTY CONCRETE PAVEMENT	[Pattern]
LIGHT DUTY ASPHALT PAVEMENT	[Pattern]
HEAVY DUTY ASPHALT PAVEMENT	[Pattern]
GRAVEL	[Pattern]
TREELINE
ADA ACCESSIBLE RAMP	R
PAVEMENT MARKING	←
ADA PARKING SYMBOL	♿
BOLLARD	o

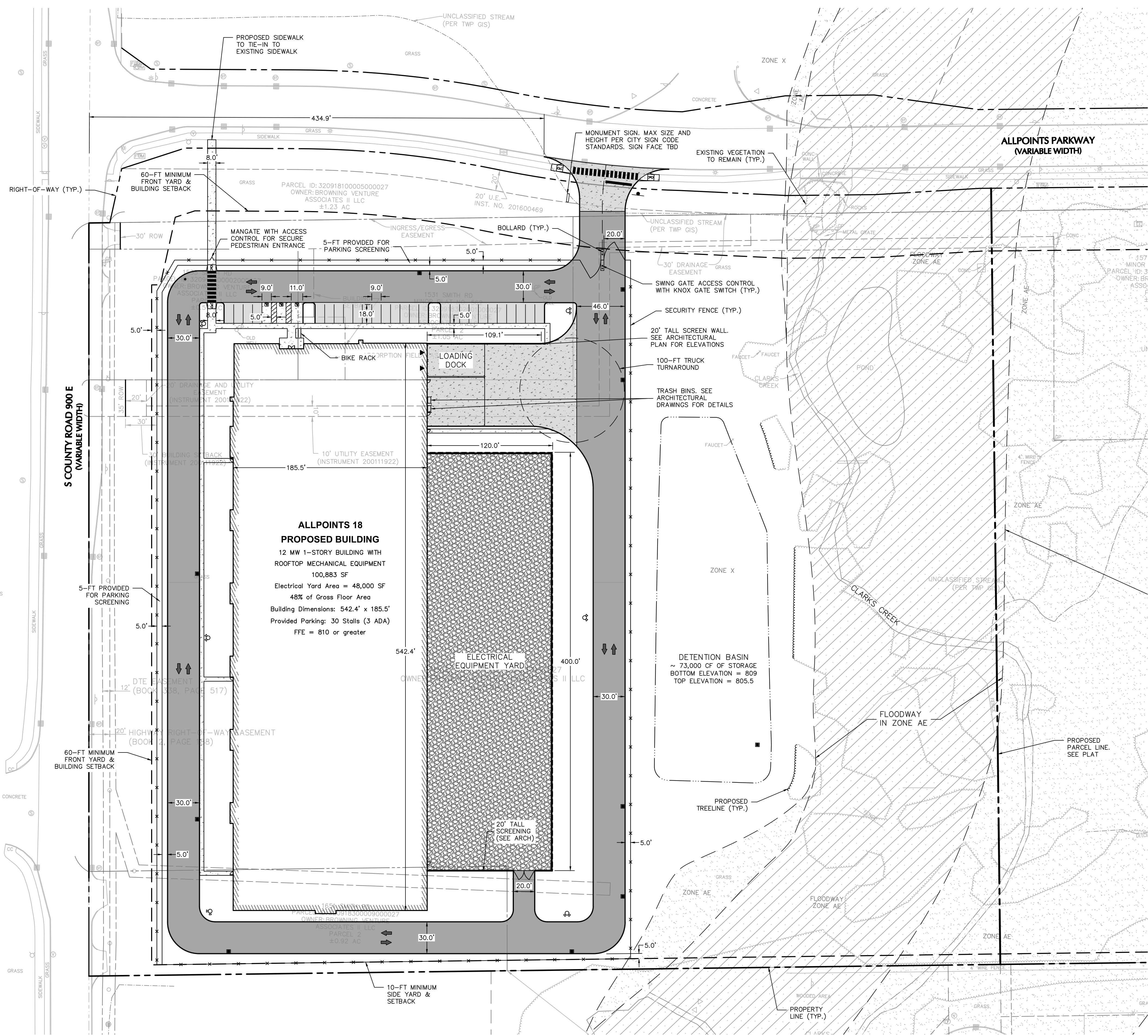


LEGEND

PROPERTY LINE	
BUILDING SETBACK LINE	
BUILDING LINE	
DOOR LOCATION	
DOCK ENTRANCE	
CURB LINE	
FENCE	
SIGN	
STOP BAR	
STANDARD DUTY CONCRETE PAVEMENT/CONCRETE WALK	
HEAVY DUTY CONCRETE PAVEMENT	
LIGHT DUTY ASPHALT PAVEMENT	
HEAVY DUTY ASPHALT PAVEMENT	
GRAVEL	
TREELINE	
ADA ACCESSIBLE RAMP	
PAVEMENT MARKING	
ADA PARKING SYMBOL	
BOLLARD	

ZONING DATA TABLE

PROPERTY ZONED:	I2	
INTENDED USE:	I2	
MINIMUM LOT AREA:	N/A	N/A
MINIMUM LOT WIDTH:	100 FT	>100 FT
MINIMUM LOT FRONTAGE:	100 FT	>100 FT
BUILDING SETBACKS		
FRONT SETBACK:	60 FT	60 FT
SIDE SETBACK:	10 FT	10 FT
REAR SETBACK:	N/A	N/A
PARKING REQUIREMENTS		
ADA SPACES:	2	3
PARKING SPACES (PROPOSED SPACES BASED ON PEAK DEMAND OF 25):	N/A	30
FULL-TIME EMPLOYEES PER SHIFT:	2	2
LOADING SPACES:	2	2
LANDSCAPE REQUIREMENTS		
BUILDING FOUNDATION PLANTING:	1826 SF	1944 SF
PARKING LOT INTERIOR PLANTING:	288 SF	1096 SF
PARKING LOT PERIMETER SCREENING:	LINE OF SHRUBS SPACED 3' O.C.	LINE OF SHRUBS SPACED 3' O.C.
PERIMETER YARD LANDSCAPE TO BE INSTALLED PER MINIMUM REQUIREMENTS IN ORDINANCE.		



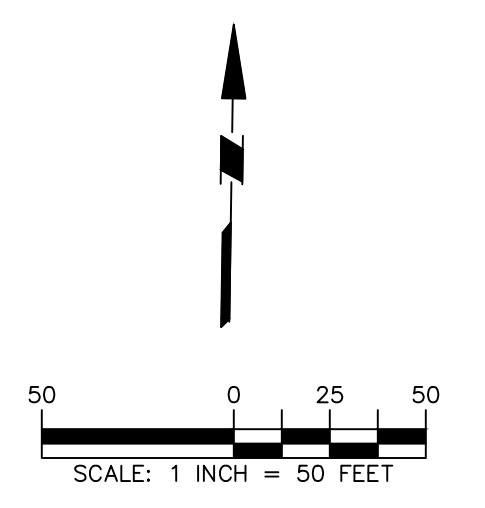
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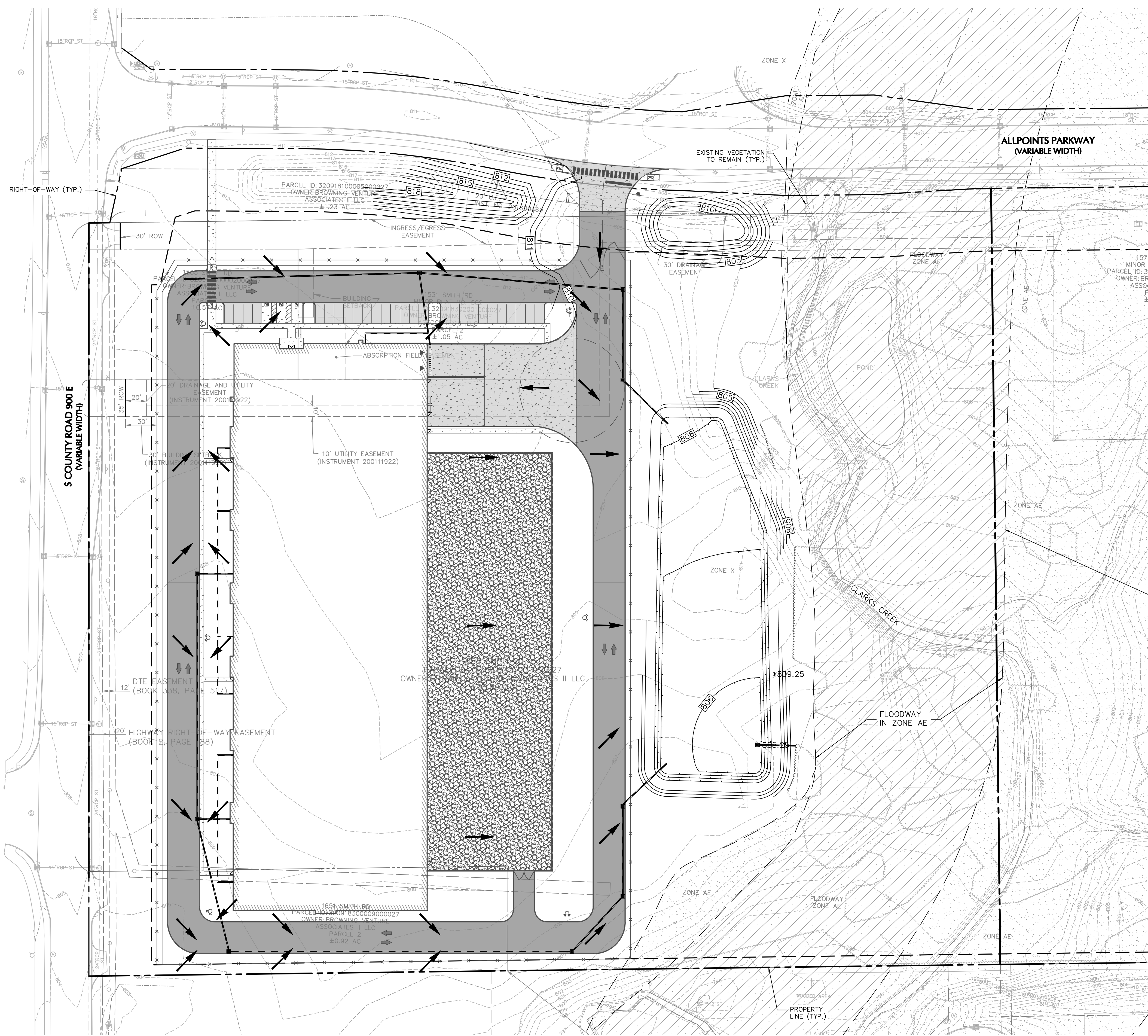
Project
**RADIUSDC
INDIANAPOLIS 2**
PLAINFIELD
HENRICKS COUNTY INDIANA

Drawing Title
SITE PLAN

Project No. 411000401	Drawing No. CS101
Date 12/12/2025	
Drawn By ZWH	
Checked By TH	



LEGEND	
PROPERTY LINE	---
EXISTING CONTOUR	---xxx---
PROPOSED CONTOUR	---xxx---
EXISTING STORM PIPE	---
PROPOSED STORM PIPE	---
EXISTING STORM STRUCTURES	⊙ ⊠ ⊡ ⊢
PROPOSED STORM STRUCTURES	● ⊠
FLOW DIRECTION	←

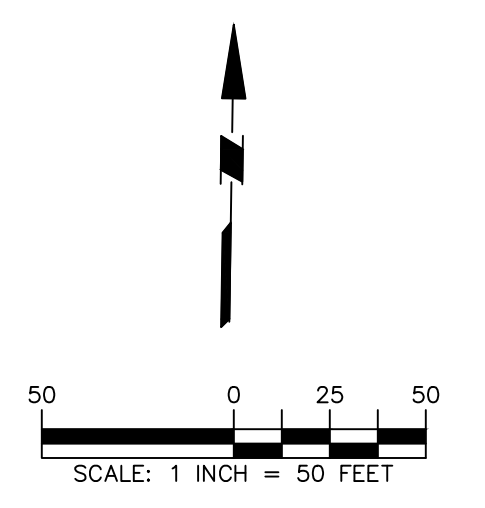


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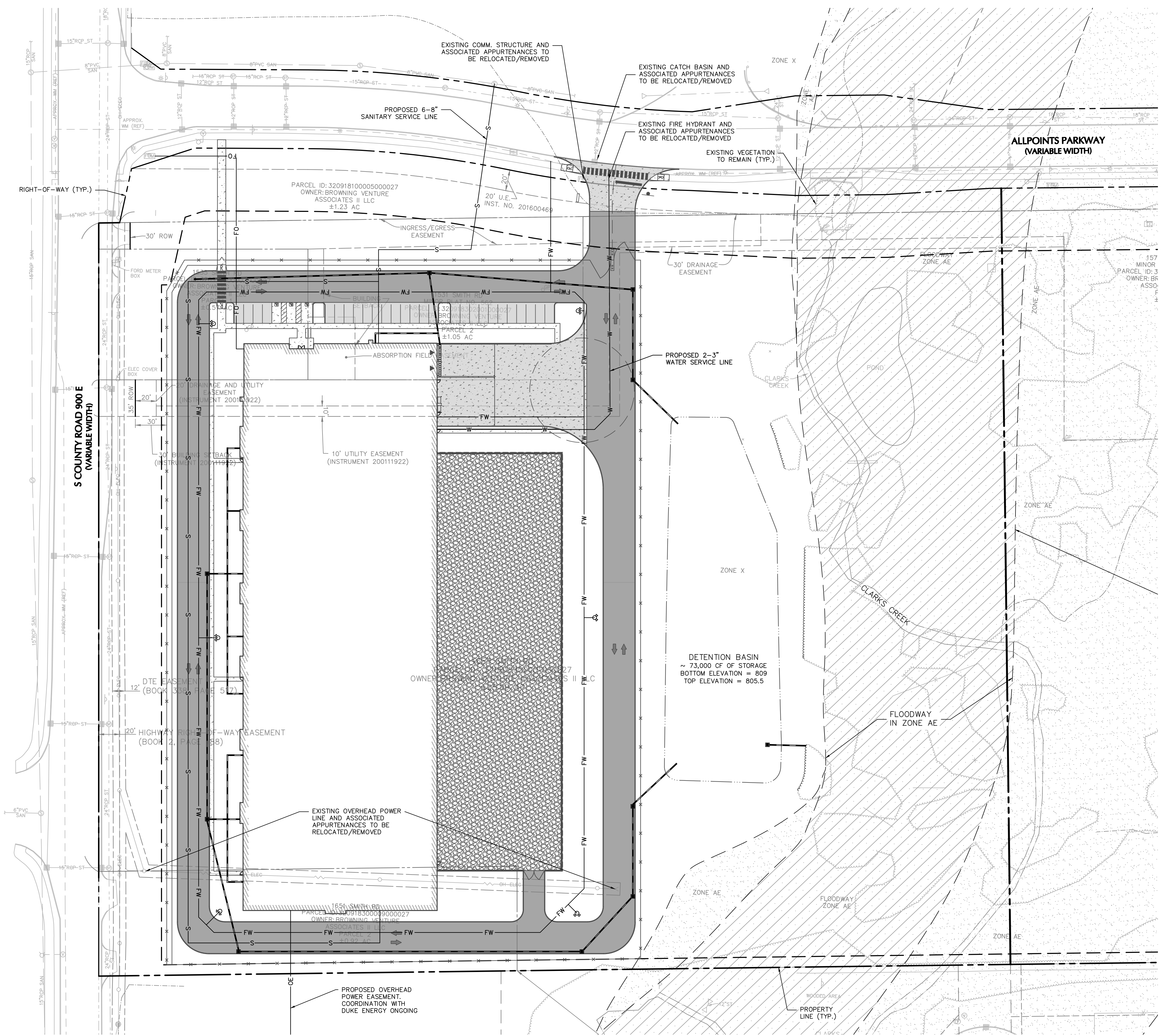
Project
**RADIUSDC
 INDIANAPOLIS 2**
 PLAINFIELD
 HENDRICKS COUNTY INDIANA

Drawing Title
**GRADING AND
 DRAINAGE PLAN**

Project No. 411000401	Drawing No. CG101
Date 12/12/2025	
Drawn By ZWH	
Checked By TH	



LEGEND	
WATER LINE	— W —
FIRE HYDRANT	⊕
WATER METER	⊞
WATER VALVE	⊞
GAS LINE	— G —
GAS METER	⊞
GAS VALVE	⊞
OVERHEAD WIRES	— OT & OE —
UTILITY POLE	⊞
UNDERGROUND COMMUNICATIONS AND ELECTRIC	— UT . UE —
UNDERGROUND ELECTRIC	— UE —
ELECTRIC METER	⊞
TRANSFORMER	⊞
LIGHT POLE	⊞
UNDERGROUND TELEPHONE	—
SANITARY SEWER LINE	— S —
SANITARY MANHOLE	⊞
SANITARY CLEANOUT	⊞
STORM PIPE	— S —
CATCH BASIN	⊞
TRENCH DRAIN	—
STORM MANHOLE	⊞
YARD DRAIN	⊞
STORM CLEANOUT	⊞
EXISTING UTILITY STRUCTURE	⊞
PROPOSED UTILITY STRUCTURE	⊞



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Project
**RADIUSDC
 INDIANAPOLIS 2**
 PLAINFIELD
 HENDRICKS COUNTY INDIANA
 Drawing Title

UTILITY PLAN

Project No. 411000401	Drawing No. CU101
Date 12/12/2025	
Drawn By ZWH	
Checked By TH	

SITE LIGHTING SCHEDULE - ALLPOINTS 18

SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	LAMP	OPTICS	LUMENS	LLF	COLOR TEMPERATURE	IES FILE	FIXTURE CATALOGUE NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOGUE NO.
	A	8	LITHONIA LIGHTING	DSX1	POLE-MOUNTED AREA LIGHT FIXTURE. COLOR: BLACK	20'-0"	102W LED	TYPE 4M W/HOUSE-SIDE SHIELD	11,529	0.90	3000K	DSX1_LED_P3_30K_70CRI_T4M_HS.ies	DSX1-LED-P3-30K-70CRI-T4M-VOLTS-SPA-HS-DBLXD	LITHONIA LIGHTING	SQUARE STRAIGHT ALUMINUM	17'-0"	POLE TO BE FACTORY CUT, MOUNTED ON 3" CONCRETE BASE
	B	7	LITHONIA LIGHTING	DSX1	POLE-MOUNTED AREA LIGHT FIXTURE. COLOR: BLACK	20'-0"	68W LED	TYPE 2M W/HOUSE-SIDE SHIELD	8,034	0.90	3000K	DSX1_LED_P2_30K_70CRI_T2M_HS.ies	DSX1-LED-P2-30K-70CRI-T2M-VOLTS-SPA-HS-DBLXD	LITHONIA LIGHTING	SQUARE STRAIGHT ALUMINUM	17'-0"	POLE TO BE FACTORY CUT, MOUNTED ON 3" CONCRETE BASE
	C	4	LITHONIA LIGHTING	DSX1	POLE-MOUNTED AREA LIGHT FIXTURE. COLOR: BLACK	20'-0"	68W LED	TYPE 3 W/BACKLIGHT CONTROL	8,034	0.90	3000K	DSX1_LED_P1_30K_70CRI_BLC3.ies	DSX1-LED-P1-30K-70CRI-BLC3-VOLTS-SPA-HS-DBLXD	LITHONIA LIGHTING	SQUARE STRAIGHT ALUMINUM	17'-0"	POLE TO BE FACTORY CUT, MOUNTED ON 3" CONCRETE BASE

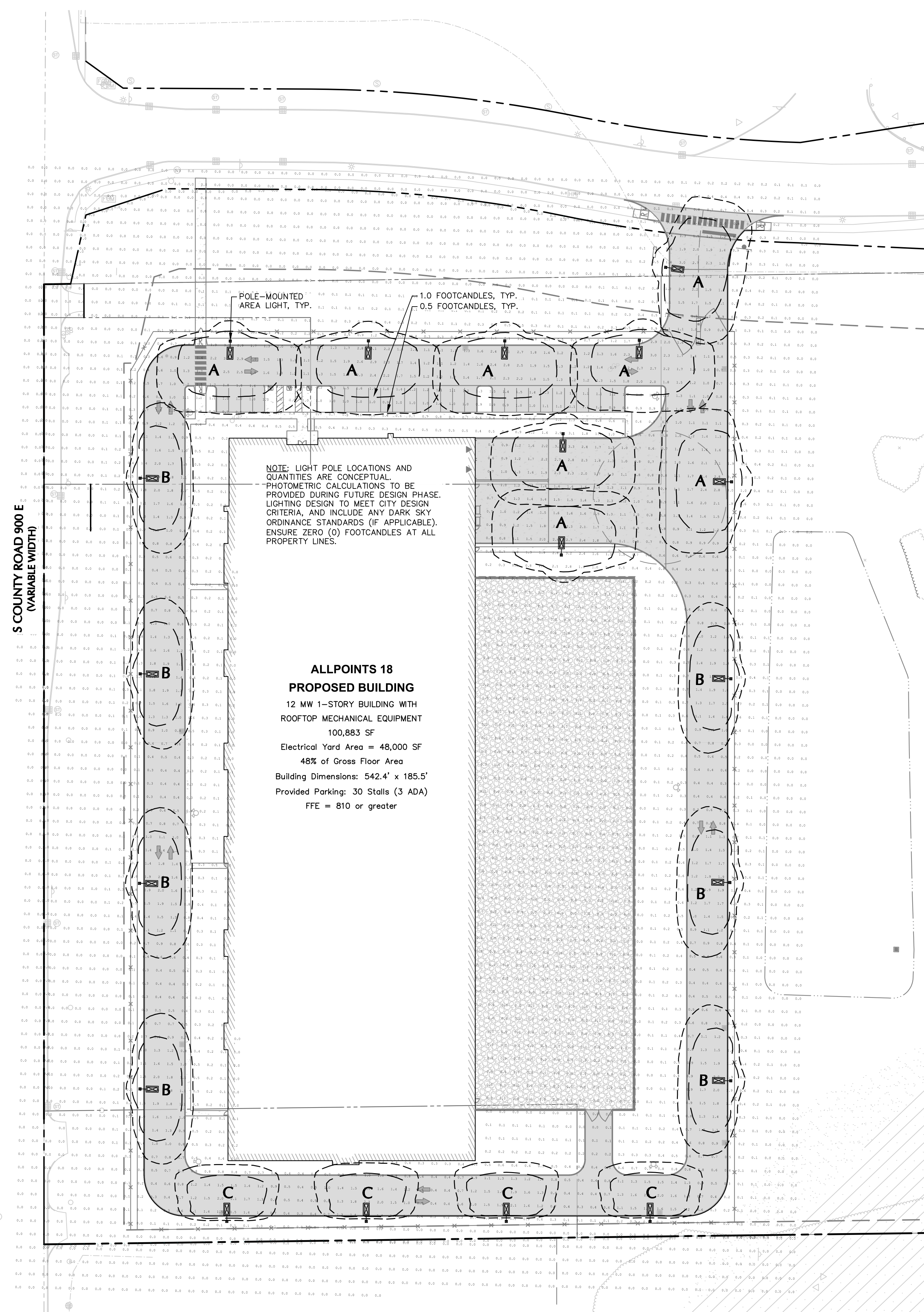
NOTES:

- REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING VOLTAGES AND ELECTRICAL LAYOUT.
- ALL POLES SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.
- CONTRACTOR TO CONFIRM CONTROLS SYSTEM REQUIRED BY THE OWNER AND PER CODE. BID PRICING SHALL INCLUDE REQUIRED CONTROLS SYSTEM, OCCUPANCY SENSORS FOR DIMMING CONTROLS SHALL BE PROVIDED FOR ALL FIXTURES.

STATISTICS

DESCRIPTION	AVG.	MAX.	MIN.	MAX/MIN.	AVG/MIN.
CAR PARKING	1.4 FC	3.1 FC	0.6 FC	5.17:1	2.45:1
DRIVEWAYS	1.1 FC	3.1 FC	0.2 FC	15.5:1	5.5:1
PROPERTY LINE	0.0 FC	0.0 FC	0.0 FC	N/A	N/A

NOTE: LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



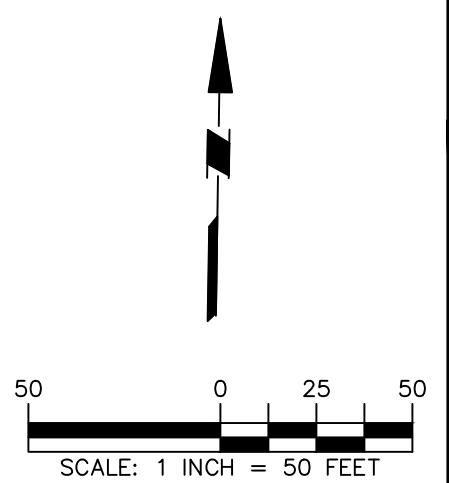
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Project
RADIUSDC INDIANAPOLIS 2
 PLAINFIELD
 HENDRICKS COUNTY INDIANA

Drawing Title
LIGHTING PLAN

Project No. 411000401	Drawing No. LL101
Date 12/12/2025	
Drawn By SD	
Checked By MS	



LIGHTING NOTES:

GENERAL

- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY STANDARD LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP/DIRT DEGRADATION ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY STANDARD LLF IN ACCORDANCE WITH GUIDANCE AS PROVIDED BY IESNA. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY IN EITHER DIRECTION FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS. NO GUARANTEE OF LIGHT LEVELS IS EXPRESSED OR IMPLIED BY THE POINT BY POINT CALCULATIONS SHOWN ON THESE PLANS.
- LIGHT LEVEL POINT SPACING IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE.
- ALL LIGHTING IS TO BE FULL CUT-OFF.

COMPLIANCE

- LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY RECOMMENDATIONS FOR LIGHT LEVELS.

COORDINATION

- CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.

POLES AND FOOTINGS

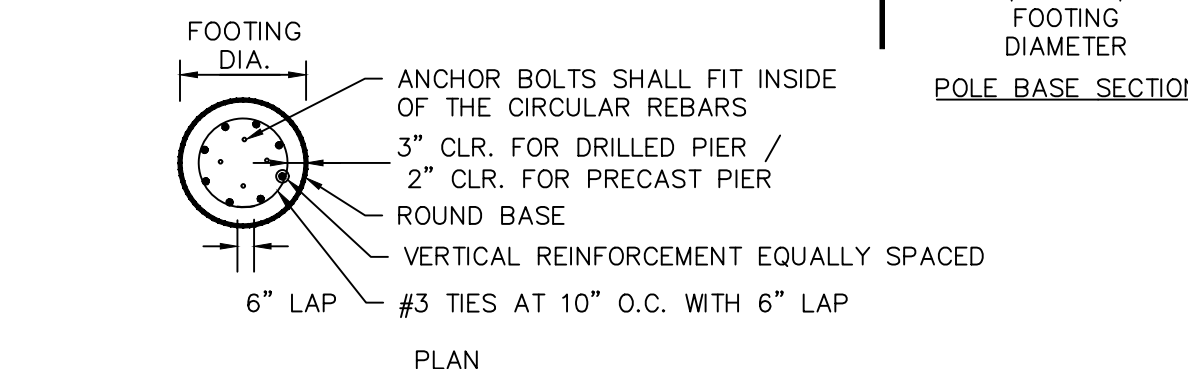
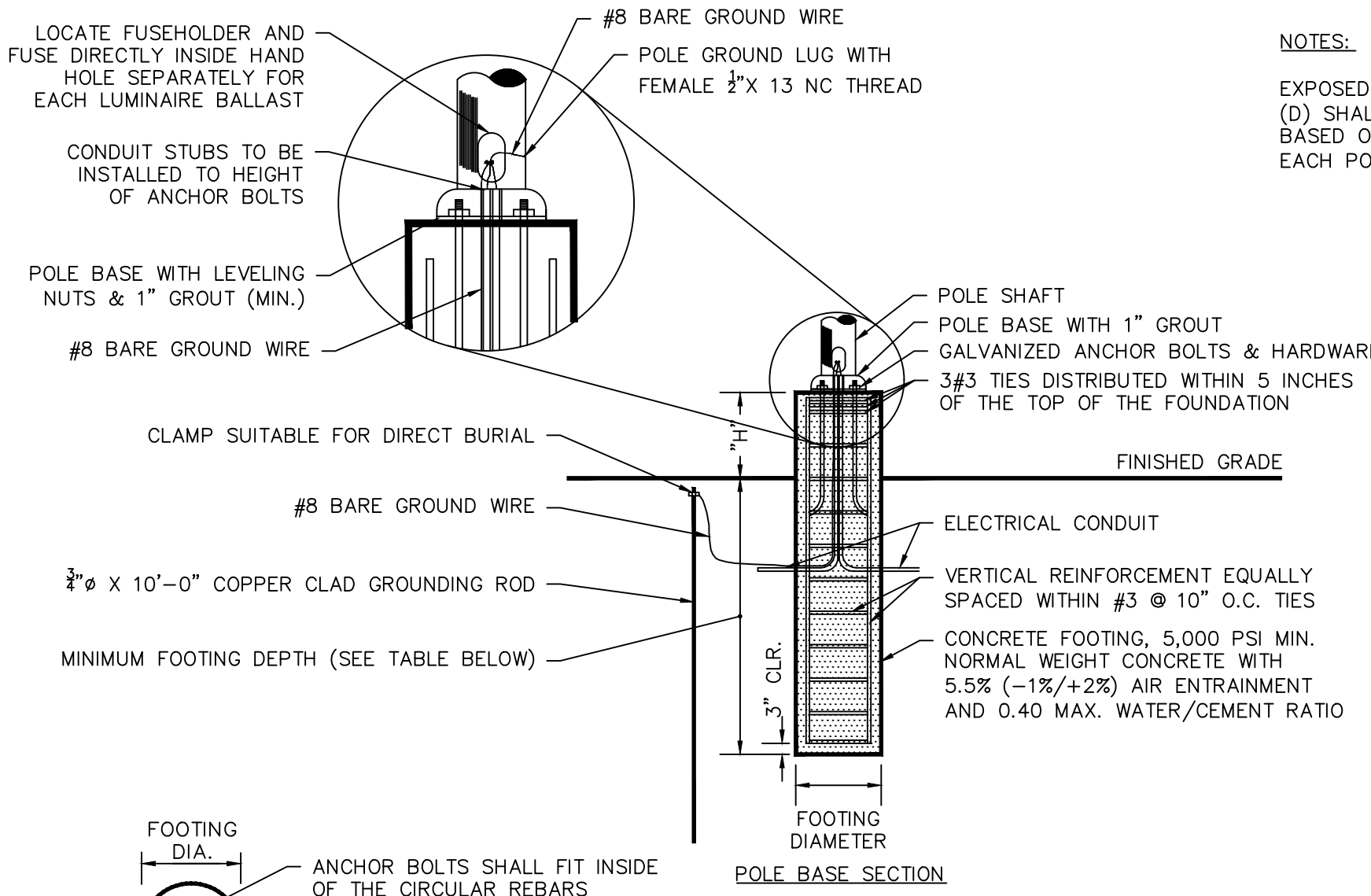
- PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND/OR IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS. CAST-IN-PLACE CONCRETE, THE USE OF ALTERNATE LIGHTING FOUNDATIONS, SUCH AS PRECAST, MAY CHANGE THE SIZING AND REINFORCEMENT REQUIREMENTS FROM THOSE SHOWN ON THESE PLANS. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING ANY SUBSTITUTED PRODUCTS.
- CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
- POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- ALL POLES HIGHER THAN 25 FT. SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

ADJUSTMENT AND INSPECTION

- CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
- CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE PLANS.

REQUIREMENTS FOR ALTERNATES

- ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
 - ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR.
 - COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOTOCANDLE, THE SYSTEM'S PERFORMANCE.
 - A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS, IES CALCULATIONS, POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM MINIMUM AND UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION.
 - POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
 - A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.

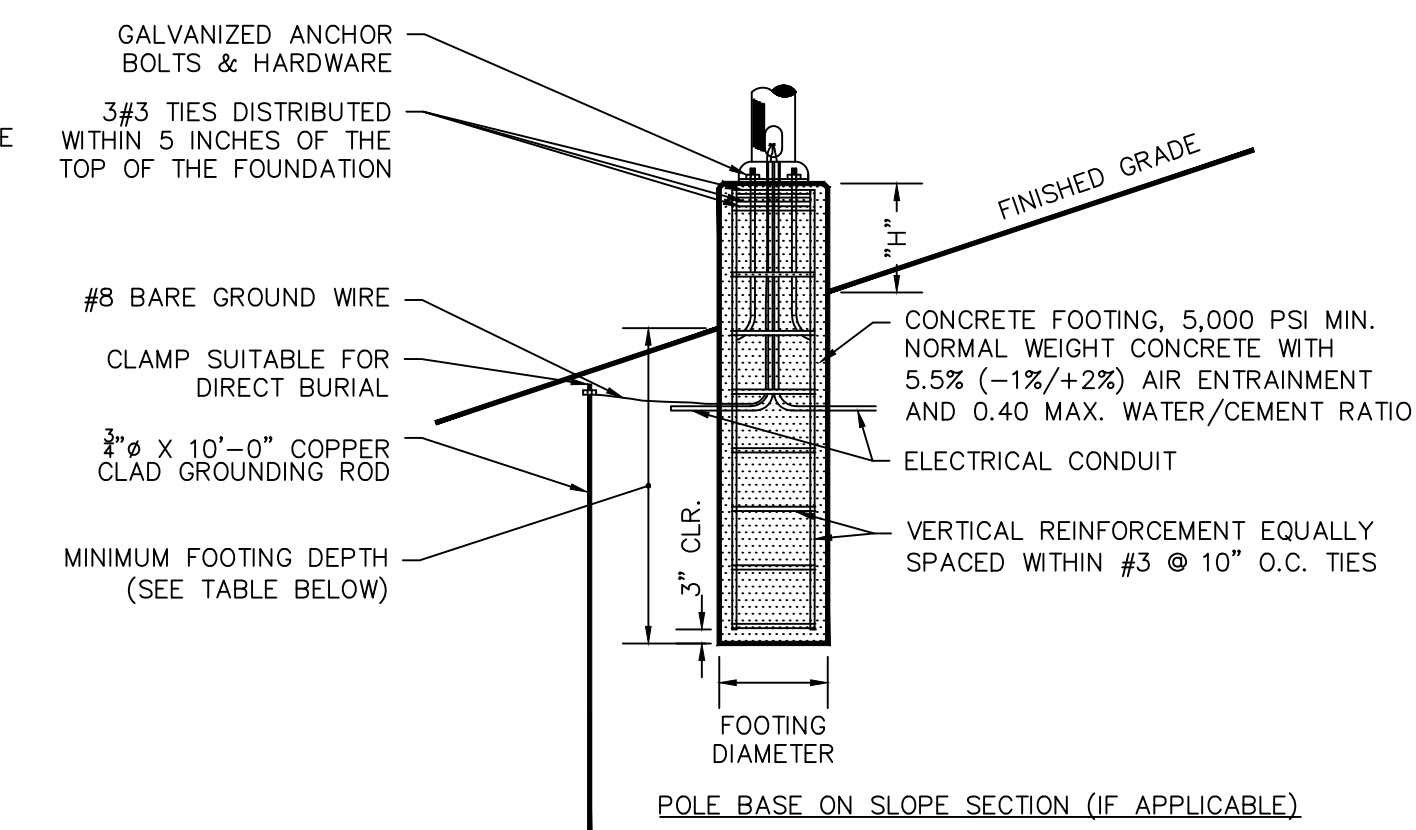


MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	EXPOSED HEIGHT "H"	VERTICAL REINFORCEMENT
20'-0"	TBD	TBD	3'-0"	TBD

LIGHT POLE BASE

NOTES:

EXPOSED HEIGHT OF POLE BASE (H) SHALL BE MEASURED ON THE UPHILL SIDE OF A SLOPE. FOOTING DEPTH (D) SHALL BE MEASURED ON THE DOWNHILL SIDE OF A SLOPE. AN ADDITIONAL VARIABLE HEIGHT (V) WILL BE BASED ON THE SLOPE ON WHICH THE POLE BASE IS LOCATED. CONTRACTOR TO CALCULATE FULL LENGTH OF EACH POLE BASE REQUIRED ON SLOPES (H+D+V = TOTAL BASE LENGTH)

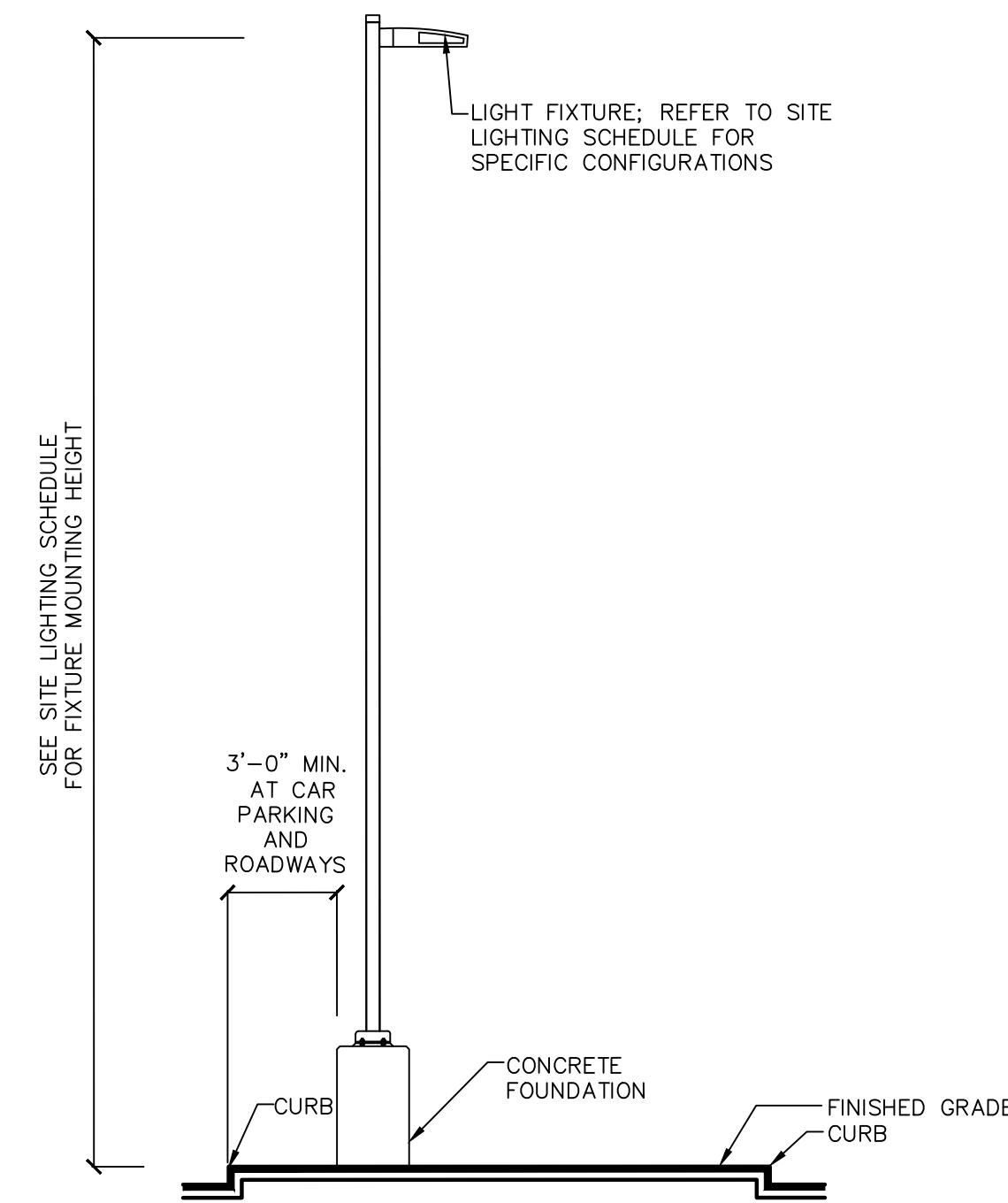


NOTES:

- SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER.
- EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBER 250-86, N.E.C.
- CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENT OF ACI 318. CAST-IN-PLACE SHALL HAVE UNCONFINED COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI AT 28-DAYS. DEFORMED REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.
- CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL.
- IF POLE BASE IS CAST-IN-PLACE, POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND-REBUBED SMOOTH.
- CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT.
- CONTRACTOR TO CONFIRM GROUNDING DESIGN WITH MEP.

THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS' RECOMMENDATIONS.

NTS



- NOTES:**
- ALL LIGHT POLES SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.
 - CURB LOCATION IS SHOWN FOR SCHEMATIC PURPOSE. LIGHT POLES SHALL BE LOCATED PER THE LIGHTING PLANS.

D-Series Size 1 LED Area Luminaire

Specifications

EPA: 0.60 ft² @ 100 ft

Length: 32.21" (823mm)

Width: 14.26" (362mm)

Height H1: 7.88" (200mm)

Height H2: 2.23" (57mm)

Weight: 34 lbs (15.4kg)

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAR2 PIRHN DDBX0

Series	Optic	Color Temperature	Color Rendering Index	Distribution	Beam	Type	Wavelength	Package	Mounting
DSX1 LED	Forward optics								
	P1	FW	300K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P2	FW	400K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P3	FW	500K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P4	FW	500K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
DSX1 LED	Retained optics								
	P10	FW	300K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P11	FW	400K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P12	FW	500K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)
	P13	FW	500K	90CRI	70CRI	T3M	Typical medium	MVOLT (100V/277V)	SPA Square pole mounting (off street)

FEATURES & SPECIFICATIONS

REINFORCED — These specifications are for USA standards only. Light poles are a general purpose light pole for up to 35 feet mounting height. The pole provides a robust and durable design for mounting area lights and floodlights.

CONSTRUCTION — Pole shaft: The pole shaft of uniform diameter and wall thickness and is made of a weldable grade, hot rolled, commercial quality steel tubing with a minimum yield of 45,000 (1) grade, 50,000 (1) or 55,000 (1) grade, 60,000 (1). Shaft line pipe with full length longitudinal fillet. Heavy-duty reinforced end caps, reinforced end cap section with flat sides, steel corner caps and reinforced horizontal gables. Available shaft widths are 4", 6" and 8".

Handhole — A reinforced handhole with gasketing provision is provided at 18" from the base on side A. Finishing the handhole cover may not be possible and requires engineering review. Small Bush Support Outside for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal diameter of 27.5".

Base Cover — Available A55 plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base Bolts — Anchor base is delivered free steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards, grade 55, 1/2" O.D. minimum thread strength and tensile strength of 21,900 ksi. Top threaded portion (maximum 12") is hot dipped galvanized per ASTM A 153.

WARRANTY — All structural steels are high strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc plated carbon steel or stainless steel.

FINISH — Extra durable powder finish is coated with RAL 7001 (gray) for maximum protection powder that meets 50 and 500 microns of ASTM D3359. Powder coat finish includes Dark Bronze, White, Black, and Natural Aluminum color. Architectural Color and Special Finishes are available by quote and include, but are not limited to: three coat dip galvanized, RAL Color, Custom Color and Diamond Mesh Finish.

BUY AMERICAN ACT — Product with the BA option is assembled in the USA and meets the Buy American/ government procurement requirements under FAR, 25.416 and 25.417 regulations. Please refer to www.buyusa.gov for additional information.

INSTALLATION — Do not erect poles without having brackets installed. Factory supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory supplies. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

WARRANTY — 1 year limited warranty. This is the only warranty provided and no other statements in this specification shall constitute any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.lithonia.com/Support/SupportForms/terms-and-conditions

NOTE: Actual performance may differ as a result of field and on-site environment and application. Specifications subject to change without notice.

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

BA

BUY AMERICAN

LIGHT FIXTURE AND POLE NTS

AREA LIGHT FIXTURE

AREA LIGHT POLE

Langan Engineering and Environmental Services, LLC.

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Project

RADIUSDC INDIANAPOLIS 2

PLAINFIELD INDIANA

HENDRICKS COUNTY INDIANA

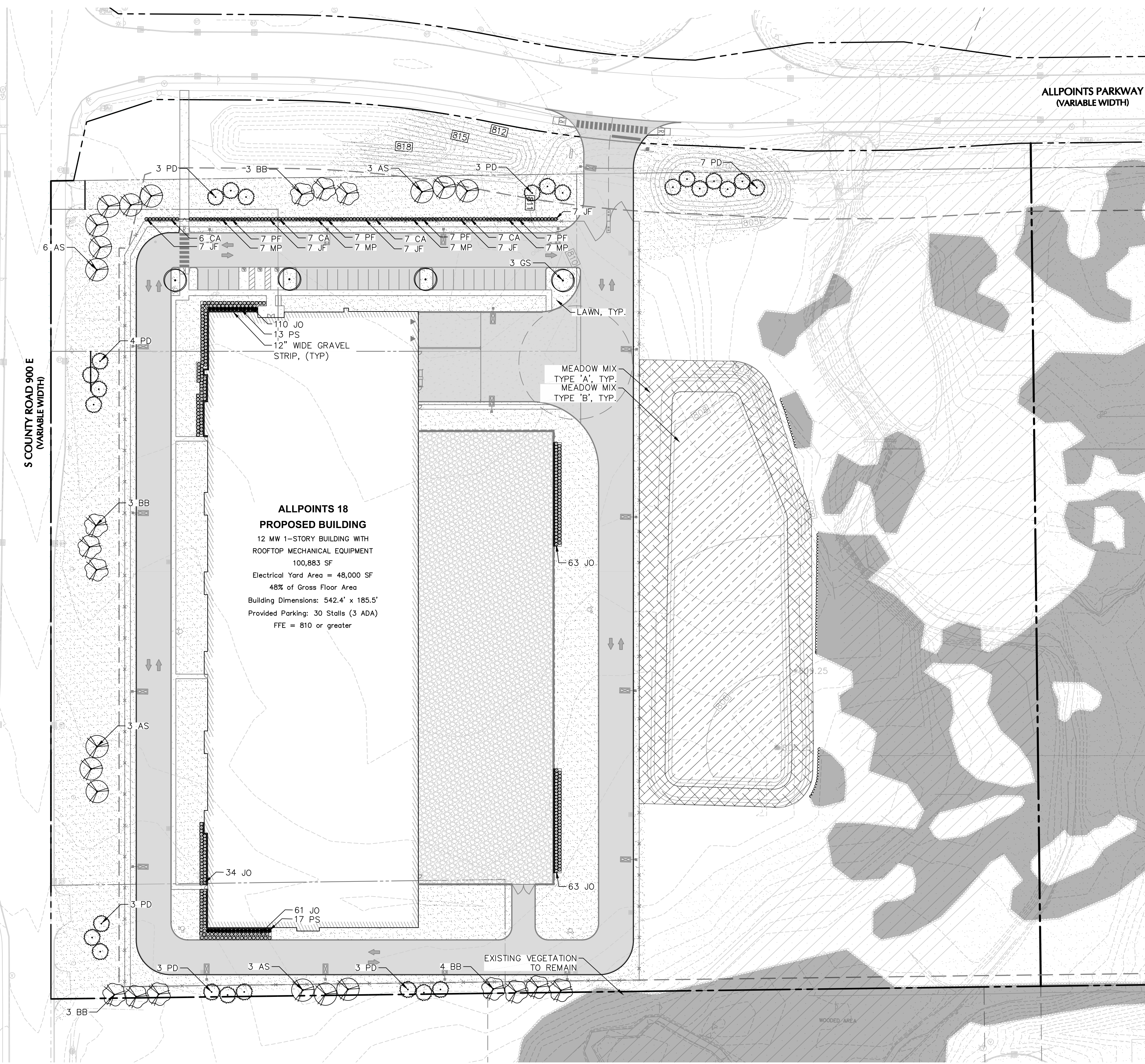
Drawing Title

LIGHTING NOTES & DETAILS

Project No.	Drawing No.
411000401	LL501
Date	
12/12/2025	
Drawn By	
Checked By	SD
	MS

LEGEND

LAWN	
MEADOW MIX TYPE 'A'	
MEADOW MIX TYPE 'B'	
EXISTING PERIMETER SCREENING TO REMAIN	



ALLPOINTS 18
PROPOSED BUILDING
 12 MW 1-STORY BUILDING WITH ROOFTOP MECHANICAL EQUIPMENT
 100,883 SF
 Electrical Yard Area = 48,000 SF
 48% of Gross Floor Area
 Building Dimensions: 542.4' x 185.5'
 Provided Parking: 30 Stalls (3 ADA)
 FFE = 810 or greater

COMPLIANCE CHART - ALLPOINTS 18

SECTION	REQUIREMENT	SITE SPECIFIC CALCULATION	PROPOSED	COMPLIANCE	
C. LANDSCAPING OF REQUIRED FRONT, SIDE AND REAR YARDS AND BUFFER YARDS IN ALL DISTRICTS	THIS SITE AND ALL ADJACENT PROPERTIES ARE ZONED I-2. LEVEL 1 PLANTING IS REQUIRED AT ALL FRONT, SIDE, AND REAR YARDS. FOR INDUSTRIAL LEVEL 1 PLANTING, A MINIMUM OF 40% OF PUV MUST BE FROM EVERGREEN PLANTS ALL REQUIRED YARDS AND ALL REQUIRED BUFFER YARDS SHALL BE LANDSCAPED IN COMPLIANCE WITH THE REQUIREMENTS IN TABLE 4.7B, TABLE 4.7.C-1, AND TABLE 4.7.C-2.	FRONT: 685 LF REQUIRES 6.85 PUV SIDE (WEST): 738 LF REQUIRES 7.38 PUV REAR: 685 LF REQUIRES 6.85 PUV	EVERGREEN TREES (8' HT. AT PLANTING) = 0.75 PUV EACH DECIDUOUS TREES (2 1/2 - 3" CAL. AT PLANTING) = 0.25 PUV EACH FRONT: 6 EVERGREEN TREES: 4.5 PUV (64%) 10 DECIDUOUS TREES: 2.5 PUV (36%) PROPOSED PUV: 7 SIDE (WEST): 7 EVERGREEN TREES: 5.25 (70%) 9 DECIDUOUS TREES: 2.25 (30%) PROPOSED PUV: 7.5 REAR: 6 EVERGREEN TREES: 4.5 PUV (64%) 10 DECIDUOUS TREES: 2.5 PUV (36%) PROPOSED PUV: 7	COMPLIES	
E. FOUNDATION PLANTING IN THE R-6 DISTRICT, R-U DISTRICT, ALL COMMERCIAL DISTRICTS, AND ALL INDUSTRIAL DISTRICTS	1.B. IN THE CASE OF A BUILDING LOCATED IN THE R-6 DISTRICT, R-U DISTRICT, OR AN OUT LOT IN A COMMERCIAL DISTRICT OR ANY BUILDING LOCATED IN AN INDUSTRIAL DISTRICT, THE FRONT, SIDE AND REAR OF THE BUILDING SHALL HAVE FOUNDATION PLANTING AREAS. 2.B. AREA - FOUNDATION PLANTING AREAS SHALL HAVE A TOTAL AREA IN SQUARE FEET OF NOT LESS THAN TWO (2) FEET TIMES THE LENGTH OF THE WALL (2' X LENGTH OF WALL = AREA FOR FOUNDATION PLANTING) TO WHICH THE FOUNDATION PLANTING IS ORIENTED	N/A	NORTH FACADE: 185.5 LF REQUIRES 371 SF PLANTING EAST FACADE: 542 LF REQUIRES 1,084 SF PLANTING SOUTH FACADE: 180.5 LF REQUIRES 361 SF PLANTING WEST FACADE: 547 LF REQUIRES 1,094 SF PLANTING	FOUNDATION PLANTING PROVIDED ALONG NORTH, SIDE, AND REAR FACADES OF BUILDING NORTH FACADE: 431 SF PROVIDED EAST FACADE: 1,092 SF PROVIDED SOUTH FACADE: 634 SF PROVIDED WEST FACADE: 1,116 SF PLANTING PROVIDED	COMPLIES
F. PARKING LOT LANDSCAPING IN THE R-6 DISTRICT, R-U DISTRICT, ALL COMMERCIAL DISTRICTS AND ALL INDUSTRIAL AREAS	(2-A) ALL NEW SURFACE PARKING LOTS AND EXPANDED SURFACE PARKING LOTS LOCATED IN ANY R-6 DISTRICT, ANY R-U DISTRICT, ANY COMMERCIAL DISTRICT OR ANY INDUSTRIAL DISTRICT SHALL INCLUDE AT LEAST ONE INTERIOR LANDSCAPE ISLAND MEASURING EIGHT FEET BY EIGHTEEN FEET (8' X 18') MINIMUM FOR EVERY FIFTEEN (15) PARKING SPACES. EACH INTERIOR LANDSCAPE ISLAND SHALL CONTAIN AT LEAST ONE DECIDUOUS SHADE (OVERSTORY) TREE, OR DECIDUOUS ORNAMENTAL (UNDERSTORY) TREE ALL TREES SHALL COMPLY WITH THE SIZE AT TIME OF PLANTING AS INDICATED IN TABLE 4.7-B. (3-A) A COMPACT HEDGE ROW LOCATED BETWEEN THE FRONT YARD OR A BUFFERYARD AND THE EDGE OF THE PARKING AREA PLANTED THREE FEET ON-CENTER (3' O.C.) AND BETWEEN TWENTY-FOUR AND THIRTY INCHES (24" - 30") IN HEIGHT AT THE TIME OF PLANTING; OR (3-B) HEDGE PLANTS IN COMBINATION WITH AN ORNAMENTAL, DECORATIVE FENCE OR MASONRY WALL OR EARTHEN BERM PROVIDED THAT THE PLANT UNIT VALUE OF THE HEDGE, WALL AND/OR BERM EQUALS 1.5.	N/A	N/A	SHADE TREES ARE PROVIDED IN EACH PARKING LOT ISLAND SHRUB ROW IS PROVIDED BETWEEN THE PROPOSED PARKING LOT AND SITE FRONTAGE. PROPOSED SHRUBS ARE SPACED 3' O.C. AND 24" MIN. AT TIME OF PLANTING.	COMPLIES

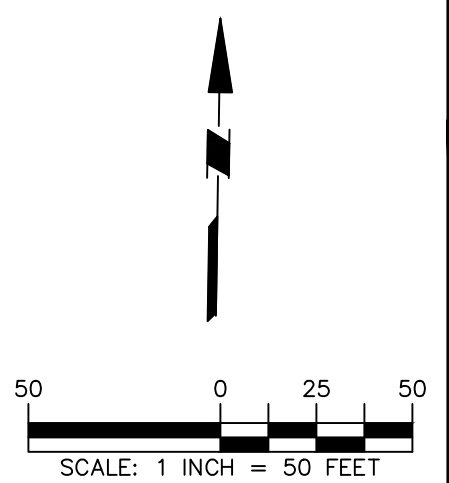
PLANT SCHEDULE ALLPOINTS 18

PLANT SPECIES ABBREVIATION	NUMBER OF PLANTS	LANDSCAPE REQUIREMENT	BOTANICAL / COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES						
AS	15	PY	ACER SACCHARUM / SUGAR MAPLE	2 1/2-3" CAL.	B&B	
BB	13	PY	BETULA NIGRA 'CULLY' / HERITAGE RIVER BIRCH MULTI-TRUNK	2 1/2-3" CAL.	B&B	MULTI-STEM
GS	4	PL	GLEDTISIA TRIACANTHOS 'INERMIS' 'SKYLINE' / SKYLINE HONEY LOCUST	2 1/2-3" CAL.	B&B	
EVERGREEN TREES						
PD	26	PY	PICEA GLAUCA 'DENSATA' / BLACK HILLS WHITE SPRUCE	8' HT.	B&B	
DECIDUOUS SHRUBS						
CA	27	PS	CORNUS SERICEA 'SILVER AND GOLD' / SILVER AND GOLD RED TWIG DOGWOOD	#5	CONTAINER	
PF	28	PS	PHYSOCARPUS OPULIFOLIUS 'DIABLO' / NINEBARK	#5	CONTAINER	
EVERGREEN SHRUBS						
JF	35	PS	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	#5	CONTAINER	
JO	331	F	JUNIPERUS VIRGINIANA 'GREY OWL' / GREY OWL EASTERN REDCEDAR	#5	CONTAINER	
MP	28	PS	MYRICA PENNSYLVANICA / NORTHERN BAYBERRY	#5	CONTAINER	
ORNAMENTAL GRASS						
PS	130	F	PANICUM VIRGATUM 'SHENANDOAH' / SHENANDOAH SWITCH GRASS	#1	CONTAINER	

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Project
RADIUSDC INDIANAPOLIS 2
 PLAINFIELD
 HENDRICKS COUNTY INDIANA
 Drawing Title
PLANTING PLAN

Project No. 411000401	Drawing No. LP101
Date 12/12/2025	
Drawn By SD	
Checked By MS	



Project No. 411000401

GENERAL LANDSCAPE PLANTING NOTES

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION, PREPARED BY THE AMERICAN ROYAL COMMISSION ON HORTICULTURE AND NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED HEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
- STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. ALL PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS' ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIES AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES. ALL TREES SHALL HAVE TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED. ANY TREE THAT LOSES THE MAIN LEADER SHALL BE REPLACED.
- THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS.
- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND SUBGRADE DRAINAGE OR PERCOLATION CHARACTERISTICS. WHETHER THE SUBGRADE SOILS ARE EXISTING TO REMAIN OR IMPORTED AND PLACED, CONTRACTOR TO ENSURE POSITIVE VERTICAL DRAINAGE THROUGHOUT PLANTING AREAS. DISCREPANCIES SHALL BE ADDRESSED WITH THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANT MATERIALS.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE FINISH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 - JUNE 15 OR SEPT 1 - NOVEMBER 1, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEING NOTES.
- ALL FENCE AND GUIDE RAIL INSTALLATIONS SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES OR IRRIGATION WORK.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF CONSTRUCTION. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
- LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADVISE THE ARCHITECT 2) TO PROTECT ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
- THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS WITHOUT PRIOR WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIAL IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, MISLEAD, WHICH DOES NOT DEVELOP FROM PLANTING STOCK, THAT APPEAR UNHEALTHY OR UNSIGHTLY AND/OR HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES, OR REJECTED FOR ANY OTHER REASON (PRIOR TO/SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, VARIETY, AND SIZE AS LISTED ON ALL PLANT LIST SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.
- DELIVERY, STORAGE, AND HANDLING:
 - PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
 - TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON AT WHICH THEY WILL BE PLANTED. DO NOT BRUISE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND THE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSPORT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR HANDLING.
 - ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP HALF OF THE BALL. AT THE TIME OF PLANTING, IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
 - THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN A PLACE TO PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.
- ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVISION INSTALLATION AND MAINTENANCE PROCEDURES.
- CONTRACTOR'S GUARANTEE: ALL PLANTING AND PLANTING AREAS SHALL BE PERMANENTLY MAINTAINED. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF TWO YEARS FOLLOWING ACCEPTANCE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, PRUNING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE DURATION OF THE GUARANTEED PERIOD. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY DEBRIS OR UNSIGHTLY MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH. CONTRACTOR SHALL CONTRIM WATER SOURCE WITH OWNER PRIOR TO BID AND INCLUDE ALTERNATE MEANS OF WATERING IF NECESSARY.
- ON-SITE WATER SHALL BE FURNISHED BY THE CONTRACTOR. HOSE AND OTHER WATERING EQUIPMENT SHALL BE FURNISHED BY THE CONTRACTOR.
- AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
- ALL TREES MUST BE GUIDED OR STAKED IF REQUIRED BY ORDINANCE, IF LOCATED ON A SLOPE 3:1 OR GREATER, OR IF THE SITE IS LOCATED IN A HIGH WIND ZONE.
- ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST. MULCH SHALL BE A FIBROUS SHREDDED HARDWOOD MULCH APPLIED AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWS SHALL GOVERN.
- LANDSCAPE PUNCH LIST SITE VISITS TO BE PERFORMED BY THE PROJECT LANDSCAPE ARCHITECT, IF UNDER CONTRACT FOR SUCH WORK. WILL NOT BE CONSIDERED AS PART OF THE PROJECT. LANDSCAPE ARCHITECT HAS THE RIGHT TO REQUEST VISITS, OR DEFICIENCIES NOTED IN THE PUNCH LIST REPORT HAVE BEEN CORRECTED. THE PUNCH LIST SITE VISIT WILL THEN BE PERFORMED WITHIN 10 BUSINESS DAYS.
- CONTRACTOR SHALL ASSESS THE NEED FOR DEER PROTECTION ON SITE. IF APPROVED NECESSARY, SHADE AND ORNAMENTAL TREES SHALL BE PROTECTED THROUGH WHITE WITH SPIRAL WRAP. TREE GUARDS OR PROTECTION LENGTHS TO BE FROM BELOW THE LOWEST BRANCH AND DOWN TO WITHIN A FEW INCHES OF THE GROUND. THE GUARDS CAN BE REMOVED IN SPRING AND SAVED FOR RE-INSTALLATION DURING FOLLOWING WINTERS AS PART OF A MAINTENANCE PROGRAM.
- ALL SLOPES 3:1 OR GREATER AND ALL SIDE SLOPES OF BASINS SHALL REQUIRE AN EROSION CONTROL BLANKET:ERONET 3150 BY NORTH AMERICAN GREEN, OR APPROVED EQUAL.

LAWN SEED MIX

- PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1/2" DIAMETER.
- PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
- SEEDING RATE AT 220 POUNDS PER ACRE:
 - 22.5% KENTUCKY BLUEGRASS
 - 22.5% PERENNIAL RYEGRASS
 - 22.5% CREeping RED FESCUE
 - 22.5% ANNUAL RYEGRASS
 - 10.0% DUTCH WHITE CLOVER
- SEEDING DATES FOR THIS MIXTURE SHALL BE BETWEEN MARCH 15TH TO MAY 15TH OR SEPT 15TH TO OCTOBER 30TH.
- GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL A STAND OF COVER IS ESTABLISHED AND FOUND ACCEPTABLE TO THE OWNER. SEE LAWN WATERING SCHEDULE NOTES.

LAWN WATERING SCHEDULE

THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 6 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE END OF THE MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER.

IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL PH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS.

- SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS.
- AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED. AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE DISPLACEMENT OF SEED.
- DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION TO OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTOR SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF GROWTH THROUGHOUT.
- AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE HEALTHY DEEP ROOTS.
- BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2-3 INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF APPLICABLE.

PLANTING SOIL SPECIFICATIONS

- PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TRASH AND STONES OVER 1/2" DIA. IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODOORS.
 - PLANTING SOIL:**
 - REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOIL, AND GRAVEL OVER 1" IN DIAMETER AND DELICIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.
 - SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
 - AT A MINIMUM, PLANTING SOILS MEETING THESE SPECIFICATIONS MAY BE OBTAINED FROM WECARE DENALI, P-888-325-1522, OR APPROVED EQUAL.
 - CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE HEIGHT OF THE BAG OR CONTAINER. SOILS OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARP/AULIN UNTIL TIME OF ACTUAL USE.
 - ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL. PRIOR TO DELIVERY TO THE SITE, CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN NUTRIENTS AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
 - THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION:
 - WHERE A PERMANENT IRRIGATION SYSTEM IS PLANNED:
 - PARTICLE SIZE ANALYSIS - SANDY LOAM: 60-75% SAND, 25-40% SILT, AND 5-15% CLAY.
 - GRAVEL CONTENT (2mm): LESS THAN 10%
 - FERTILITY ANALYSIS: pH (6.0-6.8), SOLUBLE SALTS (0.2 TO 1.0 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
 - ORGANIC MATTER CONTENT: 2.5-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
 - TOXIC SUBSTANCE ANALYSIS
 - FERTILITY DRAINAGE RATE: 40% PASSING IN 2 MINUTES, 40% RETAINED
 - NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SEIVE
 - WHERE NO PERMANENT IRRIGATION IS PLANNED:
 - PARTICLE SIZE ANALYSIS - LOAM: 40-65% SAND, 25-60% SILT, AND 5-20% CLAY.
 - GRAVEL CONTENT (2mm): LESS THAN 10%
 - FERTILITY ANALYSIS: pH (6.0-6.8), SOLUBLE SALTS (0.2 TO 1.0 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
 - ORGANIC MATTER CONTENT: 2.5-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
 - TOXIC SUBSTANCE ANALYSIS
 - MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED
 - NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SEIVE
 - SOILS FOR BASINS (BIO-RETENTION, INFILTRATION, ETC.) AND BIOWALES SHALL BE TESTED FOR COMPLIANCE WITH THE CIVIL ENGINEERING SPECIFICATIONS, OR OTHERWISE THE BEST MANAGEMENT PRACTICES MANUAL FOR THE RESPECTIVE STATE IN WHICH THE PROJECT IS LOCATED.
- SOIL AMENDMENT FOR PLANT MATERIAL:**
 - IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-9, MOISTURE CONTENT 35-55% BY WEIGHT, 100% PASSING THROUGH 1" SEIVE, AND SOLUBLE SALTS LESS THAN 0.5 MM HO/CM. MEETING ALL APPLICABLE CONFORMANCE CRITERIA FOR CLEAN FILL.
 - ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOULD WITH 60-80% ORGANIC CONTENT BY WEIGHT, SHREDDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1".
 - SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TREE ROOTS.
 - AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:
 - GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS.
 - BRING PH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERIGACEOUS PLANTS
 - BRING PH LEVELS TO 4.5 MIN. TO 5.5 FOR ERIGACEOUS PLANTS
 - TERMINAL ROOT GAVER BY PLANT HEALTH CARE® 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS.
 - MYCOR-RHIZOM GAVER BY PLANT HEALTH CARE® 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM QUARTER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.

- SOIL FILL IN LANDSCAPE AREAS:** LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 - 7.
- SOIL PLACEMENT:**
 - CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.
 - SCAFFRY AND/OR TILL COMPLETED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL. AT THE DEPTHS INDICATED ABOVE, PLANTING SOIL SHALL BE PLACED IN 12" TO 18" DEPTH. TOPSOIL AND FINISH GRADES HAVE BEEN ACHIEVED, NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.
 - PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.
- SOIL CONDITIONING:**
 - ADJUST PH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER PH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED IF PENDING RESULTS OF SOIL ANALYSIS PROVIDE WITH MINIMUM 80% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL LOOS PASSING THE 10 MESH SEIVE, MINIMUM 80% PASSING 20 MESH SEIVE, AND MINIMUM 60% PASSING 100 MESH SEIVE.
 - ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS):**
 - THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPLIANT TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.0. PEAT MOSS MAY BE USED TO IMPROVE MOISTURE RETENTION.
 - MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENSURE IT IS ADDED TO BRING THE SAND TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSIDIARY DRAINAGE LINES.
 - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

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