

# Tulsa Metropolitan Area Planning Commission

#### **Z-7367a Staff Report**

**Hearing Date:** March 6, 2024 **Prepared by:** Nathan Foster

nathanfoster@cityoftulsa.org

918-596-7609

#### **Owner and Applicant Information**

Applicant: Kurt Gariss

**Property Owner: Muncie Power Products** 

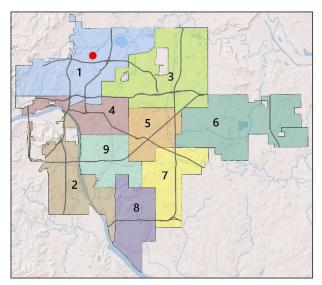
#### **Property Location**

East of the northeast corner of East Mohawk Boulevard and North Peoria Avenue

Tract Size: ±48 acres

#### **Location within the City of Tulsa**

(shown with City Council districts)



#### **Elected Representatives**

<u>City Council:</u> District 1, Vanessa Hall-Harper <u>County Commission:</u> District 1, Stan Sallee

#### **Public Notice Required**

Mailed Notice to 300' radius - min. 20 days in advance

#### **Staff Recommendation**

Staff recommends approval.

#### **Request Summary**

Minor amendment to development plan Z-7367 to increase fixture heights for parking lot lighting near Mohawk Boulevard

#### Zoning

Existing Zoning: Industrial – Moderate (IM)

Existing Overlays: Z-7367 Optional Development Plan

#### Use

<u>Current Use</u>: Industrial <u>Proposed Use</u>: Industrial

#### **Comprehensive Plan Considerations**

#### **Land Use**

Land Use Plan: Employment

<u>Small Area Plans</u>: 36th Street North <u>Development Era</u>: Early Automobile

#### **Transportation**

Major Street & Highway Plan: Residential Collector

planitulsa Street Type: N/A

Transit: TOD Area

Existing Bike/Ped Facilities: N/A

Planned Bike/Ped Facilities: Bike Lane

#### **Environment**

Flood Area: FEMA and COT Regulatory Floodplain

Tree Canopy Coverage: 30-50%

#### **Detailed Staff Recommendation**

The applicant is proposing to increase the allowable height for lighting fixtures within 200 feet of the Mohawk Boulevard right-of-way from 16 feet to 30 feet.

The development standards for Z-7367 were adopted in January of 2018. The original development plan required any light fixture within 200 feet of Mohawk Boulevard to be a maximum of 16 feet from the ground. During the initial permitting of the project, this development standard was not applied and resulted in 6 light fixtures being installed at 30 feet within the restricted area.

The light fixtures have existed since late 2021. The amendment request would not change other requirements of the development plan including the requirement that all lighting comply with the lighting requirements of the Tulsa Zoning Code and that all lighting shall be pointed down and away from the boundary of the development plan.

The building and parking lot elevations for this project sit below the elevation of Mohawk Boulevard which reduces the visibility of the lighting within the parking area from the street. The applicant has also submitted new landscaping plans for the Mohawk Boulevard corridor which will include the planting of around 40 new evergreen trees east of the driveway for the facility. The mixture of evergreen and existing deciduous trees along the Mohawk frontage will provide a natural screening from the street and neighborhood areas to the south.

The applicant has provided a lighting plan and a photometric illustration to demonstrate compliance with all other requirements. The minor amendment request is limited to the existing lighting on-site. Any future installation of lighting will be required to comply with the standards outlined in Z-7367.

Staff has reviewed the request and determined:

- 1) Z-7367a does not represent a significant departure from the approved development standards in the optional development plan and is considered a minor amendment to Z-7367.
- 2) All remaining development standards defined in Z-7367 and subsequent amendments shall remain in effect.

With consideration given to the factors listed herein, staff recommends approval of the application.

#### **Comprehensive Plan Considerations**

#### **Land Use Plan**

The subject property is designated as Employment.

Employment is intended to accommodate offices, warehousing and storage, manufacturing and assembly, and industrial processes. The Industrial Site Suitability map corresponds to the Employment land use designation and indicates where uses that are potentially incompatible with sensitive land uses are best suited to locate. This directs industrial uses to particular areas of the city while discouraging industrial in close proximity to Neighborhood areas.

#### **Surrounding Properties:**

| <u>Location</u> | Existing Zoning/Overlay | Existing Land Use Designation  | <u>Existing Use</u> |
|-----------------|-------------------------|--------------------------------|---------------------|
| North           | RMH/AG                  | Park and Open Space/Employment | Vacant              |
| East            | IM/Z-7367 ODP           | Employment                     | Vacant              |
| South           | RS-3/AG                 | Neighborhood                   | Residential         |
| West            | IM/Z-7367 ODP/AG        | Park and Open Space/Employment | Vacant              |

#### **Small Area Plans**

The subject property is located within the 36<sup>th</sup> Street North Small Area Plan. The optional development plan standards adopted under Z-7367 seek to implement several goals of the small area plan.

#### **Development Era**

The subject property is in an area developed during the Early Automobile Era (1930s-50s), which retained a high degree of the connectivity from neighborhood streets to the arterial network, with mostly commercial, office, industrial, and other active uses along major streets and a mix of housing options and neighborhood-based uses like schools, churches, and libraries in the interior sections. Priorities in these areas include walkability, bikeability, access to public transit, historic preservation, housing type variety, mixed-use development, commercial revitalization, compatibility of scale for neighborhood development, and transitions between commercial corridors and residential areas.

#### **Transportation**

<u>Major Street & Highway Plan</u>: East Mohawk Boulevard is designated as collector street which requires an ultimate right-of-way dedication of 60 feet.

Comprehensive Plan Street Designation: N/A

<u>Transit</u>: This property is in a recommended transit-oriented development area due to its proximity to the Peoria BRT line. This project implemented wider side paths along Mohawk Boulevard during construction which enhance pedestrian and bicycle connectivity to the BRT line.

Existing Bike/Ped Facilities: N/A

Planned Bike/Ped Facilities: Mohawk Bike Lanes are a listed recommendation of the GO Plan.

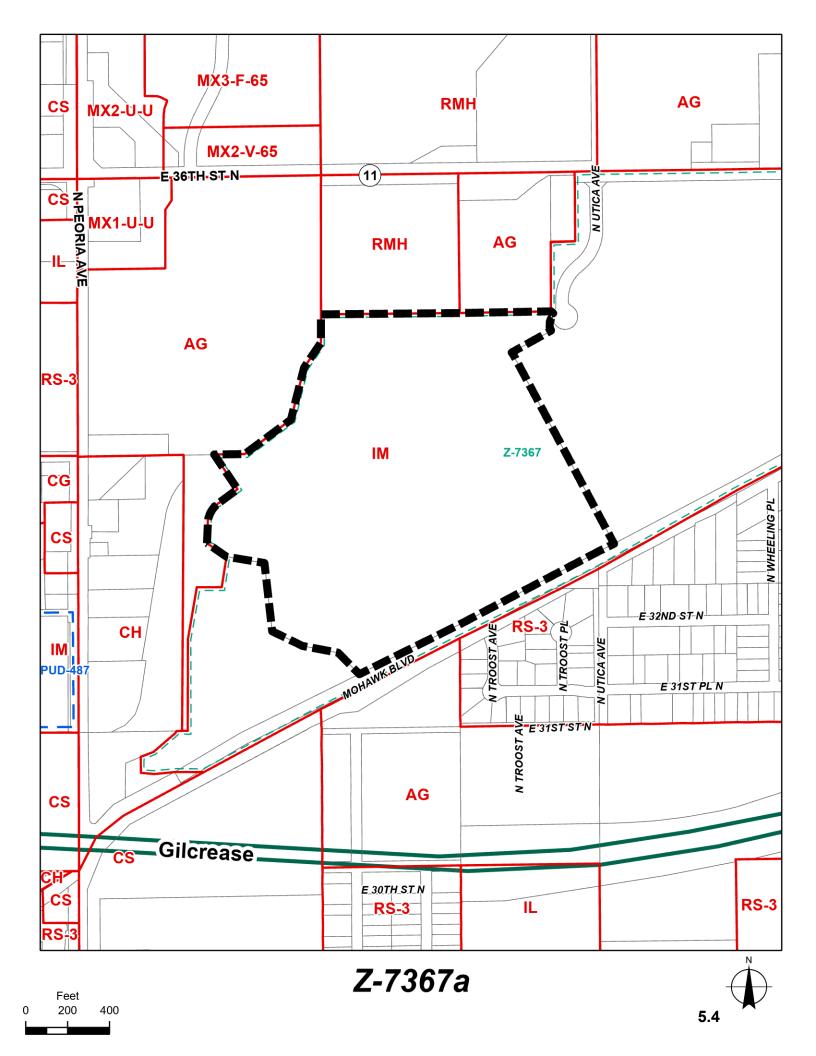
#### **Environmental Considerations**

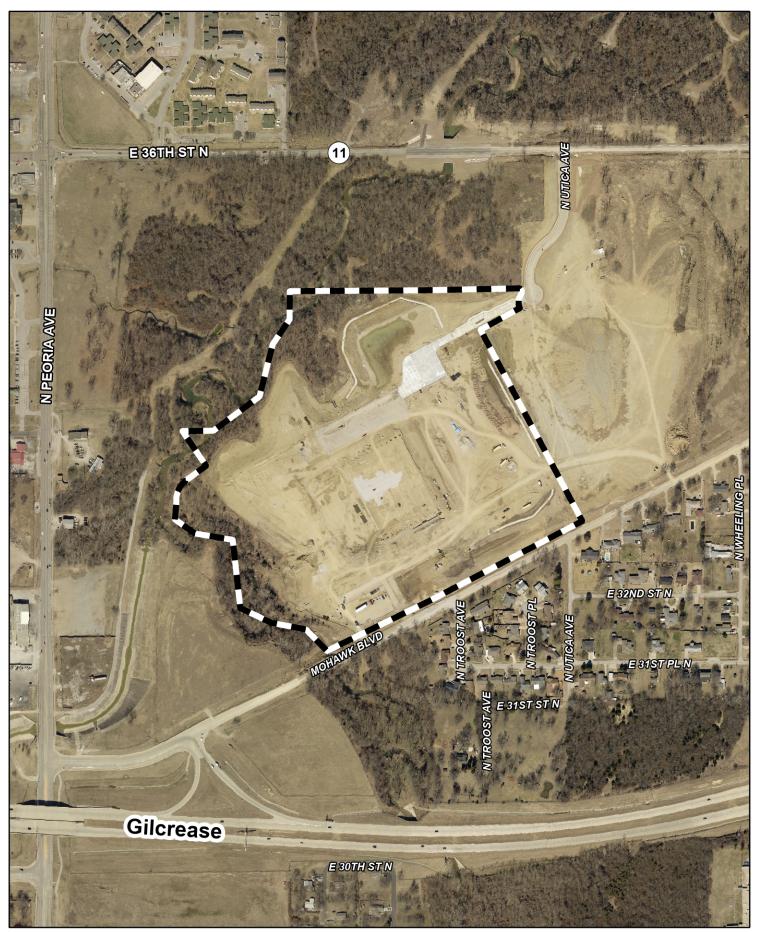
Flood Area: The subject properties contain both FEMA and City of Tulsa Regulatory floodplain boundaries.

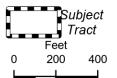
<u>Tree Canopy Coverage</u>: Tree canopy in the area is 49%.

#### **Exhibits**

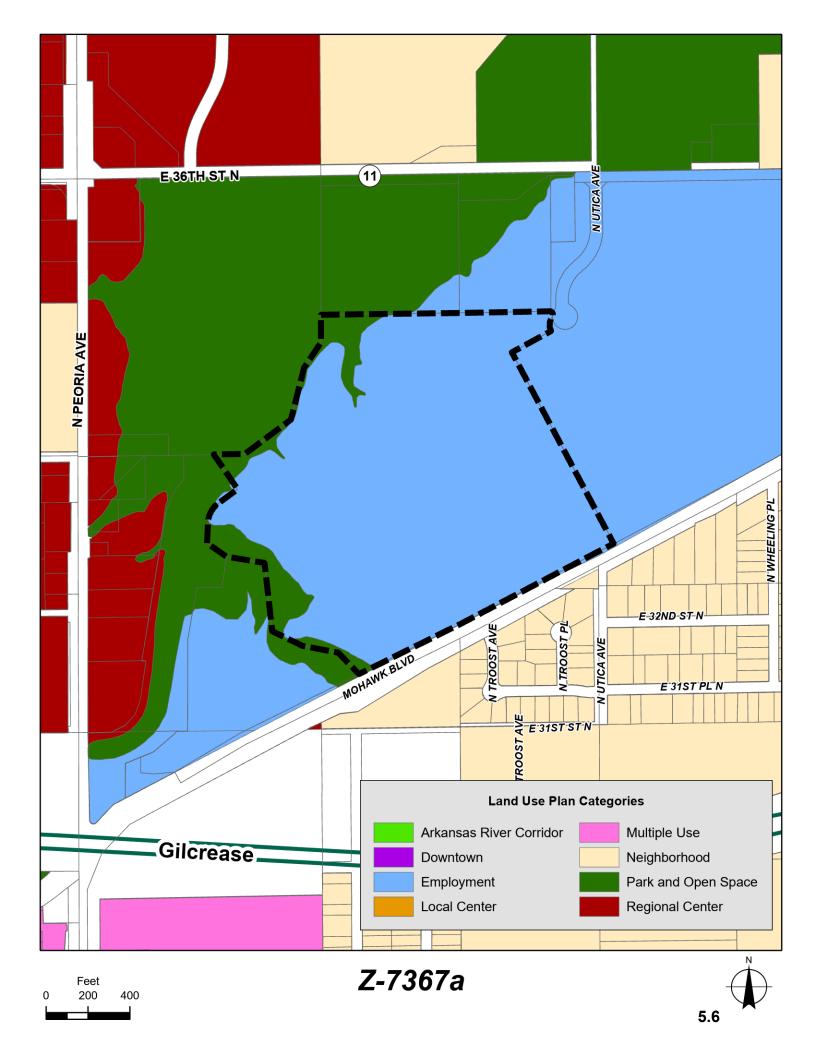
Case map Aerial (small scale) Aerial (large scale) Tulsa Comprehensive Plan Land Use Map







**Z-7367**a



## **GENERAL NOTES:**

- 1. NOT FOR CONSTRUCTION PURPOSES.
- 2. ALL CALCULATIONS CONTAIN AND ERROR FACTOR OF +/- 10%.
- 3. CALCULATION POINT SPACING IS 5' x 5'
- 4. ALL CALCULATIONS ARE IN FOOTCANDLE MEASUREMENTS
- 5. UNLESS OTHERWISE NOTED ALL REFLECTANCE VALUES ARE CALCULATED USING THE DEFAULT VALUES OF: PARKING LOT = .25
- 6. FIXTURE MOUNTING HEIGHT 30'



# Bell & McCoy Lighting and Controls 1209 S Frankfort Ave, Suite 100 Tulsa OK, 74120

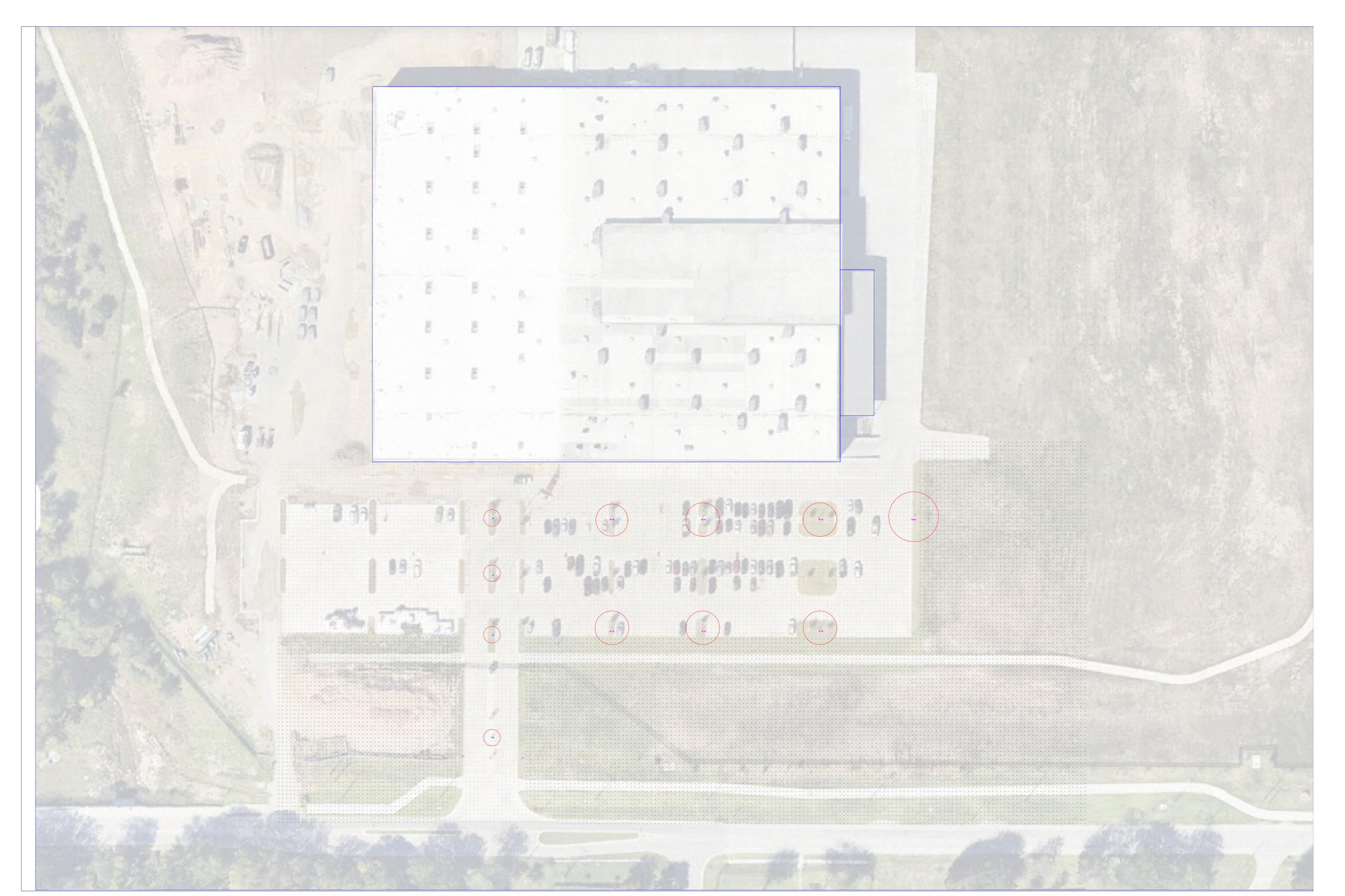
# UNCIE

| Revi | sions.     |
|------|------------|
| X    | XX/XX/XXXX |

| Drawn By:<br>B. Romero |  |
|------------------------|--|
| Date:<br>2/21/2024     |  |
| Scale:<br>N.T.S        |  |
| Sheet Title:           |  |

| 3. Romero                         |  |
|-----------------------------------|--|
| Date:<br>2/21/2024                |  |
| Scale:<br>I.T.S                   |  |
| Sheet Title:<br>Site Photometrics |  |
| Sheet No.                         |  |

## **PLAN VIEW**



| Luminaire S | Schedule |       |             |                      |  |       |            |             |             |
|-------------|----------|-------|-------------|----------------------|--|-------|------------|-------------|-------------|
| Symbol      | Qty      | Label | Arrangement | [MANUFAC]            | Description                            | LLF   | Lum. Watts | Total Watts | Lum. Lumens |
|             | 7        | S2    | Back-Back   | LSI INDUSTRIES, INC. | MRS LED 18L SIL 3 HV DIM 50 70CRI BRZ  | 0.900 | 135        | 1890        | 17592       |
|             | 4        | S3    | Single      | LSI INDUSTRIES, INC. | MRS LED 18L SIL 5W HV DIM 50 70CRI BRZ | 0.900 | 135        | 540         | 16846       |

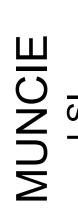
| Calculation Summary |             |       |      |     |     |         |         |
|---------------------|-------------|-------|------|-----|-----|---------|---------|
| Label               | CalcType    | Units | Avg  | Max | Min | Avg/Min | Max/Min |
| CALCS               | Illuminance | Fc    | 0.26 | 4.9 | 0.0 | N.A.    | N.A.    |
| CALCS_1             | Illuminance | Fc    | 0.07 | 0.8 | 0.0 | N.A.    | N.A.    |
| PARKING             | Illuminance | Fc    | 1.10 | 5.0 | 0.0 | N.A.    | N.A.    |
|                     | ·           |       | ·    |     | •   | ·       |         |

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| Rev | isions:    |
|-----|------------|
| X   | XX/XX/XXXX |

| Drawn By:<br>B. Romero |
|------------------------|
| Date:<br>2/21/2024     |
| Scale:<br>N.T.S        |
| Shoot Title:           |

Scale: N.T.S Sheet Title: Site Photometrics Sheet No.



Lum. Watts

135

0.900 0.900 Total Watts

1890

540

Luminaire Schedule Symbol Qty

Arrangement

Back-Back

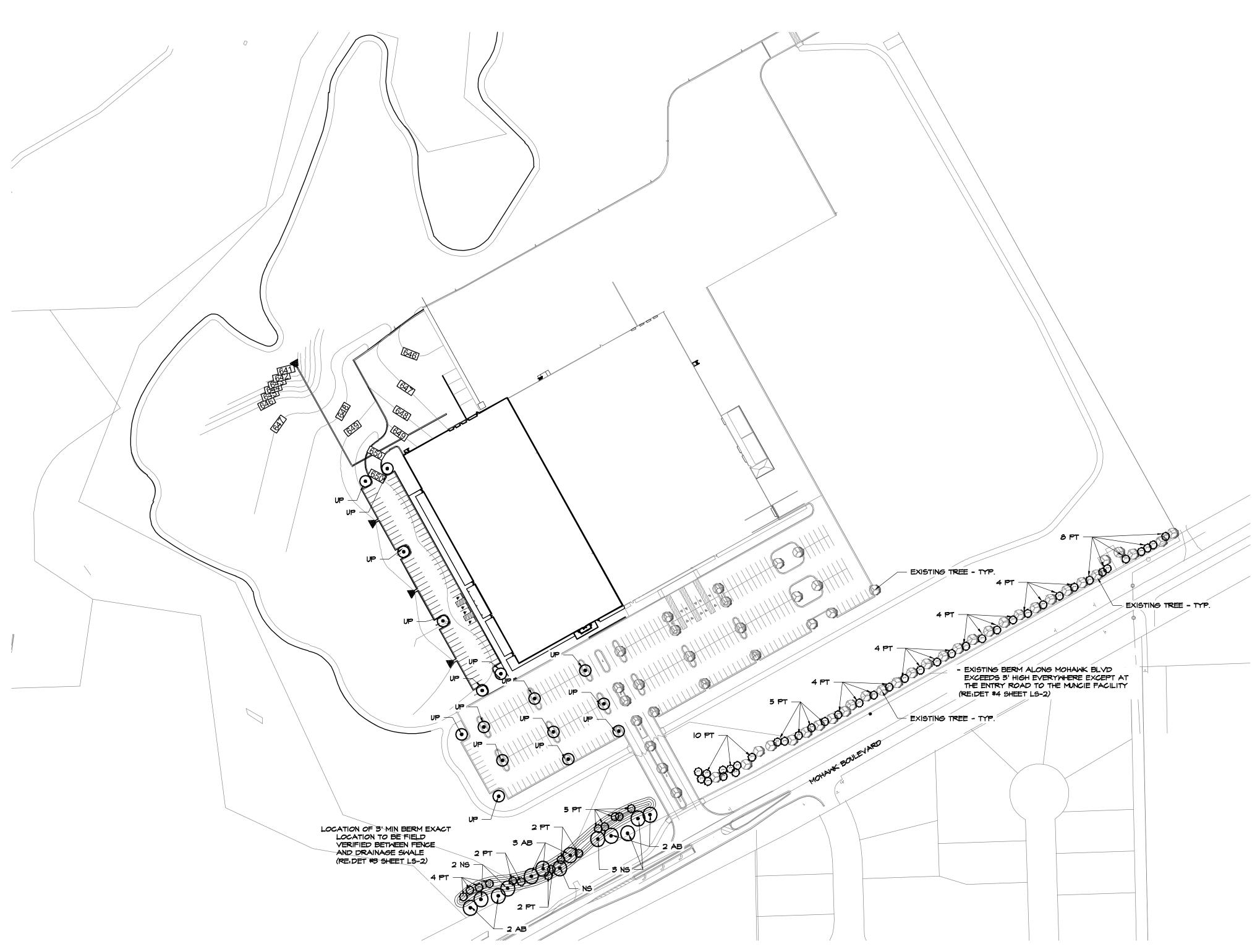
Single

[MANUFAC]

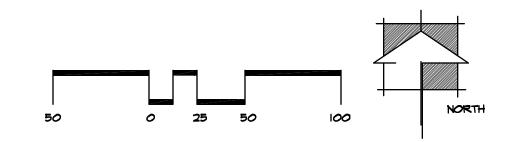
Description

LSI INDUSTRIES, INC. MRS LED 18L SIL 3 HV DIM 50 70CRI BRZ

LSI INDUSTRIES, INC. MRS LED 18L SIL 5W HV DIM 50 70CRI BRZ



# MUNCIE - LANDSCAPE ORDINANCE PLAN



\* ALL ORDINANCE REQUIRED LANDSCAPE AREA TO BE IRRIGATED BY AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.

## LANDSCAPE MATERIAL LIST

| <br>KEY | QUAN.  | MATERIAL NAME                    | SIZE/REMARK                          | TYPE |
|---------|--------|----------------------------------|--------------------------------------|------|
| AB      | 22     | ACER BUERGERIANUM Trident Maple  | 10-15' H.<br>2"-3" CAL.              | В∉В  |
| NS      | 23     | NYSSA SYLVATICA<br>Black Gum     | 2 -3 CAL.<br>10-15' H.<br>2"-3" CAL. | B\$B |
| PT      | 54     | PINUS TAEDA<br>Lobially Pina     | 10-15" H.<br>2"-3" CAL.              | BŧB  |
| UP      | 40     | ULMUS PARVIFOLIA<br>Lacebark Elm | 10-15" H.<br>2"-3" CAL.              | B≰B  |
| SOD     | 62,880 | D Bermuda Solid Sod              | N.A.                                 | S.F. |
| SEED    |        | D Bermuda HYDROSEEDING           | N.A.                                 | 5.F. |
| MULCH   | H      | <b>9</b> Cedar Mulch             | 3 C.F.                               | l BA |
| COMPO   | ST II  | <b>9</b> Back To Nature          | 3 C.F.                               | l BA |

H:HEIGHT, S:SPREAD CAL:CALIPER, O.C.: ON CENTER (Approximate), B&B:BALLED & BURLAPPED GAL: GALLON, A: ALTERNATE NUMBER ONE

THE MATERIAL LIST IS PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FIGURING ALL QUANTITIES FROM THE PLANTING PLAN AND COVERAGES FOR ALL BED AREAS. WHEN DISCREPANCIES OCCUR BETWEEN THE MATERIAL LIST AND THE PLANTING PLAN, THE PLANTING PLAN SUPERSEDES THE MATERIAL LIST IN ALL CASES. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR ALL PLANTS AND COVERAGE OF BED AREAS ON THE PLANTING PLAN.

## CITY OF TULSA LANDSCAPE ORDINANCE TABLE

## TREE AND GROUND COVER REQUIREMENTS

I. FRONT YARD AREA LANDSCAPE REQUIREMENTS:

A. ONE LARGE TREE FOR EACH 30 LF OF LOT FRONTAGE (<20' FROM ROW AND MIN. 75'

1,361 LF OF LOT FRONTAGE / 30 LF = 46 TREES REQUIRED

2. INTERIOR PARKING LANDSCAPE REQUIREMENTS:

A. 35 SF OF LANDSCAPING FOR EACH PARKING SPACE (MUST BE IN ISLANDS) AND I TREE PER 10 SPACES

TREES PROVIDED = 46 TREES

- PAYED ON TWO SIDES 2. MIN 7' WIDE
- 3. I TREE PER ISLAND W/ GROUNDCOVER PLANTS OR MULCH 4. EYERY PARKING SPACE IS WITHIN 100' OF TREE
- 35 SF X 373 PARKING SPACES = 13,055 SF OF TOTAL REQUIRED LANDSCAPING
- LANDSCAPE PROVIDED = 62,880 SF I TREE PER 10 SPACE @373 SPACES = 31 TREES TREES PROVIDED = 39 TREES

## ADDITIONAL REQUIREMENTS -

## Z-7367-DEVELOPMENT LANDSCAPE PLAN

- AN EARTHEN BERM BUILT ALONG THE ENTIRETY OF THE ZONING BOUNDARY ALONG MOHAWK, WITH A MIX OF EVERGREEN AND DECIDUOUS TREES SPACED NOT MORE THAN 25 FEET APART - ABOVE AND BEYOND ANY OTHER LANDSCAPE REQUIREMENTS IN THE ZONING CODE;

EVERGREEN TREES ALONG FRONTAGE = 54 TREES REQUIRED EVERGREEN TREES PROVIDED = 54 TREES - 34 EAST OF ENTRY 15 WEST OF ENTRY

- CALCULATIONS INCLUDE PROPOSED AND EXISTING LANDSCAPE ITEMS

## PLANTING NOTES

ON TREE.

- I. OUTLINE ALL PLANTING BEDS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WITH BED
- PREPARATION.

  2. STAKE ALL TREE LOCATIONS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO DIGGING TREE PITS. 3. REMOVE ALL WEEDS AND GRASSES FROM PLANTING BEDS.
- 4. IF BERMUDA GRASS IS PRESENT, IT SHALL BE ERADICATED BY APPROVED MEANS. 5. STEEL EDGING SHALL BE 3/16" X 4" STEEL LANDSCAPE EDGING
- WITH STEEL STAKES AS MANUFACTURED BY PRO-STEEL; FORT 6. WITHIN APPROVED BED AREAS, PREPARE SOIL BY ROTO-TILLING THREE INCHES (3") OF COMPOST (BACK TO NATURE SOIL COND-TIONER) OVER THE ENTIRE BED AREA TO A DEPTH OF SIX INCHES
- 7. SPREAD AN EVEN THREE INCHES (3") LAYER OF MULCH OVER THE ENTIRE PLANTING BED AND WITHIN ALL TREE WELLS. 8. ON ALL TREES THE TOP SIX INCHES (6") OF BACKFILL SHALL
- CONSIST OF A 1:1 MIXTURE OF COMPOST TO SOIL. 9. AROUND ALL TREES FORM A CIRCULAR RING FREE OF VEGETATION. CIRCLE SHALL BE TRUE IN FORM AND CENTERED
- IO.ALL TREES SHALL BE STAKED WITH TWO (2) GREEN METAL SPLIT TEE FENCE POSTS AND TIED WITH WIRE THROUGH THE HOSE AS PER DETAIL.
- II. APPLY OSMOCOTE AT A RATE OF 1/2 POUND PER TREE AND I POUND PER 100 SQUARE FEET TO SHRUB AND GROUNDCOVER PLANTING BEDS.
- 12.BASE IS NOT SURVEYED INFORMATION CONDITIONS WILL VARY ON SITE. CONTRACTOR TO MAKE PLANT MATERIAL ADJUSTMENTS TO MEET SITE CONDITIONS AFTER PRIOR APPROVAL BY THE
- LANDSCAPE ARCHITECT OR OWNER. 13. ALL SHRUBS SCREENING THE PARKING LOT SHALL BE PLANTED AT LEAST 24" AWAY FROM CURB LINE. ALL TREES SHALL BE PLANTED AT LEAST 5' FROM BUILT STRUCTURES AND SIDEWALKS. ALL VEGETATION MUST BE PLANTED IN SUCH A MANNER THAT
- SIGHT DISTANCE TRIANGLES ARE NOT OBSTRUCTED. 14 AZALEAS AND RHODODENDRONS SHALL BE PLANTED IN 100% PURE SPAGNUM PEAT MOSS.
- A. EXCAVATE ENTIRE AREA TO BE PLANTED TO A DEPTH OF 8" AND BACKFILLED WITH PEAT MOSS TO A HEIGHT OF 4" ABOVE SURROUNDING BED GRADE, (12" TOTAL DEPTH).
- B PEAT MOSS SHALL BE THOROGHLY WETTED WITH WATER PRIOR TO PLANTING.
- C. SCARIFY ROOT BALLS SO PLANTS WILL NOT BECOME ROOT BOUND.

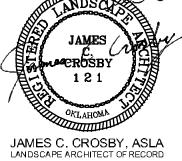


Michael Dwyer, LLC

809 East Jackson Place Broken Arrow, OK PH: 918.633.6277 LANDSCAPE ARCHITECT:

LANDSCAPE ARCHITECTURE ● RECREATIONAL DESIGN ● LAND PLANNING





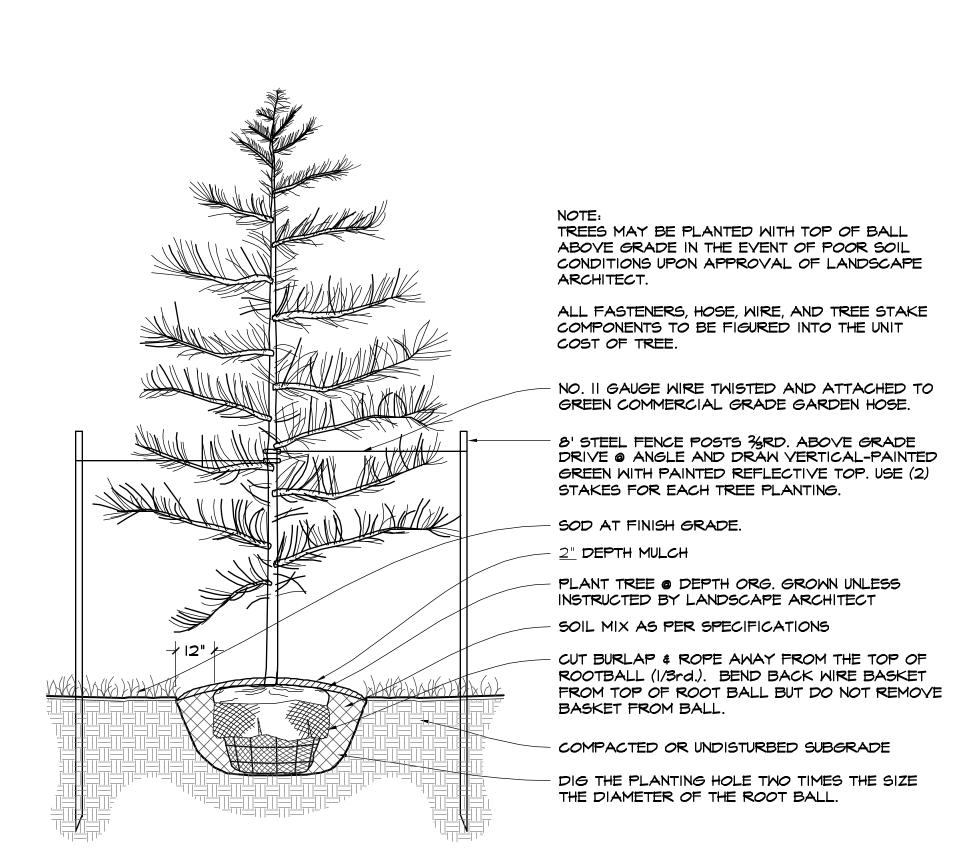
B Ŏ O Layout <u>Φ</u>

Proposed DATE 07/20/2020 Submittal 12/05/2023 \ REV



CURRENT CITY OF Tulsa standards AND SPECIFICATIONS 2009 EDITION)

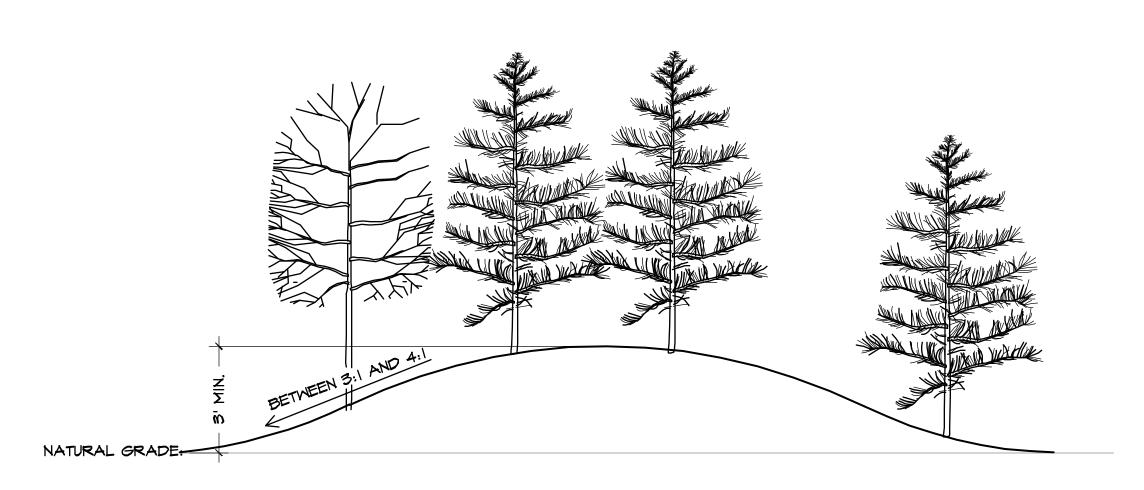
LANDŞÇAPE ORDINANCE PLAN



EVERGREEN TREE PLANTING - TYPICAL SECTION SCALE: NTS

NO. II GAUGE WIRE TWISTED AND ATTACHED TO GREEN COMMERCIAL GRADE GARDEN 8' STEEL FENCE POSTS 3/8 P. ABOVE GRADE DRIVE @ ANGLE AND DRAW VERTICAL-PAINTED GREEN WITH PAINTED REFLECTIVE TOP. USE (2) STAKES FOR EACH TREE PLANTING. 2" DEPTH MULCH PLANT TREE @ DEPTH ORG. GROWN UNLESS INSTRUCTED BY LANDSCAPE ARCHITECT CUT BURLAP & ROPE AWAY FROM THE TOP OF ROOTBALL (1/3rd.). BEND BACK WIRE BASKET FROM TOP OF ROOT BALL BUT DO NOT REMOVE BASKET FROM BALL. SOIL MIX AS PER SPECIFICATIONS COMPACTED OR UNDISTURBED SUBGRADE DIG THE PLANTING HOLE TWO TIMES THE SIZE THE DIAMETER OF THE ROOT BALL. SOD AT FINISH GRADE. TREES MAY BE PLANTED WITH TOP OF BALL ABOVE GRADE IN THE EVENT OF POOR SOIL CONDITIONS UPON APPROVAL OF LANDSCAPE ARCHITECT. ALL FASTENERS, HOSE, WIRE, AND

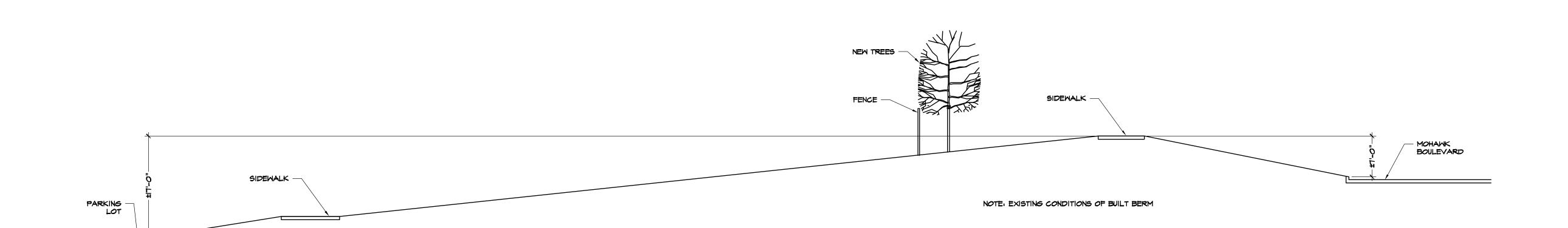
TREE STAKE COMPONENTS TO BE FIGURED INTO THE UNIT COST OF



DECIDUOUS TREE PLANTING - TYPICAL SECTION

BERM DETAIL - TYPICAL ELEVATION

SCALE: NTS



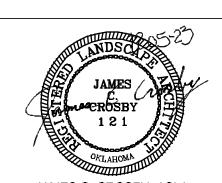




Michael Dwyer, LLC 809 East Jackson Place Broken Arrow, OK PH: 918.633.6277

LANDSCAPE ARCHITECT:

LANDSCAPE ARCHITECTURE ● RECREATIONAL DESIGN ● LAND PLANNING 5314 S. YALE AVE., SUITE 510, TULSA, OK 74135 918.628.1255 WWW.PLANNINGDESIGNGROUP.COM



JAMES C. CROSBY, ASLA LANDSCAPE ARCHITECT OF RECORD

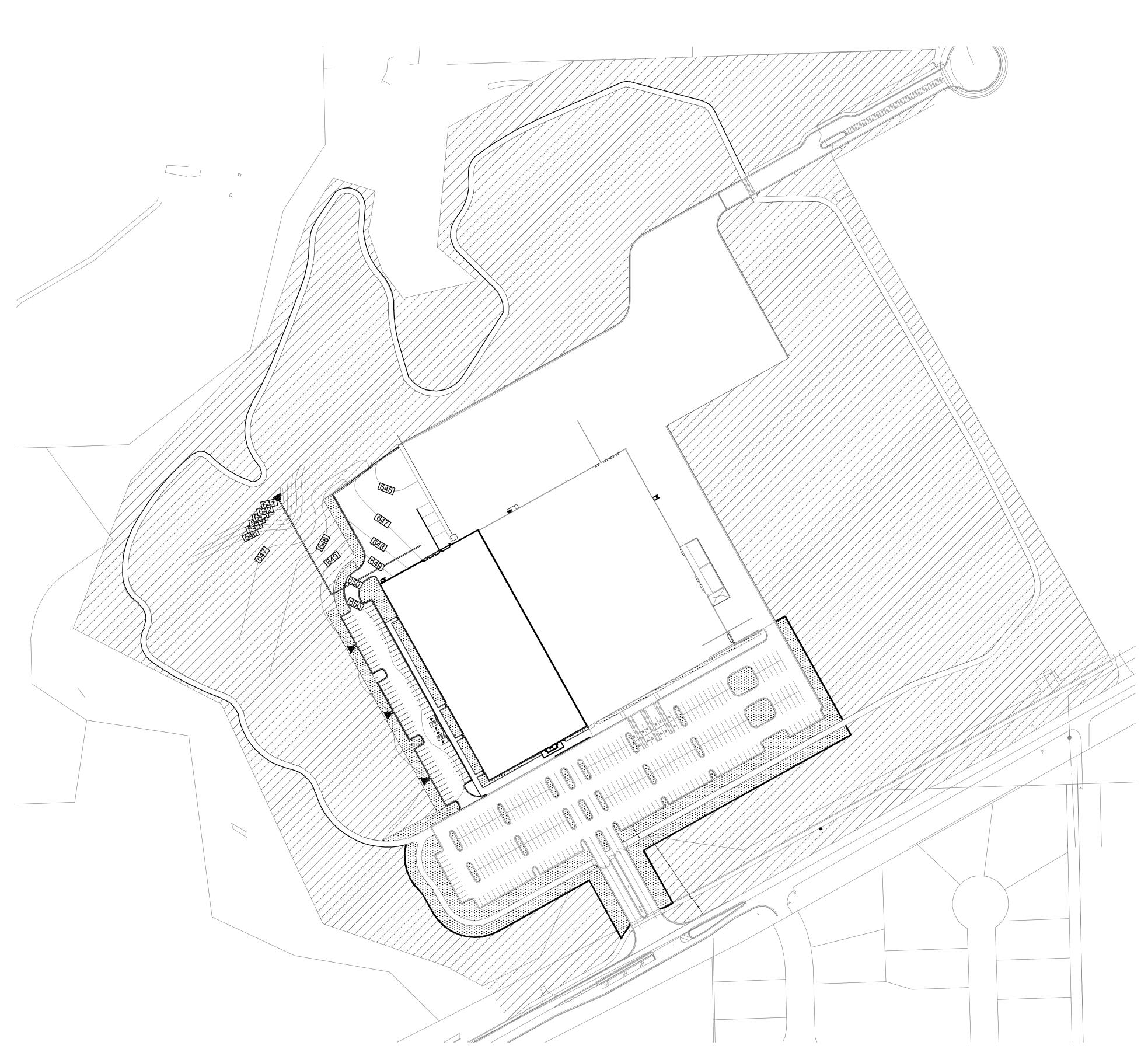
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DATE 07/20/2020 12/05/2023

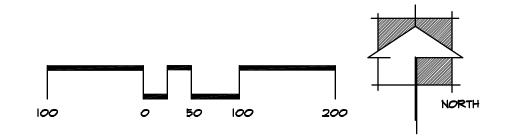


ALL CONSTRUCTION
TO BE IN STRICT
ACCORDANCE WITH
CURRENT CITY OF
TULSA STANDARDS
AND SPECIFICATIONS
(INCLUDING O.D.O.T.
2009 EDITION)

LANDSCAPE **DETAILS** 

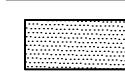






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**SOD** U3 BERMUDA SOLID SOD 80,000 S.F. RE. SPECS.

HYDROSEEDING US BERMUDA 1,185,000 S.F. <u>RE. SPECS.</u>

## SODDING SUMMARY NOTES

- . REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 2. ALL NETTING TO BE REMOVED FROM SOD DURING INSTALLATION.
- 3. FINE GRADE LAWN AREAS TO SMOOTH, EVEN SURFACE WITH A LOOSE, UNIFORMLY FINE TEXTURE. FLOAT SMOOTH TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO REMOVE RIDGES AND FILL DEPRESSIONS AS REQUIRED TO DRAIN.
- 4. APPLY APPROVED FERTILIZER ON FINISH GRADE PRIOR TO SOD INSTALLATION AT A RATE OF ONE (I) POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET.
- 5. ON 3:1 SLOPES OR GREATER SOD SHALL BE INSTALLED PERPENDICULAR TO SLOPE AND SECURED WITH APPROVED WOOD STAKES AS NEEDED TO PREVENT SOD FROM SLOUGHING OFF SLOPES.
- 6. THE SITE IS TO BE KEPT CLEAN AND ORDERLY. ALL TRASH, INCLUDING DEBRIS FROM REMOVING WEEDS OR ROCKS FROM SODDED AREAS, SHALL BE REMOVED FROM THE SITE AS WORK PROGRESSES. ALL PAVED AREAS SHALL BE KEPT CLEAN BY HOSING AND/OR SWEEPING.
- 1. CONTRACTOR IS RESPONSIBLE FOR SOLID SODDING ALL AREAS DISTURBED DURING CONSTRUCTION OPERATIONS.
- 8. LAY BERMUDA SOD TO FORM A SOLID MASS TIGHTLY-FITTED JOINTS. DO NOT OVERLAY EDGES. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES.
- 9. WATER SOD LIGHTLY AND THEN ROLL WITH A WATER FILLED LAWN ROLLER TO ENSURE CONTACT WITH SUBGRADE AND TO INSURE A SMOOTH SURFACE FREE OF CLUMPS AND DEPRESSIONS.
- IO.ALL AREAS NOT SHOWN ON PLAN THAT ARE DISTURBED DURING CONSTRUCTION ARE TO BE SOLID SODDED WITH U3 SOD. CONSULT LANDSCAPE ARCHITECT FOR APPROVAL BEFORE SODDING ANY ADDITIONAL AREAS NOT INDICATED ON THIS PLAN.



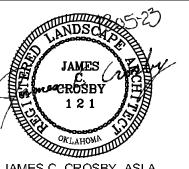
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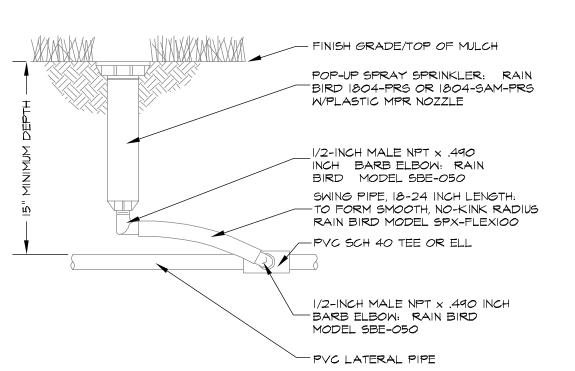
Proposed Layout

DATE 07/20/2020 Submittal 12/05/2023



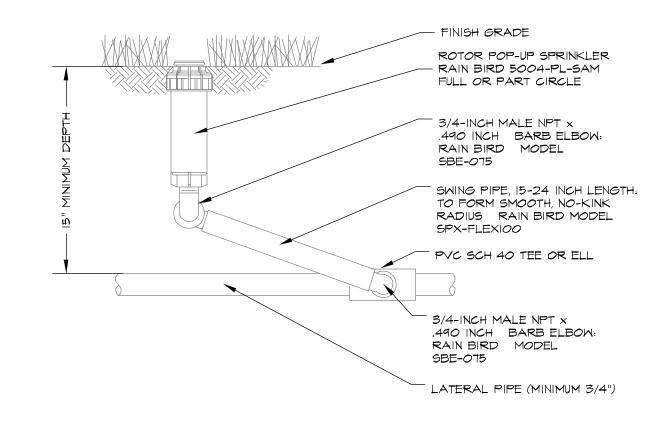
Tulsa standa**rd**s AND SPECIFICATIONS (INCLUDING O.D.O.T. 2009 EDITION)

GRASSING PLAN

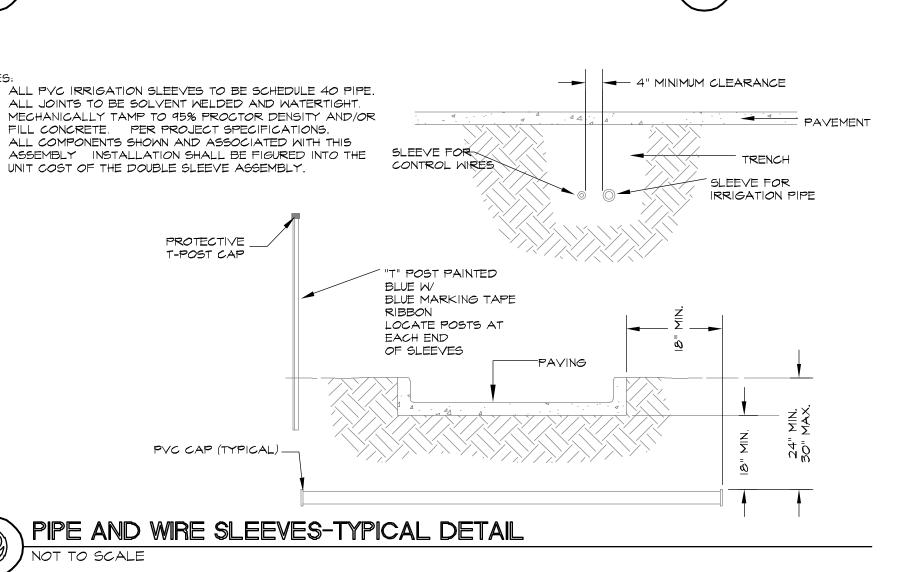


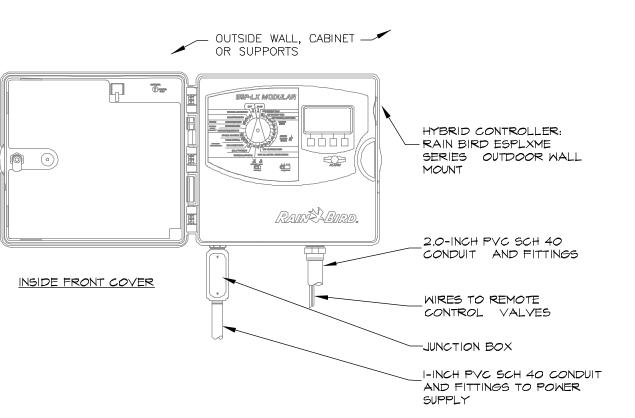
## 4" POP-UP SPRAY HEAD ASSEMBLY-TYPICAL SECTION

NOT TO SCALE

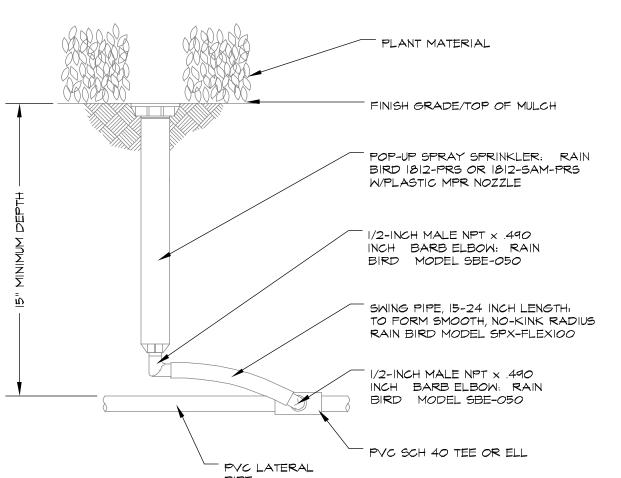


# 3/4" INLET GEARED ROTARY- TYPICAL SECTION





AUTOMATIC CONTROLLER ASSEMBLY-TYPICAL SECTION



FINISH GRADE

CARSON VALVE BOX; MOUNT TOP OF BOX FLUSH

WITH TOP OF FINISH GRADE; PRODUCT NO. 910-12.

MAIN LINE TEE; MAIN LINE SIZE x 1" SCH. 80 TEE SXSXT

RAIN BIRD MPR NOZZLE

RAIN BIRD PA-89 ADAPTER

、½" SCH 80 MACHINED NIPPLE (GREY)

KBI CRE-500-3 POLY

CUT-OFF RISER EXTENSION

½" SCH 40 PVC TEE TXTXT

' INSERT MALE ADAPTER RAIN BIRD SBA-050

LATERAL LINE SCH 40 TEE

RAIN BIRD SWING PIPE

MODEL SPX-100FLEX

LATERAL LINE PIPE

STABILITY)

- ½" SCH 40 CAP T

½" X 8" SCH 80 NIPPLE

MINIMUM 8" TO PROVIDE

\_ 5X5X5"

WITH PCS SCREEN

NOTE: PROVIDE 2 - QUICK COUPLER KEYS, RAIN

BIRD PRODUCT # 55K-I AND 2- HOSE SWIVEL, RAIN BIRD PRODUCT # SH-I. ALL THREADS TO BE

QUICK COUPLER; RAIN BIRD MODEL 5RC;

LEEMCO STABILIZER MODEL LS-120

PRODUCT NO. 5807-01012, I" SWING

JOINT TO BE INSTALLED NO MORE

SWING JOINT RISER; SPEARS

THAN 30° FROM HORIZONTAL

WRAPPED WITH TEFLON TAPE

RRIGATION MAIN

" QUICK COUPLER VALVE W/ RUBBER COVER

NOT TO SCALE

VacONMacOnatonatonatonatonat

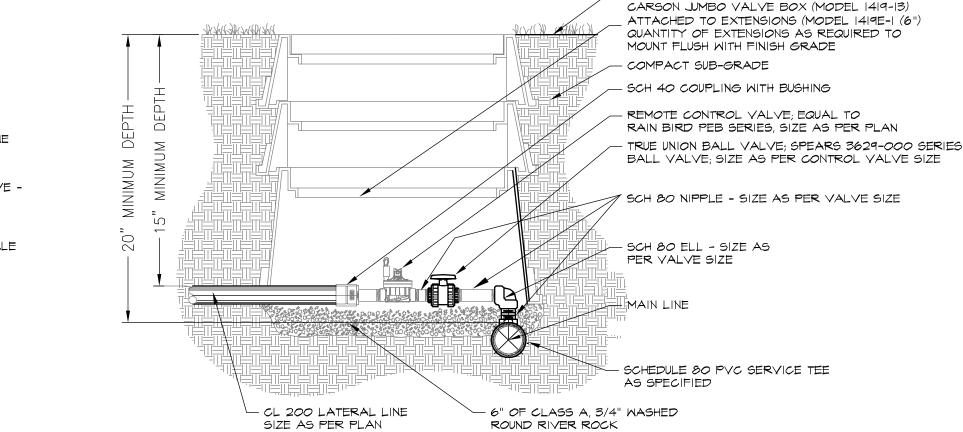
NOT TO SCALE

- <30 DEG

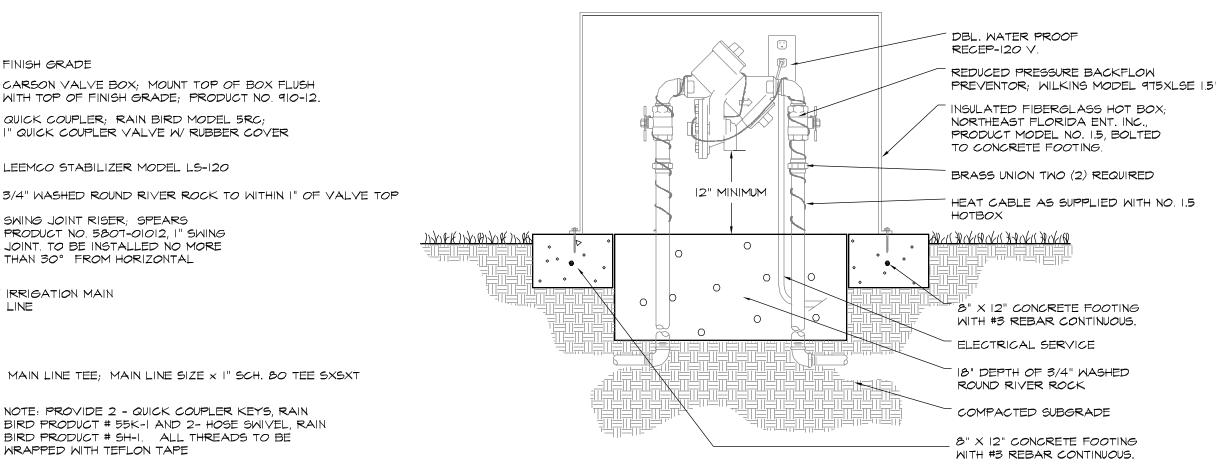
QUICK COUPLING VALVE-TYPICAL SECTION

10" ROUND VALVE 8" CORRUGATED POLYETHYLENE PIPE EXTENSION (LENGTH AS 20" MINIMUM HAMMOND IB645 BRONZE VALVE -SIZE AS PER MAIN LINE VALVE SIZE IS SAME AS MAIN LINE SCH 80 NIPPLE OR SCH 80 MALE **←−−**MAIN LINE NOTE: PLACE 6" DEEP SUMP (MINIMUM) CONSISTING OF WASHED ROUND RIVER ROCK BELOW BOTTOM OF VALVE

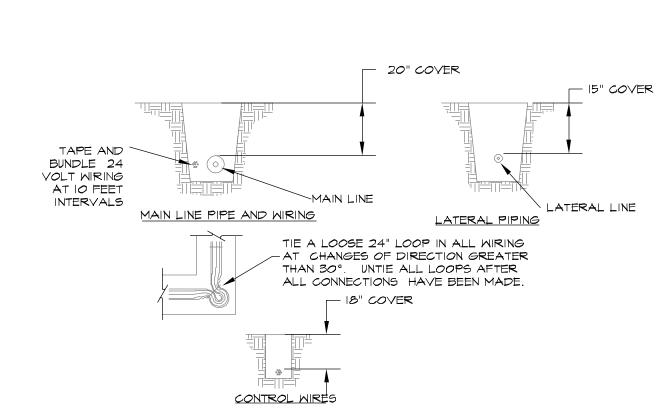
12" POP-UP SPRAY HEAD ASSEMBLY-TYPICAL SECTION ISOLATION VALVE ASSEMBLY-TYPICAL SECTION NOT TO SCALE



CONTROL VALVE ASSEMBLY-TYPICAL SECTION NOT TO SCALE



RPZ BACKFLOW PREVENTER OUTDOOR INSTALLATION (TYP)-SECTION



FINISH GRADE

TRENCH-TYPICAL SECTION

## **IRRIGATION INSTALLATION NOTES**

- I. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING FULL DESIGN FOR IRRIGATION SYSTEM WITH CUT-SHEETS OF ALL PROPOSED EQUIPMENT. ALL GRASS AREAS TO BE IRRIGATED WITH SPRAY HEADS AND ROTARY HEADS. ALL ROCK PLANTING BEDS TO BE IRRIGATED WITH DRIP IRRIGATION.
- 2. PRIOR TO EXCAVATION, CONTRACTOR SHALL VERIFY UTILITY LOCATIONS WITH TELEPHONE, GAS, CABLE TV, AND ELECTRIC COMPANIES. OWNER REPRESENTATIVE AND CONTRACTOR TO REVIEW SITE ELECTRICAL, SITE GRADING AND DRAINAGE, SITE IRRIGATION AND ALL OTHER DRAWINGS PERTAINING TO UNDERGROUND UTILITY LOCATIONS.
- 3. CONTRACTOR SHALL MEASURE THE STATIC WATER PRESSURE AT THE LOCATIONS OF THE WATER METER AND SHALL REPORT TO LANDSCAPE ARCHITECT IN WRITING A MINIMUM OF TWO (2) WEEKS PRIOR TO COMMENCEMENT OF IRRIGATION INSTALLATION. SHOULD STATIC WATER PRESSURE BE LESS THAN 90 PSI, CONTRACTOR SHALL RECEIVE APPROVAL FROM OWNER REPRESENTATIVE PRIOR TO PROCEEDING.
- 4. CONTRACTOR SHALL ROUTE LINES OUTSIDE OF CANOPY OF EXISTING OR PROPOSED TREES. WHEN OBSTRUCTIONS (TREES, SHRUBS, HYDRANTS, LIGHTS, ETC. )INTERFERE WITH SPRAY PATTERN OF SPRINKLER HEADS SO AS TO PREVENT PROPER COVERAGE, ADJUST SPRINKLER SYSTEM BY INSTALLING ADJUSTABLE PATTERN SPRINKLER HEADS ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. CONTRACTOR SHALL PERFORM ALL ADJUSTMENTS AT NO ADDITIONAL COST TO OWNER.
- 5. IRRIGATION INSTALLATION SHALL BE COORDINATED WITH EXCAVATION, GRADING, BUILDING, ELECTRICAL, PAVING AND PLANTING OPERATIONS.
- 6. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PLACEMENT OF ALL SLEEVES ON THE PROJECT. SLEEVES SHALL BE SIZED TWO (2) TIMES THE NOMINAL DIAMETER OF THE LARGEST PIPE PASSING THROUGH THE SLEEYE. MINIMUM SLEEYE SIZE SHALL BE 4" FOR MAIN LINES, 4" FOR 2" AND SMALLER LINES PASSING UNDER PAVEMENT AND 2" FOR LINES UNDER SIDEWALKS. SLEEVES SHALL BE INSTALLED AT A MINIMUM COVER DEPTH OF TWENTY (20) INCHES FROM FINISH GRADE. COORDINATE HORIZONTAL AND VERTICAL ELEVATIONS WITH UTILITIES AND FOOTINGS. A SEPARATE MINIMUM 2" DIAMETER SLEEVE SHALL BE PROVIDED FOR THE CONTROL WIRES TO PASS THROUGH AT EACH CROSSING. CONTRACTOR SHALL RECEIVE OWNER REPRESENTATIVE'S APPROYAL FOR ALL REQUIRED BORES UNDER ROADS, PATHS AND SIDEWALKS.
- 7. CONTRACTOR SHALL FOLLOW DRAWINGS, NOTES, SPECIFICATIONS AND SPECIFIC MANUFACTURERS RECOMMENDATIONS TO ENSURE PROPER INSTALLATION OF THE IRRIGATION SYSTEM. CONTRACTOR SHALL NOTIFY OWNER REPRESENTATIVE IN WRITING WHENEVER THERE APPEARS TO BE A CONFLICT BETWEEN ANY OF THE ABOVE STATED DOCUMENTS. CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT OBYIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED DURING DESIGN. CONTRACTOR SHALL BRING SUCH OBSTRUCTIONS OR DIFFERENCES TO THE ATTENTION OF OWNER'S REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, CONTRACTOR ASSUMES RESPONSIBILITY FOR ALL REQUIRED REVISIONS.

- 8. BACKFLOW PREVENTER SHALL BE INSTALLED IN THE SPECIFIED INSULATED AND HEATED ENCLOSURE PER DETAILS. CONTRACTOR SHALL RECEIVE OWNER REPRESENTATIVE'S APPROVAL FOR FINAL LOCATION. BACKFLOW PREVENTER INSTALLATION SHALL MEET ALL APPLICABLE CITY CODES AND REQUIREMENTS. BACKFLOW PREVENTER SHALL BE INSTALLED WITH TWO (2) UNIONS FOR EASE OF REMOVAL. ALL REQUIRED SLEEYING, CONDUITS AND PIPES FOR INSTALLING THE BACKFLOW PREVENTER ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- REPRESENTATIVE'S APPROVAL FOR SPECIFIC PLACEMENT PRIOR TO INSTALLATION OF CONTROLLER. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTION OF 120 VOLT POWER TO CONTROLLER. CONTRACTOR TO PROVIDE 2" SCHEDULE 40 PVC CONDUIT FOR IRRIGATION CONTROL WIRES.
- IO. ONE (I) COMBINATION RAIN AND FREEZE SENSOR SHALL BE INSTALLED FOR EACH CONTROLLER AND MOUNTED IN A LOCATION TO INSURE PROPER OPERATION AND PROTECTION OF THE SENSORS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL RECEIVE OWNER REPRESENTATIVE'S APPROVAL FOR ACCEPTABLE LOCATION PRIOR TO INSTALLATION OF THE SENSORS.
- IRRIGATION 24 YOLT COMMON WIRE SHALL BE 14 GAUGE UF AND CONTROL WIRE SHALL BE 14 GAUGE UF. CONTRACTOR SHALL INSTALL TWO(2) ADDITIONAL CONTROL WIRES FROM CONTROLLER TO THE FURTHEST VALVE ON EACH SIDE OF THE CONTROLLER (FOUR WIRES TOTAL). CONTRACTOR SHALL TERMINATE THE WIRES WITH WATERPROOF CONNECTORS AT THE FURTHEST VALVE BOX LOCATION FROM THE CONTROLLER AND SHALL NOTE THEIR LOCATION ON THE AS-BUILT DRAWING.
- 12. ONE WATER METER SHALL BE INSTALLED FOR THE PROJECT. SUPPLY LINES FROM WATER METER TO BACKFLOW PREVENTER SHALL BE 2" SCHEDULE 40 PVC OR 2" TYPE "K" COPPER PIPE. METER SIZE SHOULD BE ADEQUATE TO SUPPLY IRRIGATION SYSTEM.
- SPRAY AND ROTARY SPRINKLER HEADS WITH CHECK VALVES SHALL BE REQUIRED TO PREVENT LOW HEAD DRAINAGE. CONTRACTOR SHALL INSTALL ADDITIONAL IN-LINE PIPE CHECK YALVES AS REQUIRED WHEN HEAD OF WATER IN UPSTREAM PIPE EXCEEDS THE CAPACITY OF DOWNSTREAM SPRINKLER HEAD CHECK
- ALL SPRAY HEADS AND ROTARY HEADS SHALL BE INSTALLED PERPENDICULAR (90 DEGREES) TO FINISHED GRADE. ADJUST ALL HEADS TO MINIMIZE OVER SPRAY ONTO HARDSCAPE AND BUILDINGS. USE PCS SCREENS ON ALL RISERS AND AS NEEDED ON SPRAY HEADS WITH 5'- 15' SERIES MPR SPRAY NOZZLES TO ADJUST OVER SPRAY, USE RADIUS ADJUSTMENT SCREW ON 5'- 15' SERIES MPR SPRAY NOZZLES ONLY WHEN NECESSARY.





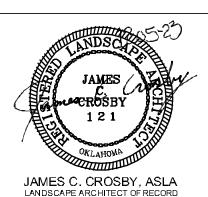
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Layout

Proposed

DATE 07/20/2020 Submittal 12/05/2023 REV

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF Tulsa standa**r**ds

AND SPECIFICATIONS {INCLUDING O.D.O.T. 2009 EDITION)

IRRIGATION

DETAILS

PVC RISER WITH RAIN BIRD MPR NOZZLE- TYPICAL SECTION

5.12