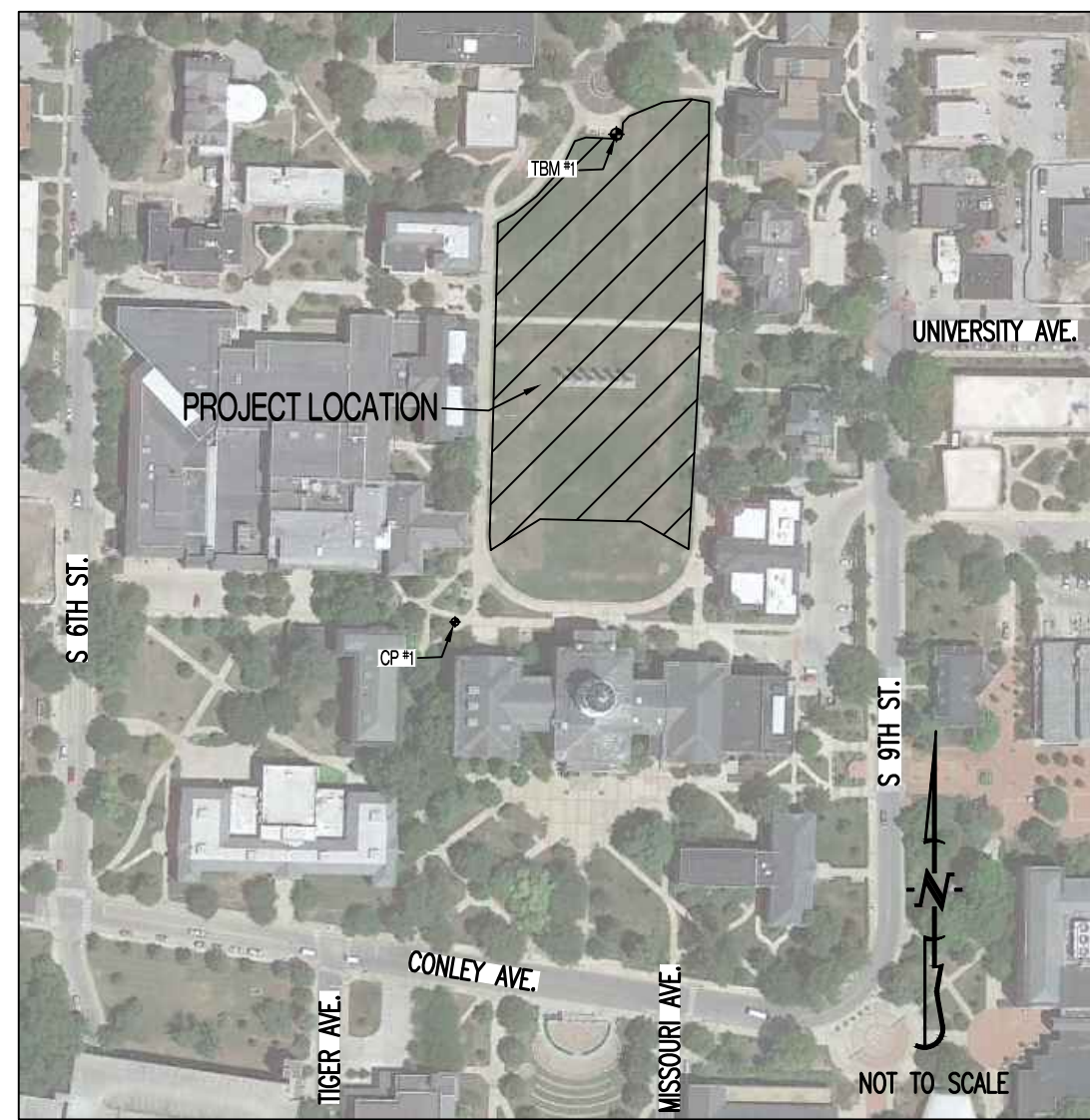




FRANCIS QUADRANGLE - IRRIGATION, DRAINAGE, AND TURF REPLACEMENT

FOR THE CURATORS OF THE UNIVERSITY OF MISSOURI PROJECT NO. CP241991

LOCATION MAP



GENERAL NOTES:

EXISTING UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM EXISTING RECORDS AND THEIR LOCATIONS ARE APPROXIMATE ONLY. OTHER UTILITIES OR OBSTRUCTIONS MAY ALSO BE ENCOUNTERED. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO AVOID DAMAGE TO SAME DURING CONSTRUCTION. IF IT CAN BE DETERMINED BY THE OWNER'S REPRESENTATIVE THAT ANY EXISTING UTILITY HAS BEEN, OR CAN BE ABANDONED, CONTRACTOR SHALL REMOVE SAME, AT HIS EXPENSE, TO FACILITATE CONSTRUCTION. ENDS OF REMAINING CONDUITS OR PIPES SHALL BE PLUGGED OR CAPPED.

EXISTING UTILITIES SHOWN FOR REFERENCE ONLY. FIELD VERIFY UTILITY LOCATIONS, ELEVATIONS, AND SLOPES PRIOR TO CONSTRUCTING NEW UTILITIES.

SUPPORT AND PROTECT UTILITIES CROSSING EXCAVATIONS. RESTORE DAMAGED UTILITIES TO ORIGINAL CONDITIONS PRIOR TO BACKFILLING EXCAVATIONS. OBTAIN INSPECTION AND APPROVAL OF OWNER'S REPRESENTATIVE PRIOR TO BACKFILLING EXCAVATIONS.

DO NOT STORE EQUIPMENT OR MATERIAL IN AREA OF TREES. PROTECT TREES FROM DAMAGE UNLESS NOTED OTHERWISE. OWNER WILL TRIM TREES AS REQUIRED PRIOR TO CONSTRUCTION. COORDINATE WITH OWNER'S REPRESENTATIVE.

INSTALL CONSTRUCTION FENCING AROUND THE DRIP LINES OF ALL TREES IN WORK AREAS.

COORDINATE CONSTRUCTION FENCE LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING.

REPLACE ALL PAVING, SIDEWALKS, CURBS, GUTTERS, DRAINAGE STRUCTURES, PAVEMENT MARKING, SIGNS, PARKING METERS, LIGHTS, BIKE RACKS, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION. COMPLY WITH CITY OF COLUMBIA OR MU STANDARDS, AS APPROPRIATE. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND PAVEMENT THAT IS TO REMAIN. ALL DAMAGED ITEMS OUTSIDE THE SCOPE OF WORK TO ARE TO BE REPLACED OR REPAIRED TO ORIGINAL CONDITION AT THE CONTRACTORS EXPENSE.

CONTRACTOR SHALL NOT BLOCK ACCESS TO ANY MANHOLE OR VALVE BOX.

THE STORM WATER POLLUTION PREVENTION MEASURES INDICATED ARE THE MINIMUM MEASURES TO BE USED. PROVIDE ADDITIONAL SITE SPECIFIC MEASURES AS NECESSARY TO PREVENT STORM WATER POLLUTION & TO COMPLY WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES AND REMOVING THEM ONCE THE SITE IS STABILIZED.

CONTRACTOR SHALL COORDINATE SITE LOGISTICS AMONGST ADJACENT CONCURRENT PROJECTS WITH OWNER'S REPRESENTATIVE.

IT IS THE INTENT OF THESE PLANS TO COMPLY WITH THE REQUIREMENTS OF THE MODNR CLEAN WATER COMMISSION.

ALL PAVEMENTS, SIDEWALKS, ABANDONED SEWERS, PIPELINES, EXCESS EARTHWORK, OR OTHER OBSTRUCTIONS TO CONSTRUCTION THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFICALLY NOTED AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH STATE REGULATION 10 CSR 80-2.010 (9)(A)1.

ALL SLOPES ARE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

ALL DISTURBED AREAS WITHIN THE "LIMITS OF DISTURBANCE" SHALL BE FINE GRADED BY CONTRACTOR AND VEGETATION REESTABLISHED BY OWNER.

ROOT SYSTEM FROM PREVIOUSLY REMOVED TREES REMAIN AND MAY BE ENCOUNTERED DURING GRADING AND INSTALLATION OF UTILITIES. CONTRACTOR TO REMOVE ROOTS IN TOP 6" OF SOIL TO BE AMENDED. ROOTS DEEPER THAN 6" SHALL REMAIN.

CONTRACTOR SHALL ADJUST ALL YARD BOXES, VALVE BOXES, PULL BOXES, CLEANOUTS, MANHOLE LID RINGS, AND OTHER UTILITY STRUCTURES TO FINISHED GRADE.

REMAINS FROM ACADEMIC HALL (BUILDING DESTROYED BY FIRE IN 1892). MAY BE ENCOUNTERED DURING GRADING. ANY ARTIFACTS FOUND SHALL BE RETURNED TO OWNER.

TOTAL DISTURBED AREA ON SITE = 2.61 AC.

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE	CD SET 03/20/24	ADDENDUM #1 04/04/24
CE 0	COVER SHEET	X	X
CE 11	EXISTING CONDITIONS NORTH QUAD	X	
CE 12	EXISTING CONDITIONS SOUTH QUAD	X	
CE 21	EROSION CONTROL AND SITE ACCESS PLAN	X	
L-100	GRADING AND STORM SEWER PLAN	X	X
L-200	PLANTING PLAN	X	
L-201	PLANTING DETAILS AND SPECIFICATIONS	X	
L-300	IRRIGATION PLAN - BASE BID	X	
L-301	IRRIGATION PLAN - ADD ALTERNATE #1	X	
L-302	IRRIGATION DETAILS	X	
L-303	IRRIGATION SPECIFICATIONS	X	

SPECIAL INSPECTIONS:

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE:

- a. IN-SITU SOILS, EXCAVATIONS, FILLING & COMPACTION (PERIODIC)

THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.

PROJECT BENCHMARK:

MCP #005 - 2" DOMED BRONZED CONCRETE SURVEY MARKER LOCATED IN THE SIDEWALK AT THE SOUTHEAST CORNER OF UNIVERSITY AVE. AND HITT ST. INTERSECTION.

NORTHING - 1133490.99
EASTING - 1690054.62
ELEVATION - 764.78

TBM #1 - CHISELED SQUARE LOCATED ON THE SOUTHEASTERN CORNER OF THE CONCRETE PAD APPROXIMATELY 290' NORTH OF THE COLUMNS AND APPROXIMATELY 140' WEST OF REYNOLDS JOURNALISM INSTITUTE. ELEVATION = 736.76

SURVEY CONTROL POINTS:

CP #1 (PK NAIL) - NORTHING: 1133168.41 (FT.)
EASTING: 1689251.75 (FT.)

COORDINATE SYSTEM NOTES:

COORDINATES SHOWN ARE MODIFIED MISSOURI STATE PLANE COORDINATES (CENTRAL ZONE). MODIFICATION INCLUDES CONVERSION FOR METERS TO U.S. SURVEY FOOT. USING 3.280833 FEET PER METER.

ENGINEER CERTIFICATION:

BY SIGNING AND AFFIXING MY SEAL TO THESE PLANS, I HEREBY CERTIFY THAT THESE DRAWINGS AND/OR SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS AND/OR SPECIFICATIONS ARE AS REQUIRED BY AND IN COMPLIANCE WITH THE BUILDING CODES OF THE UNIVERSITY OF MISSOURI.

LEGEND OF SYMBOLS:

(* indicates utility drawn from map provided by owner)

---	EXISTING CURB744.....	EXISTING MINOR CONTOUR
---	EXISTING WATERLINE	---745---	EXISTING MAJOR CONTOUR
---	EXISTING WATERLINE	(circle)	EXISTING DECIDUOUS TREE
(X)	EXISTING WATER VALVE	(starburst)	EXISTING CONIFEROUS TREE
(M)	EXISTING WATER METER	(X)	EXISTING LIGHT POLE
(H)	EXISTING FIRE HYDRANT	(/)	EXISTING UTILITY POLE
---	EXISTING GAS LINE	(A)	EXISTING AIR CONDITIONER
(G)	EXISTING GAS METER	(T)	EXISTING TELEPHONE PEDESTAL
---	EXISTING SANITARY SEWER	(E)	EXISTING ELECTRICAL TRANSFORMER
(S)	STORM/SANITARY MANHOLE	(E)	EXISTING ELECTRIC METER
---	EXISTING SANITARY SEWER LATERAL	(C)	EXISTING CONCRETE
---	EXISTING UNDERGROUND ELECTRIC	(A)	EXISTING ASPHALT
---	EXISTING UNDERGROUND FIBER OPTIC	(C)	PROPOSED CONCRETE
---	EXISTING STEAM CHASE	(S)	EXISTING SIGN
---	EXISTING STORM SEWER	(P)	EXISTING POST AND CHAIN FENCE
(B)	BEEHIVE INLET	(B)	EXISTING BRICK PAVERS
---	PROPOSED CURB		
(S)	EXISTING STRUCTURE		

FLOOD PLAIN STATEMENT:

NO PART OF THIS TRACT IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN AS PER THE FEM F.I.R.M. PANEL #29019C0280E DATED APRIL 19, 2017.

UTILITY COMPANIES:

LOCATES:

MISSOURI ONE CALL INC.
1022 B NORTHEAST DRIVE
JEFFERSON CITY, MO 65109
1-800-344-7483



WATER/ELECTRIC:

CITY OF COLUMBIA
P.O. BOX 6015
WATER & LIGHT DEPARTMENT
COLUMBIA, MO 65205
573-874-7325

NATURAL GAS:

AMEREN MISSOURI
2001 MAGUIRE BLVD.
COLUMBIA, MO 65201
573-876-3030

SANITARY SEWER:

CITY OF COLUMBIA
P.O. BOX 6015
UTILITIES DEPARTMENT
COLUMBIA, MO 65205
573-874-7250

FIBER:

UNIVERSITY OF MISSOURI, DIVISION OF I.T.
920 S COLLEGE AVE.
COLUMBIA, MO 65211
573-882-5000

WATER/ELECTRIC:

ENERGY MANAGEMENT
417 S. 5TH ST.
COLUMBIA, MO 65211
573-882-3094

STORM/SANITARY SEWER & SECONDARY ELECTRIC:

UNIVERSITY CAMPUS FACILITY OPERATIONS
180 GENERAL SERVICES BUILDING
COLUMBIA, MO 65211
573-882-8211

REVISIONS:

NO.	DATE
BID SET	03/20/2024
1	04/04/2024

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY



NATHAN THOMAS ECKHOFF
MO LICENSE: 200304960



OWNER:
THE CURATORS OF THE UNIVERSITY OF MISSOURI
200 UNIVERSITY HALL
C/O BUSINESS SERVICES
COLUMBIA, MO 65211

CP241991 - FRANCIS QUADRANGLE
IRRIGATION, DRAINAGE, AND TURF REPLACEMENT
COLUMBIA, BOONE COUNTY, MISSOURI

DRAWING INCLUDES:

COVER SHEET

DESIGNED: NTE

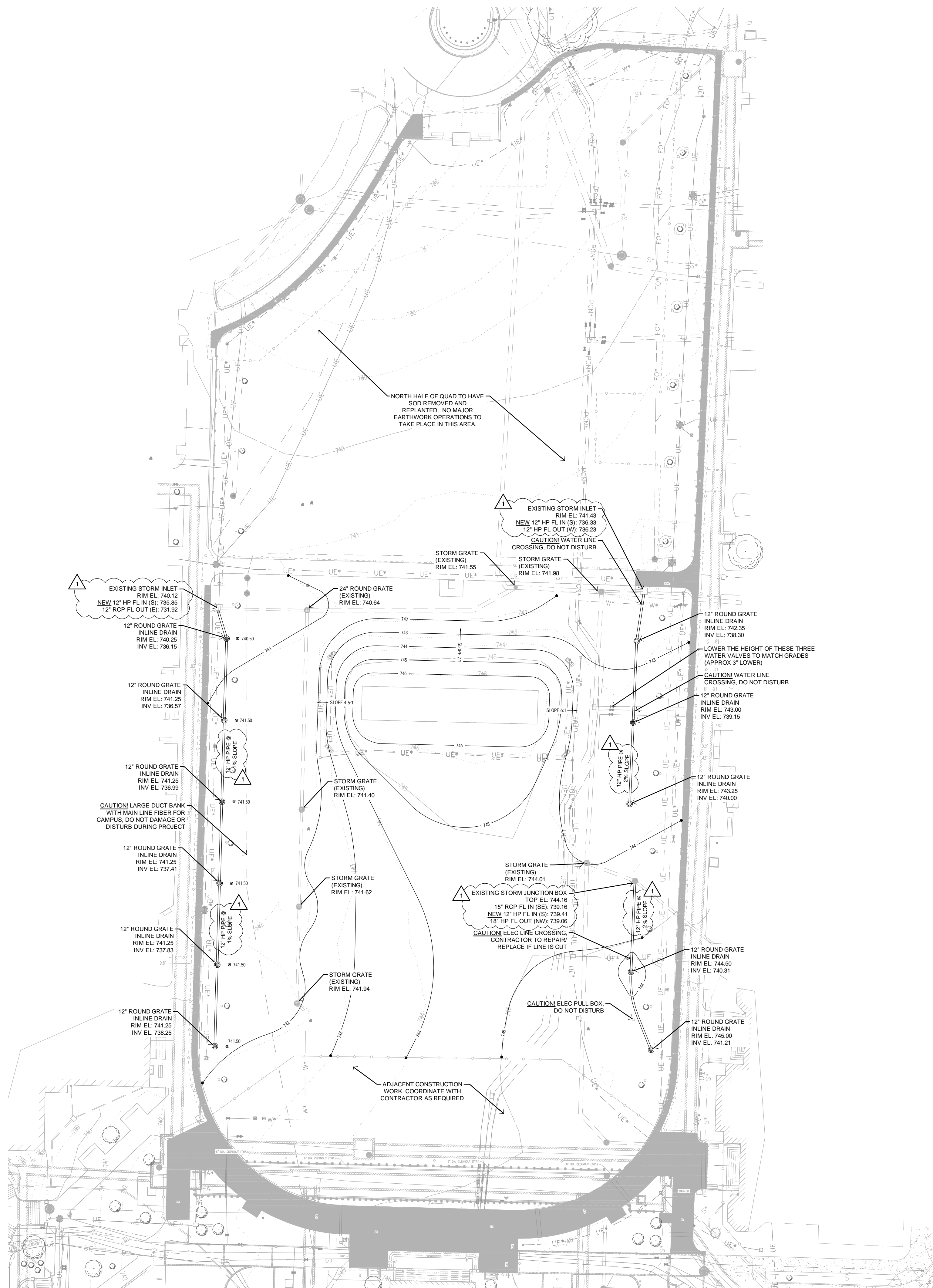
DRAWN: NMD

PROJECT NO.: CP241991

SHEET:

CE 0

Drawing name: K:\KNC_LA\268642000_MU FRANCIS QUAD\2. DESIGN\CAD\PLANS\SHEETS\L-100 GRADING.DWG Plot date: Wednesday, April 03, 2024 3:40:45 PM by: Ray, Sean Last saved: 4/3/2024 3:35 PM
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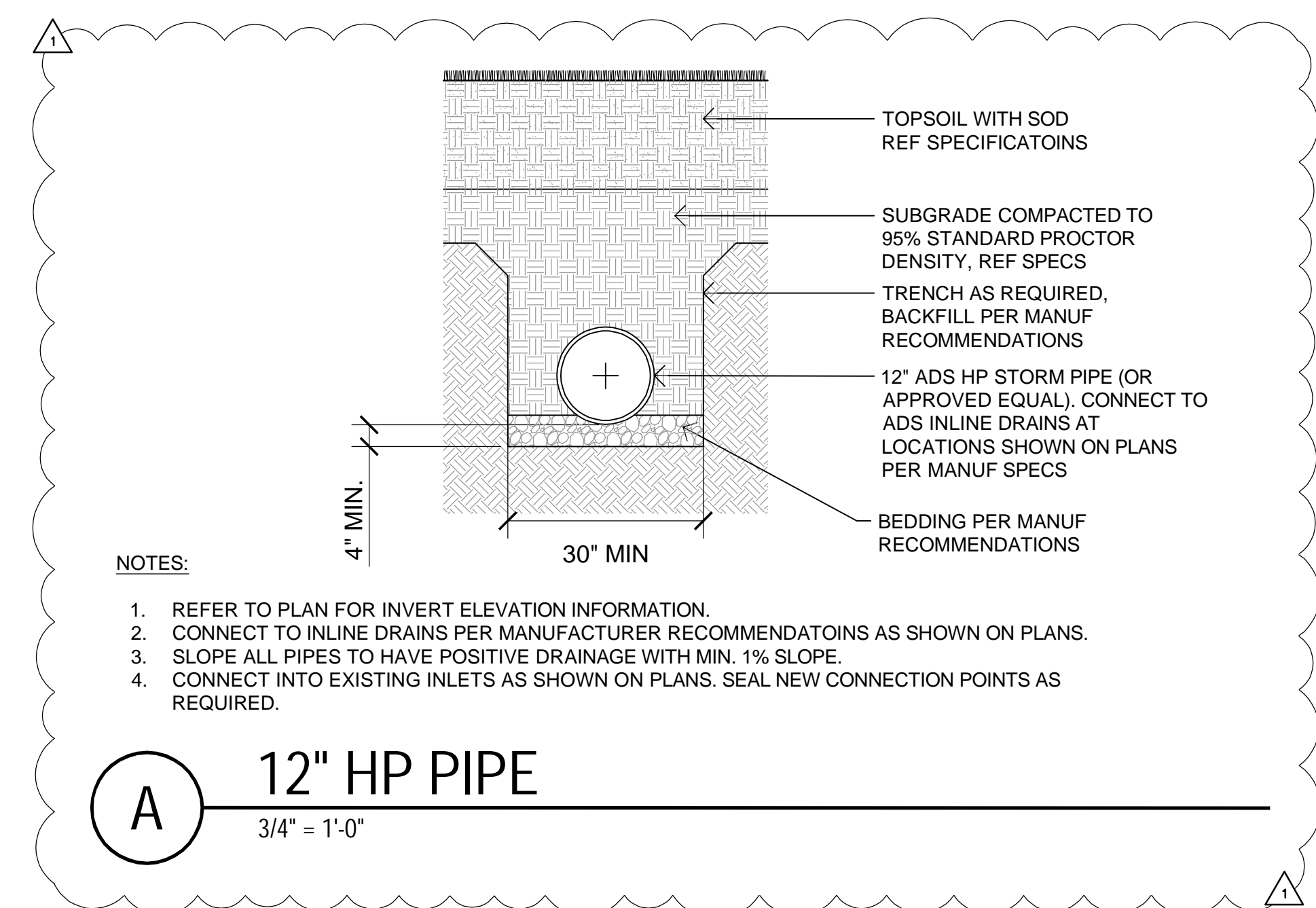


GRADING LEGEND:

- ⊕xxx.xx PROPOSED SPOT ELEVATION
- xxx--- PROPOSED CONTOUR
- PROPOSED ADS 12" HP STORM PIPE WITH ADS INLINE DRAIN AND GRATE

GRADING NOTES:

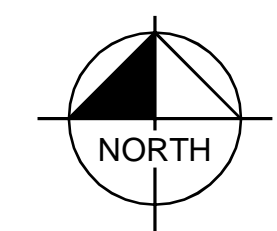
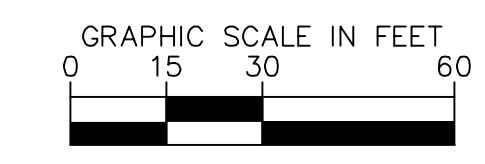
1. STRIP 6" EXISTING TOPSOIL IN AREAS OF MAJOR EARTHWORK OPERATIONS IN THE SOUTH HALF OF THE QUAD AS OUTLINED IN SOD SPECIFICATIONS.
2. REMOVE EXISTING TURF MATERIAL IN NORTH HALF OF QUAD FOR INSTALLATION OF NEW SOD.
3. ALL EARTHWORK OPERATIONS TO COMPLY WITH SOIL AMENDMENTS AND SOD PREP REQUIREMENTS AS OUTLINED IN SOD SPECIFICATIONS.
4. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS SHOWN ON PLAN. ANY DISCREPANCIES NOTED IN THE FIELD SHALL BE RELAYED TO THE OWNER PRIOR TO COMMENCEMENT OF WORK.
5. UNDERGROUND IMPROVEMENTS MAY VARY FROM SURVEY AND CONTRACTOR SHALL USE CAUTION DURING ANY EARTHWORK OPERATIONS NEAR EXISTING UTILITIES. ANY UTILITIES DAMAGED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
6. ROOT SYSTEMS FROM REMOVED TREES MAY STILL EXIST WITHIN TOP 6" OF SOIL TO BE REMOVED. THESE ROOTS SHALL BE REMOVED. USE CAUTION AS TO NOT DAMAGE UTILITIES DURING THE REMOVAL PROCESS.
7. CONTRACTOR TO REPAIR ANY DAMAGE TO WIRING ASSOCIATED WITH SITE LIGHTING OR SECURITY CAMERAS WITHIN 12 HOURS.
8. PROVIDE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE CONSTRUCTION AREA. CONTRACTOR SHALL GRADE ALL LOW SPOTS TO DRAIN.
9. ALL NEW STORM PIPES TO BE 12" ADS HP WITH INLINE DRAIN BASINS AND 12" GRATES (OR APPROVED EQUAL). RECOMPACT TRENCH INFILL MATERIAL TO 95% MIN DENSITY.
10. DEMO AND REMOVE EXISTING IRRIGATION SYSTEM TO BE REPLACED IN SOUTH HALF OF QUAD. IF ADD ALTERNATE FOR NEW IRRIGATION SYSTEM IN NORTH HALF OF QUAD IS TAKEN, EXISTING IRRIGATION IN THAT AREA SHALL BE REMOVED AS WELL.



NOTES:

1. REFER TO PLAN FOR INVERT ELEVATION INFORMATION.
2. CONNECT TO INLINE DRAINS PER MANUFACTURER RECOMMENDATIONS AS SHOWN ON PLANS.
3. SLOPE ALL PIPES TO HAVE POSITIVE DRAINAGE WITH MIN. 1% SLOPE.
4. CONNECT INTO EXISTING INLETS AS SHOWN ON PLANS. SEAL NEW CONNECTION POINTS AS REQUIRED.

A 12" HP PIPE
 3/4" = 1'-0"



 805 PENNSYLVANIA AVENUE, SUITE 150 KANSAS CITY, MO 64105 WWW.KIMLEY-HORN.COM © 2023 KIMLEY-HORN AND ASSOCIATES, INC. MO CERTIFICATE OF AUTHORITY #001512, EXPIRES 12/31/22		KHA PROJECT 268642000 DATE 03/20/2024 SCALE: AS SHOWN DESIGNED BY: JJK DRAWN BY: DLL CHECKED BY: SAR	GRADING AND STORM SEWER PLAN	CP241991 FRANCIS QUADRANGLE IRRIGATION, DRAINAGE, AND TURF REPLACEMENT	SHEET NUMBER L-100
ADDENDUM #1	No.	REVISIONS	DATE	BY	SAR