

MCDONOUGH HORSESHOE SERVICE CENTER

1001 & 1003 MCDONOUGH LAKE ROAD
COLLINSVILLE, IL 62234

ENGINEERS

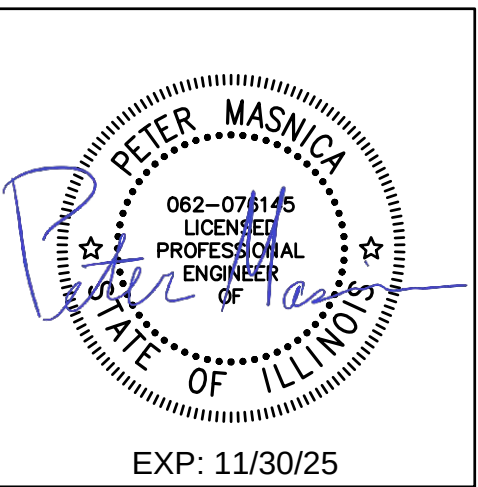


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ILLINOIS DESIGN FIRM LICENSE NO.: 184.001115



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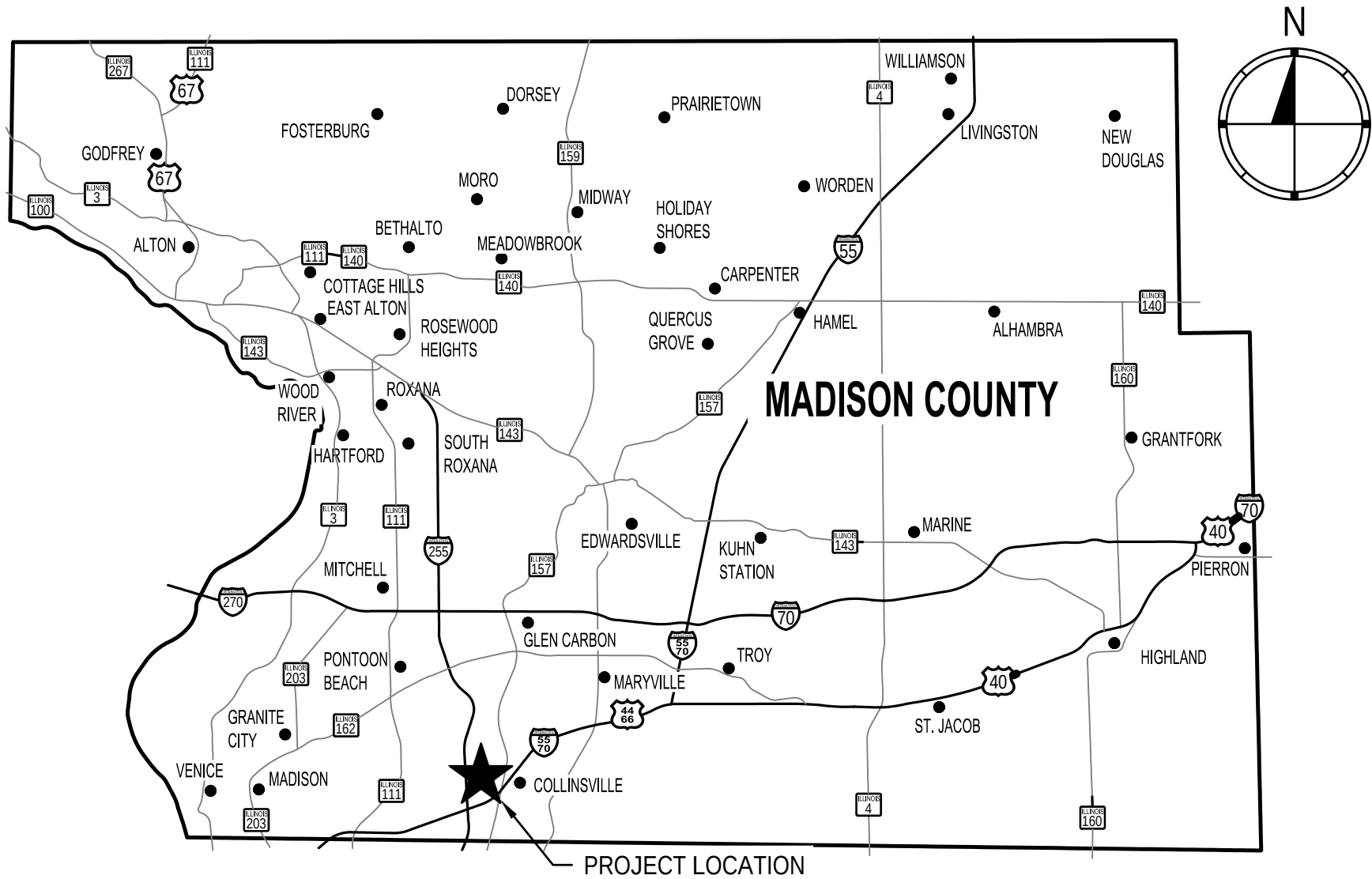
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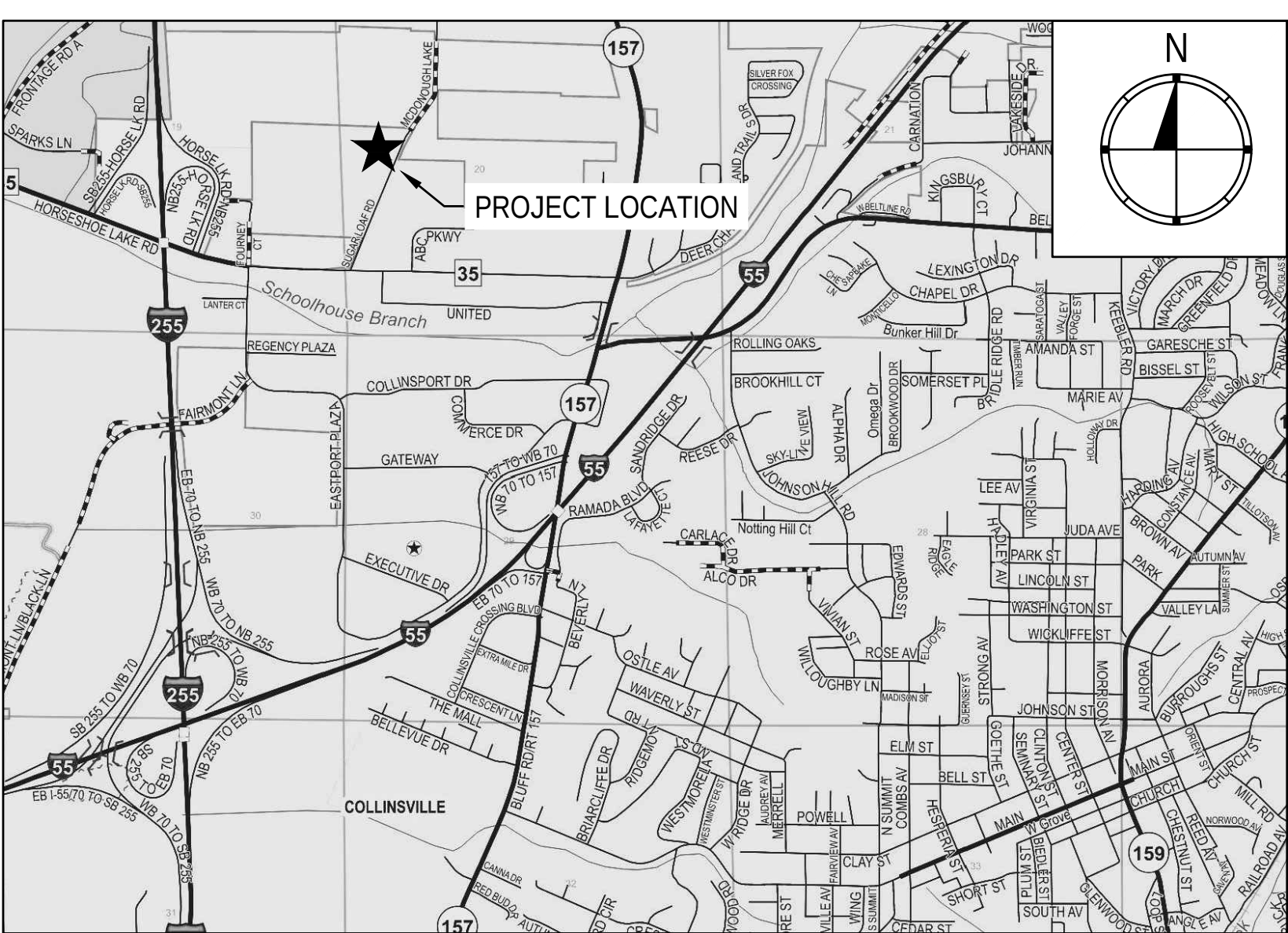
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VICINITY MAP



LOCATION MAP



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UTILITIES

1.

EXISTING UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. ILLINOIS LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE J.U.L.I.E. SYSTEM AT 800-892-0123 AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-J.U.L.I.E. MEMBERS MUST BE CONTACTED DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS ARE LISTED BELOW.
2.

ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER. THE COST OF ANY NECESSARY RELOCATIONS SHALL BE INCURRED BY THE OWNER UNLESS NOTED OTHERWISE AND IF PRIOR AGREEMENTS ARE NOT IN PLACE.
3.

THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION WHICH MAY REQUIRE ADJUSTMENT, RELOCATION OR REMOVAL. ALL ARE MEMBERS OF J.U.L.I.E., UNLESS NOTED OTHERWISE.

AMEREN IP (GAS) 2600 NORTH CENTER STREET MARYVILLE, IL 62062 (618) 346-1287	AT&T (DISTRIBUTION) 203 GOETHE AVENUE COLLINSVILLE, IL 62234 (662) 385-5191	CHARTER COMMUNICATIONS (COMMUNICATIONS) 815 CHARTER COMMONS TOWN & COUNTRY, MO 63017 (636) 387-6650	CITY OF COLLINSVILLE (WATER & SEWER) 125 SOUTH CENTER STREET COLLINSVILLE, IL 62234 (618) 346-5211
SOUTHWESTERN ELECTRIC COOPERATIVE (ELECTRIC) 525 US ROUTE 40 GREENVILLE, IL 62246 (800) 637-8667			

THE ABOVE INFORMATION REPRESENTS THE BEST INFORMATION AVAILABLE TO THE OWNER AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN PREPARING HIS/HER BID, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCE CAUSED BY SAME.

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATIONS
PHONE: 800-892-0123

4.

THE CONTRACTOR SHALL KEEP ALL UTILITIES IN SERVICE DURING CONSTRUCTION OPERATIONS. MEANS & METHODS TO ACCOMPLISH THIS ARE THE CONTRACTOR'S RESPONSIBILITY, BUT SOME EXAMPLES INCLUDE POTHOLING TO AVOID DISRUPTION, SHORING TO LIMIT EXCAVATION, PUMPING TO MAINTAIN FLOW, AND TEMPORARY SUPPORTING TO MAINTAIN STABILITY.
5.

SHOULD UNCHARTED OR INCORRECTLY CHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION, THE CONTRACTOR SHALL CONSULT WITH THE UTILITY OWNER AND ENGINEER IMMEDIATELY FOR DIRECTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE SERVICES AND FACILITIES IN OPERATION AND REPAIR DAMAGED UTILITIES TO THE SATISFACTION OF THE UTILITY OWNER. IF THE UTILITY OWNER IS FOUND NOT RESPONSIBLE, THE COST TO REPAIR DAMAGED UTILITIES UNCHARTED OR INCORRECTLY CHARTED WILL BE CONSIDERED AN UNFORESEEN CONDITION AND WILL BE PAID FOR AT AN AGREED UPON PRICE OR ON A TIME AND MATERIAL BASIS.
6.

ALL EXISTING UTILITY ACCESS COVERS SUCH AS MANHOLES, VALVE BOXES, VAULT COVERS, METER COVERS, AND OTHER SURFACE APPURTENANCES - EVEN IF THERE IS NO SPECIFIC CALLOUT - SHALL BE ADJUSTED TO THE PROPER FINISH GRADE ELEVATION ACCORDING TO THE REQUIREMENTS OF THE AFFECTED UTILITY COMPANY.

GENERAL

1.

ALL SITE WORK SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS INCLUDING THE CITY OF COLLINSVILLE'S MUNICIPAL CODE AND WITH THE LATEST EDITION OF THE CITY OF COLLINSVILLE'S "INFRASTRUCTURE DESIGN MANUAL", AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S, "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND "HIGHWAY STANDARDS", IN SO FAR AS THEY APPLY, EXCEPT THAT ALL REFERENCES TO MEASUREMENT AND PAYMENT SHALL BE DELETED.
2.

ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF COLLINSVILLE'S MUNICIPAL CODE AND WITH THE LATEST EDITION OF THE CITY OF COLLINSVILLE'S "INFRASTRUCTURE DESIGN MANUAL" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS", UNLESS OTHERWISE PROVIDED HEREIN.
3.

IF THERE ARE ANY DISCREPANCIES BETWEEN THESE PLANS, SPECIFICATIONS, OR STANDARDS BY GOVERNING BODIES, THE MOST STRINGENT AND RELEVANT REQUIREMENT SHALL BE BINDING AND APPLICABLE.
4.

UNLESS OTHERWISE INDICATED, THE COST OF WORK REQUIRED UNDER ANY GENERAL, PLAN, OR KEYED NOTE WILL NOT BE PAID FOR SEPARATELY, BUT IT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR THE VARIOUS ITEMS OF WORK INVOLVED.
5.

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO ACCOMPLISH THE WORK. NO CONSTRUCTION ACTIVITIES SHALL BE PERFORMED UNTIL ALL NECESSARY PERMITS HAVE BEEN SECURED. THE COST OF THE PERMITS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
6.

ALL CONSTRUCTION SHALL CONFORM TO THE PLANS AND SPECIFICATIONS. IF THE CONTRACTOR CHOOSES TO MAKE MODIFICATION DURING CONSTRUCTION, EVEN IF THE WORK IS AFFECTED BY OMISSION OR DISCREPANCY, WITHOUT THE APPROVAL OF THE ENGINEER, HE/ SHE IS MAKING SUCH CHANGES AT HIS/ HER OWN RISK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY CHANGES FROM THE APPROVED DOCUMENTS.
7.

THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND MATERIAL TESTING NECESSARY TO COMPLETE THE PROJECT TO THE PLANS AND SPECIFIED TOLERANCES.
8.

AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS FOR THE OWNER'S RECORDS.
9.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD, INCLUDING POTHOLING POTENTIAL UTILITY CONFLICTS, PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.
10.

THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE CONSTRUCTION SITE FREE OF DEBRIS AT ALL TIMES AND SHALL KEEP DIRT/ MUD OFF ALL PUBLIC STREETS ADJACENT TO THE CONSTRUCTION SITE.
11.

THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE AREA SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
12.

THE CONTRACTOR SHALL FERTILIZE, SEED, AND MULCH ALL EARTH SURFACES DISTURBED BY CONSTRUCTION, EXCEPT AS NOTED OTHERWISE IN THE PLANS. FERTILIZE, SEED, AND MULCH WITHIN THE CONSTRUCTION LIMITS AS PROVIDED IN THE CONTRACT. FERTILIZER, SEEDING, AND MULCH OUTSIDE THESE LIMITS DUE TO CONSTRUCTION ENCROACHMENTS SHALL BE RESTORED TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE CONTRACT.
13.

IF INDICATED, A PORTION OF THE CONSTRUCTION SITE MAY BE USED AS A STAGING AND CONTRACTOR PARKING AREA. IF SIDEWALKS, LAWNS, DRIVEWAYS, OR ANY OTHER AREA WITHIN OR IN THE HAUL PATH FROM THE STAGING AREA ARE DAMAGED BY THE CONTRACTOR, THEY SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
14.

CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED ON THE PROPOSED CONSTRUCTION SITE AND NOT ON ANY PUBLIC STREET OR RIGHT OF WAY OUTSIDE THE DESIGNATED CONSTRUCTION ZONE.
15.

THE CONTRACTOR SHALL STAGE ALL WORK TO MAINTAIN INGRESS AND EGRESS TO ALL ADJACENT BUILDINGS AND PROPERTIES AT ALL TIMES DURING CONSTRUCTION. AGGREGATE FOR TEMPORARY ACCESS OR OTHER TEMPORARY ELEMENTS MAY BE REQUIRED TO ACCOMPLISH REQUIREMENT.
16.

THE CONTRACTOR SHALL PROVIDE A PORTABLE RESTROOM FACILITY WITHIN THE CONSTRUCTION LIMITS. ADJACENT BUILDING RESTROOMS ARE NOT AVAILABLE FOR USE.
17.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY SIGNS AND BARRICADES AT THE PROJECT ENTRANCES TO PREVENT PUBLIC ENTRY. ALL MATERIAL PILES, EQUIPMENT, OPEN EXCAVATIONS OR THEIR OBSTRUCTIONS, OR HAZARDS TO MOTORISTS OR PEDESTRIANS SHALL BE ENCLOSED BY FENCES OR PROTECTED BY BARRICADES. BARRIER SHALL BE EITHER 4' TALL SNOW FENCE WITH T-POSTS SPACED ON 5' CENTERS, CHAIN LINK FENCE ON STANDS, OR OTHER PRE-APPROVED METHODS. CAUTION TAPE IS NOT CONSIDERED ADEQUATE TO PROTECT EXCAVATIONS.

18.

THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE AND INSTALL OTHER EROSION CONTROL ITEMS AS SHOWN ON THE "STORMWATER POLLUTION PREVENTION PLAN" AND AS DIRECTED BY THE ENGINEER. TO CONTROL SITE RUNOFF, THE ENGINEER MAY REQUEST EROSION CONTROL ITEMS NOT SHOWN ON THE PLANS AT NO ADDITIONAL COST TO THE CONTRACT WHEN STAGED OPERATIONS CREATE A TEMPORARY CONDITION THAT WOULD ALLOW OFFSITE EROSION IF NOT CONTAINED.
19.

THE UNITED STATES ACCESS BOARD, PROWAG 2023 AND THE ILLINOIS ACCESSIBILITY CODE SHALL GOVERN ALL ACCESS ROUTE IMPROVEMENTS.
20.

THE CONTRACTOR SHALL GUARANTEE ALL WORK, MATERIALS, AND LABOR ASSOCIATED WITH THIS WORK FOR A PERIOD OF ONE (1) YEAR.

REMOVALS

1.

THE CONTRACTOR SHALL INSPECT AND ACCEPT THE SITE CONDITIONS PRIOR TO MOBILIZATION. DOCUMENTATION FOR ANY CONCERNS SHALL BE PROVIDED TO OWNER IN WRITING AND WITH PHOTOGRAPHS PRIOR TO MOBILIZATION. NO ADDITIONAL PAYMENT WILL BE MADE FOR REPAIR OF DAMAGED EXISTING FEATURES TO REMAIN THAT WERE NOT ADDRESSED BEFORE THE CONTRACTOR ASSUMED THE SITE FROM THE OWNER.
2.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL EXISTING FEATURES SUCH AS SIGNS, PAVEMENT, CURB, AND TREES FROM DAMAGE. IF ANY FEATURE TO REMAIN IS DAMAGED, IT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE OWNER OR ENGINEER.
3.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. IF ANY PROPERTY MARKER IS TO REMAIN AND IS DAMAGED, IT SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AS DIRECTED BY THE ENGINEER OR OWNER.
4.

THE CONTRACTOR SHALL REMOVE ALL EXISTING FEATURES INCLUDING BUT NOT LIMITED TO PAVEMENT, CURB, SIDEWALK, DRIVEWAY PAVEMENT, CULVERTS, HEADWALLS, RIPRAP, FENCING, AND RETAINING WALLS WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION UNLESS NOTED OTHERWISE ON THE PLANS. ALL FEATURES WHICH ARE TO BE REMOVED AND FOR WHICH THERE IS NOT A SPECIFIC CALLOUT, WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.
5.

THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN AND AVOID COMPACTING THE AREA UNDER THE TREE'S DRIPLINE. IF TREE ROOTS ARE ENCOUNTERED, THEY SHALL BE SAWN OFF AT THE EDGE OF THE EXCAVATION RATHER THAN RIPPED WITH EQUIPMENT.
6.

ANY EXCESS EARTH EXCAVATION SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED.
7.

FULL DEPTH SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEM INVOLVED ACCORDING TO SECTION 440 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."
8.

ALL PAVEMENT REMOVAL SHALL BE REMOVED TO THE NEAREST EXISTING JOINT LOCATION. NO PARTIAL SLAB REMOVALS WILL BE ALLOWED.
9.

THE CONTRACTOR SHALL REMOVE, MAINTAIN IN A TEMPORARY LOCATION, AND PERMANENTLY RESET ALL MAILBOXES, TRAFFIC SIGNS, STREET NAME SIGNS, AND ALL PRIVATE AND COMMERCIAL SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS ACCORDING TO ARTICLES 107.20 AND 107.25 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND AS DIRECTED BY THE ENGINEER.
10.

THE CONTRACTOR SHALL REMOVE TRAFFIC SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND RE-ERECT THEM AT TEMPORARY LOCATIONS TO SAFELY MAINTAIN TRAFFIC CONTROL THROUGHOUT THE CONSTRUCTION PERIOD. AS SOON AS CONSTRUCTION OPERATIONS ALLOW, ALL TRAFFIC SIGNS SHALL BE PERMANENTLY LOCATED.
11.

WHERE TREE REMOVAL CONFLICTS WITH EXISTING UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CUT THE TREE OFF AT THE GROUND LINE AND GRIND THE STUMP AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE COMPLETELY REMOVING TREES AND ROOTS UNDER PAVED SURFACES.
12.

ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED WITH SUITABLE MATERIAL AS APPROVED BY THE ENGINEER. UNLESS NOTED OTHERWISE IN THE PLANS OR GEOTECHNICAL REPORT, THE COST TO REMOVE AND REPLACE UNSUITABLE MATERIAL WILL BE CONSIDERED AN UNFORESEEN CONDITION AND WILL BE PAID FOR AT AN AGREED UPON PRICE OR ON A TIME AND MATERIAL BASIS.

EARTHWORK & GRADING

1.

THE CONTRACTOR SHALL CONTACT THE ENGINEER DURING SUBGRADE PREPARATION AND PRIOR TO SOIL MODIFICATION TO DETERMINE THE NECESSITY OF THE PROPOSED SUBGRADE IMPROVEMENT. IF THE SUBGRADE IS FOUND TO REQUIRE OR NOT TO REQUIRE REMEDIAL PROCEDURES, SOIL MODIFICATION AND MODIFIER MAY BE ADDED OR DELETED AS A CONTRACT MODIFICATION.
2.

PRIOR TO COMPACTION AND THE PLACEMENT OF PAVEMENT BASE COURSE LAYERS, THE CONTRACTOR SHALL PREPARE A DRY, STABLE SUBGRADE BY DISKING OR OTHERWISE AERATING THE SOIL. WHEN AIR DRYING IS NOT FEASIBLE, THE CONTRACTOR MAY USE A MOISTURE REDUCING CHEMICAL ADDITIVE SUCH AS HYDRATED LIME TO ADJUST THE MOISTURE IN THE SOIL AT NO ADDITIONAL COST TO THE CONTRACT.
3.

AT THE BEGINNING OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL STRIP THE TOP 6" OF EXISTING LAWN AREAS TO REMOVE ORGANICS AND SALVAGE EXISTING, CLEAN TOPSOIL FOR USE DURING FINAL GRADING AND LAWN RESTORATION. THE CONTRACTOR SHALL STOCKPILE THE TOPSOIL AS INDICATED ON THE PLANS OR AT AN AGREED UPON LOCATION.
4.

TOPSOIL SHALL BE SPREAD EVENLY (4" MIN.) OVER ALL THE LAWN AREAS WITHIN THE SITE TO MEET THE FINAL GRADE PRIOR TO CONCLUDING EARTHWORK OPERATIONS. TOPSOIL MAY CONSIST OF SALVAGED TOPSOIL, EXISTING TOPSOIL AMENDED WITH 2" OF IMPORTED COMPOST, AND/OR BE IMPORTED FROM PRE-APPROVED SOURCES AS NEEDED FOR SUPPLEMENTATION.
5.

FOR LAWN AREAS, SEED SHALL CONSIST OF JAGUAR FESCUE APPLIED AT A RATE OF 10# PER 1,000-SF. FERTILIZER SHALL BE APPLIED AT A RATE OF 1:1:1 AT 6# OF NUTRIENT PER 1,000-SF. STRAW MULCH SHALL BE BROADCAST OVER ALL AREAS THAT ARE SEEDED. MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE AND CRIMPED TO THE EARTH FOR STABILIZATION.
6.

FINAL PAYMENT ON RETAINAGE WILL NOT BE MADE UNTIL THE LAWN HAS ESTABLISHED TO A 95% LEVEL WITH NO INDIVIDUAL BARE SPOTS LARGER THAN 6"x6" IN SIZE AFTER ONE GROWING SEASON (APRIL TO MAY OR SEPTEMBER TO OCTOBER).
7.

DURING GRADING OPERATIONS, THE SURFACE SHALL BE SMOOTH AND NOT BE LEFT TO IMPOUND WATER IF THERE MAY BE RAIN PRIOR TO THE NEXT WORKING DAY. IF THE SURFACE IS FINISHED SMOOTH FOR ANY REASON, IT SHALL BE SCARIFIED BEFORE PROCEEDING WITH THE PLACEMENT OF SUCCEEDING EARTH LIFTS.
8.

DEWATERING OF EXCAVATION AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9.

THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION FROM NEW AREAS TO ADJACENT, EXISTING AREAS AS NECESSARY.

PAVING & PAVEMENT MARKING

1.

PAVEMENT MARKING LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE. PROPOSED PAVEMENT MARKINGS MAY BE ADJUSTED BY THE CONTRACTOR, AS APPROVED BY THE ENGINEER, TO MATCH FIELD CONDITIONS.
2.

ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). ALL PAVEMENT MARKINGS SHALL BE WHITE, EXCEPT HANDICAP PARKING STALLS AND PAINTED ISLANDS, WHICH SHALL BE YELLOW.

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ILLINOIS DESIGN FIRM LICENSE NO.: 184.00115



MCDONOUGH HORSESHOE
SERVICE CENTER
GENERAL NOTES

NOT FOR
CONSTRUCTION

EXP. 11/30/2025

PROJECT NO.:
224169

DATE:
03/26/25

SHEET NO.:

03/26/2025 - DESIGN DEVELOPMENT

C0.1

H:\P\224169 - MCDONOUGH HELIXKAMP SITE\DWG\224169 - GENERAL NOTES.DWG - 3/25/2025

DRAINAGE

1. TO PROVIDE A FULLY FUNCTIONAL PROJECT, THE CONTRACTOR SHALL MAKE WATERTIGHT CONNECTIONS AND MAKE NECESSARY ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES AS PART OF THE WORK. CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL CONSIST OF CONCRETE COLLARS.
2. STORM SEWER INVERTS SHOWN ON THE PLANS ARE AT THE CENTER OF THE STRUCTURE. THE STORM SEWER SLOPES SHOWN ON THE PLANS ARE THE PERCENT GRADE FROM CENTER TO CENTER OF STRUCTURE. THE LENGTH OF STORM SEWERS SHOWN ON THE PLANS IS THE DISTANCE FROM CENTER TO CENTER OF STRUCTURE. FLARED END SECTIONS ARE HORIZONTALLY AND VERTICALLY LOCATED AT THE MIDPOINT AT END OF THE FLARED END SECTION.
3. THE OFFSETS TO ALL INLETS, MANHOLES, AND STRUCTURES ARE GIVEN TO THE CENTER OF THE OPENING AT THE BASE OF THE FRAME AND GRATE OR LID. CONCENTRIC DRAINAGE STRUCTURES WERE ASSUMED WHEN PLACING THESE ELEMENTS ON THE PLANS.
4. STORM SEWERS AND CULVERTS MAY HAVE MINIMAL DEPTH BELOW THE SOIL SUBGRADE LAYER. THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS ARE NECESSARY TO PROTECT THE PIPES FROM DAMAGE DURING HAULING AND/ OR DURING THE SOIL MODIFICATION OR CONDITIONING PROCESS. IF THE PIPES ARE DAMAGED, THEY SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
5. ALL DRAINAGE STRUCTURES CONSTRUCTED, ADJUSTED, OR RECONSTRUCTED UNDER THE CONTRACT, SHALL BE CLEANED OF ANY ACCUMULATION OF SILT, DEBRIS OR FOREIGN MATTER AT THE END OF EACH WORKING DAY AND AT THE TIME OF FINAL INSPECTION. THE EXISTING STRUCTURE ONE REACH IMMEDIATELY DOWNSTREAM SHALL ALSO BE CLEANED.
6. FOR SEWERS WITH A DESIGN GRADE OF LESS THAN ONE PERCENT (1%), FIELD VERIFICATION OF THE STORM SEWER GRADE WILL BE REQUIRED FOR EACH INSTALLED REACH OF SEWER PRIOR TO ANY SURFACE RESTORATION OR INSTALLATION OF ANY SURFACE IMPROVEMENTS. VERIFICATION SHALL BE BY VISUAL INSPECTION, LASER LEVEL, FIELD SURVEY, OR TELEVISIONING THE PIPE WITH CAMERAS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
7. MANHOLES AND DRAINAGE STRUCTURES MAY BE ADJUSTED WITH GRADE RINGS FOR ADJUSTMENTS UP TO TWELVE (12) INCHES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADJUSTMENTS REQUIRED TO MATCH FINISHED GRADE.
8. ALL PIPE TRENCHES UNDER AND WITHIN 2 FEET OF PAVED AREAS SHALL BE BACKFILLED TO FINAL GRADE WITH COARSE AGGREGATE, GRADATION CA 6.
9. A MINIMUM 10-FOOT HORIZONTAL AND 18-INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER AND SEWER MAINS. WHERE PHYSICAL CONSTRAINTS PREVENT THIS REQUIREMENT FROM BEING MET, ALTERNATIVE METHODS FOR PREVENTING CROSS-CONTAMINATION BETWEEN THE SEWER AND WATER MAIN SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS AND AS APPROVED BY THE ENGINEER.

EROSION CONTROL

1. THE CONSTRUCTION OF THIS PROJECT WILL BE GOVERNED BY THE CONDITIONS OF THE GENERAL NPDES STORMWATER PERMIT ISSUED BY I.E.P.A. DIVISION OF WATER POLLUTION CONTROL. HOWEVER, A "STORMWATER POLLUTION PREVENTION PLAN" HAS BEEN PREPARED BY THE ENGINEER IN CONJUNCTION WITH THIS PLAN SET. THE "EROSION CONTROL PLAN" CONTAINS INFORMATION SUCH AS REQUIRED SEQUENCE OF CONSTRUCTION, SEED, FERTILIZER AND LIME APPLICATION RATES AND PROCEDURES, AND PROVISION FOR MAINTENANCE OF EROSION CONTROL STRUCTURES AND MEASURES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP A COPY OF THE PLAN AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES, AND TO ENSURE COMPLIANCE WITH THE PLAN.
2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SILTATION CONTROL, AS NEEDED, TO PREVENT SILTATION OF OFF SITE PROPERTIES, UNTIL THE VEGETATION IN ALL DISTURBED AREAS HAS BEEN ESTABLISHED (75% COVERAGE OR MORE), AT WHICH TIME HE/SHE SHALL BE RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY SILTATION CONTROL AND REPAIR OF ANY ERODED AREAS. EROSION CONTROL MEASURES SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH APPLICABLE PLAN DETAILS AND THE ILLINOIS URBAN MANUAL. NO CONSTRUCTION ACTIVITIES SHALL BE PERFORMED UNTIL EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED ON AND ADJACENT TO THE PROJECT SITE.
3. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE, SILT PANELS, ROLLED EXCELSIOR, SILT WEDGES, OR OTHER PRE-APPROVED MATERIALS. HAY BALES SHALL NOT BE PERMITTED.
4. THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE DETAIL IN THE PLANS.

ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE IN GRADE
ADJ	ADJACENT
AGG	AGGREGATE
AI	AREA INLET
ALT	ALTERNATE
APPROX	APPROXIMATE
BC	BACK OF CURB
BIT	BITUMINOUS
BLDG	BUILDING
BLRD	BOLLARD
BM	BENCHMARK
BO	BY OTHERS (USED IN CONJUNCTION WITH TBA & TBR)
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION
BVCS	BEGINNING OF VERTICAL CURVE STATION
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CB	CATCH BASIN
CI	CURB INLET
CIPP	CURED IN-PLACE PIPE (LINER)
CJ	CONTROL JOINT
CL	CENTERLINE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY BLOCK
CO	CLEANOUT
COM	COMMUNICATIONS
CONC	CONCRETE
CONST	CONSTRUCTION
CP	CONTROL POINT

CTR	CENTER
CY	CUBIC YARD
DIA	DIAMETER
DND	DO NOT DISTURB
DS	DOWN SPOUT
DTL	DETAIL
E	EAST
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC
ENGR	ENGINEER
EOP	EDGE OF PAVEMENT
EQ	EQUAL
ESMT	EASEMENT
ETR	EXISTING TO REMAIN
EVCE	END OF VERTICAL CURVE ELEVATION
EVCS	END OF VERTICAL CURVE STATION
EX	EXISTING
EXP	EXPANSION
FES	FLARED END SECTION
FF	FINISHED FLOOR
FL	FLOW LINE
FO	FIBER OPTIC
FT	FEET
FV	FIELD VERIFY
GI	GRATE INLET
GND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT-MIX-ASPHALT
HT	HEIGHT
HVAC	HEATING/ VENTILATION/AIR

ID	CONDITIONING
IN	INSIDE DIAMETER
IN	INCHES
INV	INVERT
JB	JUNCTION BOX
K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
LF	LINEAR FEET
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH
NF	NOW OR FORMERLY
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OC	OIL AND CHIP
OC	ON CENTER
OD	OUTSIDE DIAMETER
PERM	PERMANENT
PL	PROPERTY LINE
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
ROW	RIGHT OF WAY

S	SOUTH
SAN	SANITARY
SEW	SEWER
SF	SQUARE FEET
SHT	SHEET
STA	STATION
STD	STANDARD
STM	STORM
SY	SQUARE YARD
TBA	TO BE ADJUSTED
TBR	TO BE REMOVED
TBS	TO BE SAVED
TBRL	TO BE RELOCATED
TBV	TO BE VACATED
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEL	TELEPHONE
THK	THICK
TUP	TEMPORARY USE PERMIT
TW	TOP OF WALL
TYP	TYPICAL
UIP	USE IN PLACE
UTIL	UTILITIES
VCP	VETRIFIED CLAY PIPE
W	WIDTH OR WEST
W/	WITH
WO/	WITHOUT
WR	WATER RESISTANT
WT	WEIGHT
WTR	WATER
WWF	WELDED WIRE FABRIC
YD	YARD DRAIN
YL	YARD LIGHT

LEGEND

EX	NEW	
		SIGN (TRAFFIC)
		SIGN (ADVERTISEMENT)
		TELEPHONE / POWER POLE
		LIGHT POLE
		ANCHOR POLE
		GUY WIRE
		FIRE HYDRANT
		GAS\VALVE
		WA\TER VALVE
		ELECTRIC METER
		GAS METER
		TELEPHONE BOX
		ELECTRIC BOX
		MAILBOX
		CLEANOUT

EX	NEW	
		AREA INLET
		CATCH BASIN
		CURB INLET
		MANHOLE
		TRAFFIC SIGNAL BOX
		TRAFFIC SIGNAL
		HANDHOLE
		SHRUB
		TREE (DECIDUOUS)
		TREE (EVERGREEN)
		CONTROL POINT
		BENCHMARK

LINETYPES

EX		NEW
	WATER LINE	
	GAS LINE	
	TELEPHONE LINE	
	OVERHEAD ELECTRIC LINE	
	ELECTRIC LINE	
	FIBER OPTIC LINE	
	STORM SEWER	
	SANITARY SEWER	
	FENCE LINE	
	TREE LINE	
	CONTOUR LINE	
	LIMITS OF CONST	

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MCDONOUGH HORSESHOE
SERVICE CENTER

GENERAL NOTES

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DATE:
03/26/25

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03/26/2025 - DESIGN DEVELOPMENT

C0.2

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CONTROL POINTS & BENCHMARKS

CP#22
IRON BAR W/ CAP
EASTING: 2337860.4102
NORTHING: 737901.8971
ELEVATION: 418.15'

CP#21
IRON BAR W/ CAP
EASTING: 2338331.8737
NORTHING: 737275.8719
ELEVATION: 423.63'

CP#20
IRON BAR W/ CAP
EASTING: 2338587.7670
NORTHING: 737865.3220
ELEVATION: 424.72'

TBM "B"
RR SPIKE IN POWER POLE
ELEVATION: 424.48

TBM "C"
RR SPIKE IN POWER POLE
ELEVATION: 425.12

TBM "D"
RR SPIKE IN POWER POLE
ELEVATION: 424.94

KEYED NOTES

- EXISTING POWER POLE, DND
- EXISTING OVERHEAD ELECTRIC, DND
- EXISTING WATER, DND
- EXISTING HYDRANT, DND
- EXISTING RETAINING WALL, DND
- EXISTING FENCE, DND
- EXISTING UNDERGROUND FIBER OPTIC, DND
- EXISTING ASPHALT SHOULDER, TBR
- EXISTING POWER POLE IN CONFLICT, DEVELOPER TO COORDINATE RELOCATION WITH UTILITY
- EXISTING TELEPHONE IN CONFLICT, DEVELOPER TO COORDINATE RELOCATION WITH UTILITY

LEGAL DESCRIPTION

The land referred to herein below is situated in the County of Madison, State of Illinois, and is described as follows:

A tract of land in U.S. Survey 509, Claim 1653, Township 3 North, Range 8 West of the Third Principal Meridian, Madison County Illinois, being more particularly described as follows, to-wit:

Commencing at the northeast corner of U.S. Survey 509, Claim 1653; thence north 87 degrees 24 minutes 53 seconds west (based on Grid North, Illinois State Plane Coordinate System West Zone) along the north line of said U.S. Survey 64.99 feet to a railroad spike set on the centerline of Sugar Loaf Road; thence south 22 degrees 40 minutes 07 seconds west along the centerline of said road 336.68 feet to the point of beginning of the tract herein described; thence continuing south 22 degrees 40 minutes 07 seconds west along said centerline 358.25 feet; thence north 87 degrees 24 minutes 53 seconds west and parallel with the north line of said U.S. Survey 1845.65 feet to an iron rod on the west line of the east half of said U.S. Survey; thence north 2 degrees 03 minutes 18 seconds east 336.48 feet to an iron rod; thence south 87 degrees 24 minutes 53 seconds east and parallel with the north line of said U.S. Survey 1971.78 feet to the point of beginning.

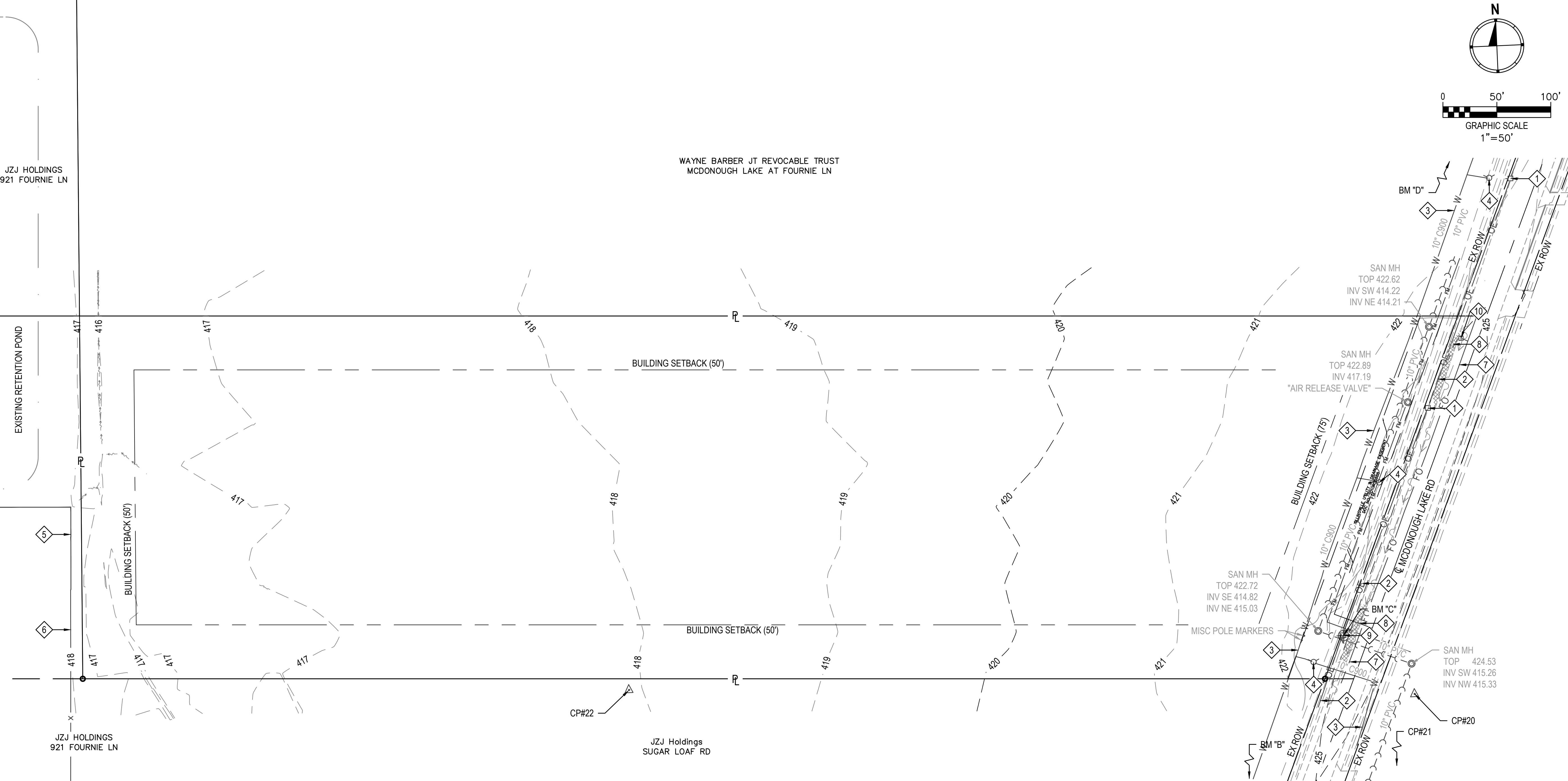
EXCEPT THEREFROM that portion conveyed to JZJ Holdings, L.L.C. by deed recorded July 21, 2005 as document 2005R40324, described as follows, to-wit:

Commencing at the northeast corner of U.S. Survey 509, Claim 1653; thence on an assumed bearing of north 87 degrees 24 minutes 53 seconds west on the north line of said U.S. Survey 509, Claim 1653 a distance of 64.99 feet to the centerline of Sugar Loaf Road; thence south 22 degrees 40 minutes 47 seconds west on said centerline of Sugar Loaf Road a distance of 694.93 feet; thence north 87 degrees 24 minutes 53 seconds west parallel to said northerly line of U.S. Survey 509 Claim 1653 a distance of 1178.32 feet to the point of beginning.

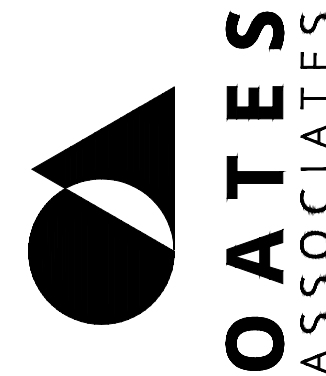
From said point of beginning thence north 87 degrees 24 minutes 53 seconds west on the northerly line of a tract of land described in deed book 4359 page 2704 a distance of 667.38 feet to the westerly line of a tract of land described in deed book 3222 on page 2318; thence north 02 degrees 03 minutes 18 seconds east on said westerly line of a tract of land described in deed book 3222 on page 2318 a distance of 336.46 feet; thence south 87 degrees 24 minutes 53 seconds east a distance of 667.38 feet; thence south 02 degrees 03 minutes 18 seconds west a distance of 336.46 feet to the point of beginning.

Except the coal, oil, gas and other minerals as may have been heretofore excepted, reserved or conveyed and all rights and easements in favor of said mineral estate.
Situated in Madison County, Illinois.

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MCDONOUGH HORSESHOE
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EXISTING CONDITIONS AND
REMOVAL PLAN

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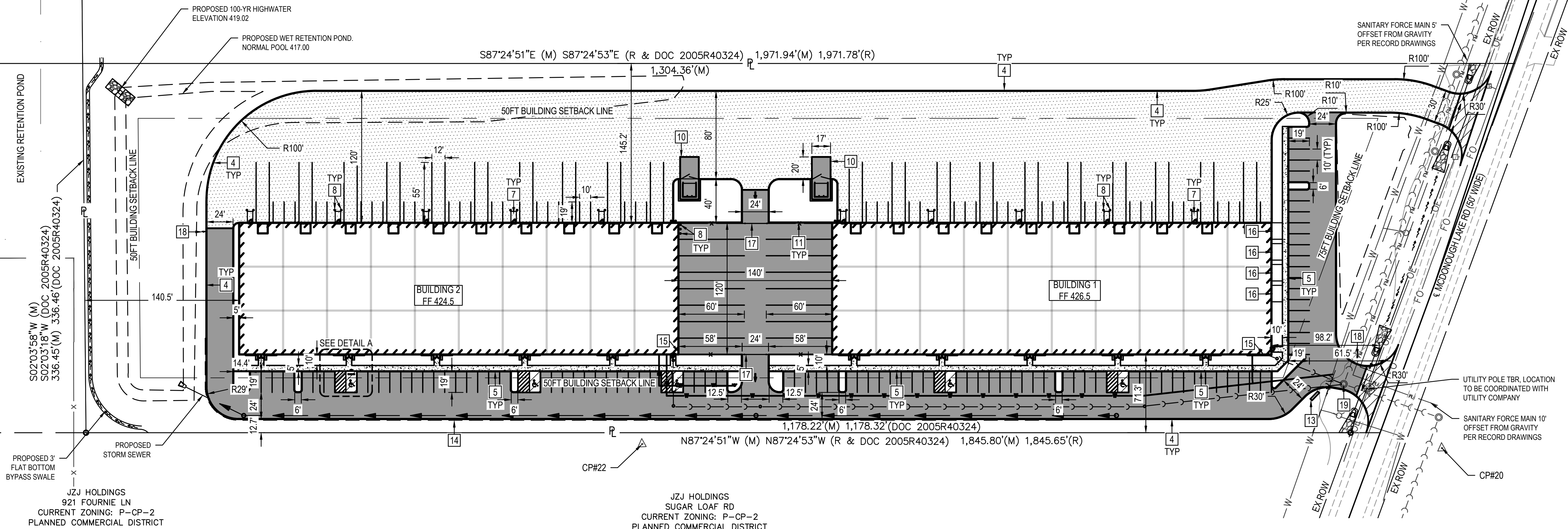
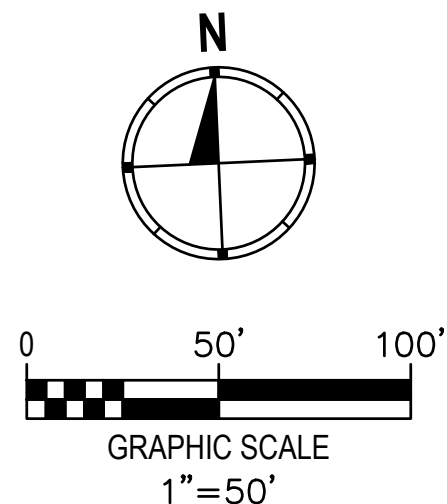
C1.1

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JZJ HOLDINGS
921 FOURNIE LN
CURRENT ZONING: P-CP-2
PLANNED COMMERCIAL DISTRICT

WAYNE BARBER JT REVOCABLE TRUST
MCDONOUGH LAKE AT FOURNIE LN
CURRENT ZONING: BP-3 BUSINESS PARK DISTRICT



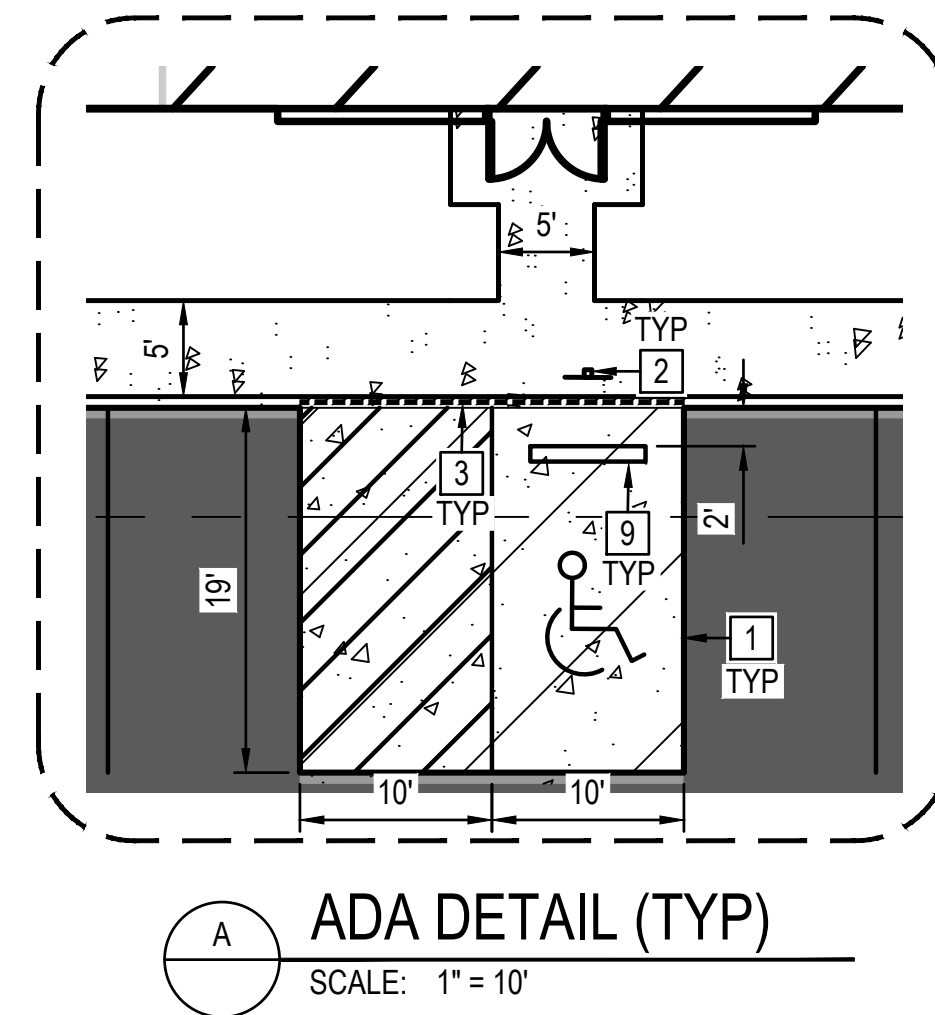
LEGEND

- NEW ASPHALT PAVEMENT, SEE DETAIL 1 ON SHEET C2.2
- NEW HEAVY DUTY ASPHALT PAVEMENT, SEE DETAIL 2 ON SHEET C2.2
- NEW PC CONCRETE SIDEWALK, SEE DETAIL 7 AND 8 ON SHEET C2.2
- NEW PCC PAVEMENT, SEE DETAIL 3 ON SHEET C2.2
- NEW PLUS DUTY CONCRETE PAVEMENT, SEE DETAIL 1 ON SHEET C2.4
- CONSTRUCTION LIMITS

SITE COVERAGE:	INCLUDING EX ROW. = 300,135 SF / 417,620 SF = 71.86% EXCLUDING EX ROW. = 293,798 / 408,663 SF = 71.90%
TOTAL PARKING REQUIRED BASED ON ASSUMED 10% OFFICE SPACE:	82 SPACES
PARKING SPACES PROVIDED:	129 TOTAL NORTH LOT = 29 REGULAR PARKING SPACES SOUTH/EAST LOT = 95 REGULAR SPACES / 5 ADA
SPACES PROVIDED	16 STORAGE SPACES

KEYED NOTES

- NEW ACCESSIBLE PARKING SPACE, SEE DETAIL 1 ON SHEET C2.3
- NEW ACCESSIBLE SIGN AND POST, SEE DETAIL 2 ON SHEET C2.3
- NEW COMBINATION CONC DEPRESSED CURB AND SIDEWALK, SEE DETAIL 8 ON SHEET C2.2
- NEW CONC BARRIER CURB, SEE DETAIL 6 ON SHEET C2.2
- NEW COMBINATION FULL HEIGHT CURB AND SIDEWALK, SEE DETAIL 7 ON SHEET C2.2
- RESERVED
- NEW STAIRS, SEE ARCHITECTURAL PLANS
- NEW PIPE BOLLARD, SEE DETAIL 3 ON SHEET C2.3
- NEW PARKING BLOCK, SEE DETAIL 7 ON SHEET C2.3
- NEW DUMPSTER ENCLOSURE, SEE DETAIL 2 ON SHEET C2.4
- NEW SITE PROOF FENCING, SEE DETAIL 2 ON SHEET C2.5
- RESERVED
- NEW MONUMENT SIGN, TO BE SUBMITTED UNDER SEPARATE PERMIT
- NEW CONC RETAINING WALL, SEE DETAIL 3 ON SHEET C2.4
- NEW FIRE DEPARTMENT CONNECTION, SEE SPRINKLER PLANS FOR DETAILS
- 10' X 15' GREEN SCREEN, SEE LANDSCAPING PLANS FOR DETAILS
- NEW 20' SLIDING GATE, SEE DETAIL 1 ON C2.5
- NEW SIGN "NO TRUCKS"
- EXISTING SAN MANHOLE, ADJUST TO GRADE



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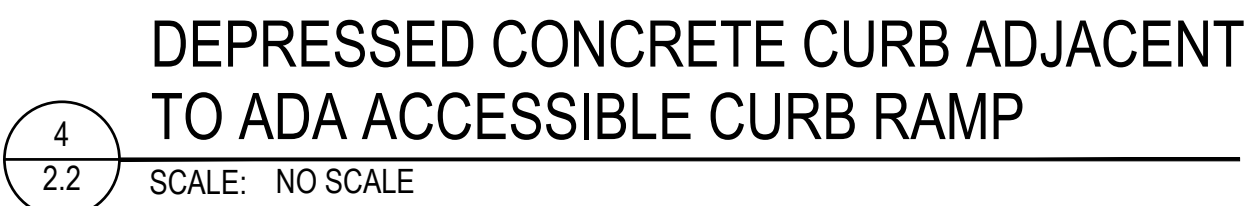
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MIXTURE USE	SURFACE	BINDER
AC/PG	PG 64-22	PG 64-22
RAP % (MAX)	10%	10%
DESIGN AIR VOIDS	4.0% @ NDES = 50	4.0% @ NDES = 50
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGG	MIXTURE C	MIXTURE B



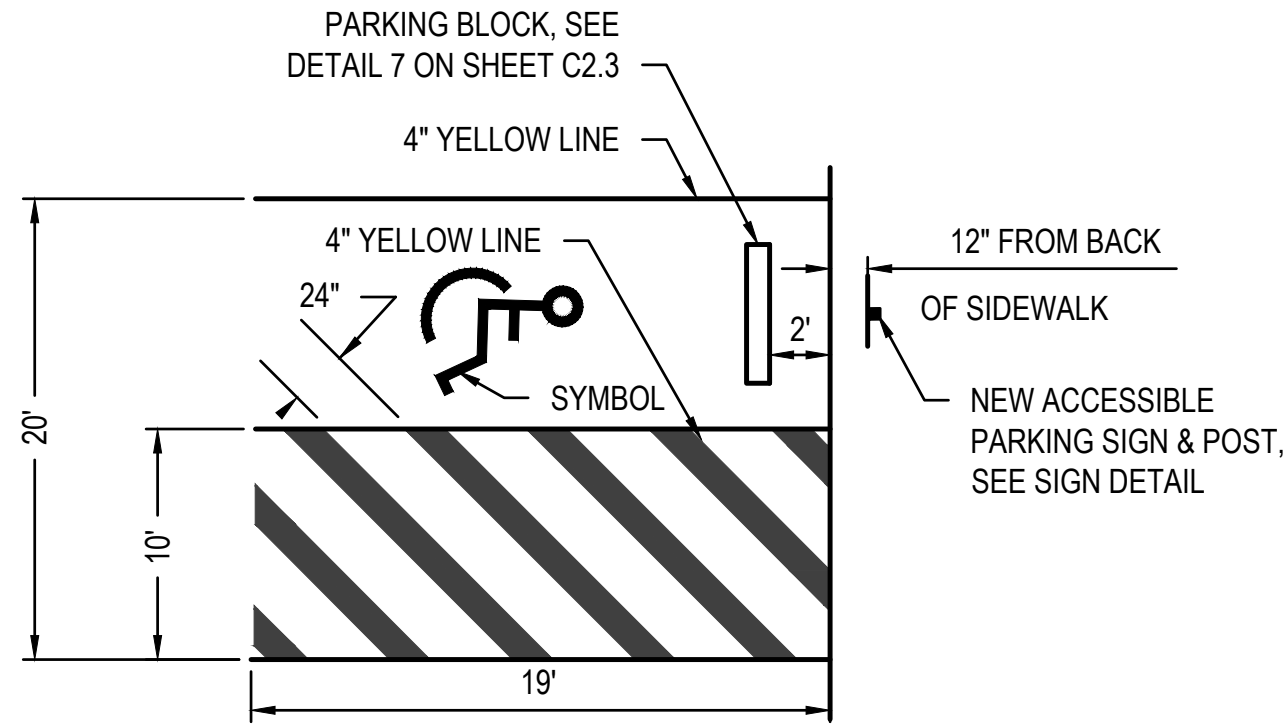
MIXTURE USE	SURFACE	BINDER
AC/PG	PG 64-22	PG 64-22
RAP % (MAX)	10%	10%
DESIGN AIR VOIDS	4.0% @ NDES = 50	4.0% @ NDES = 50
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGG	MIXTURE C	MIXTURE B



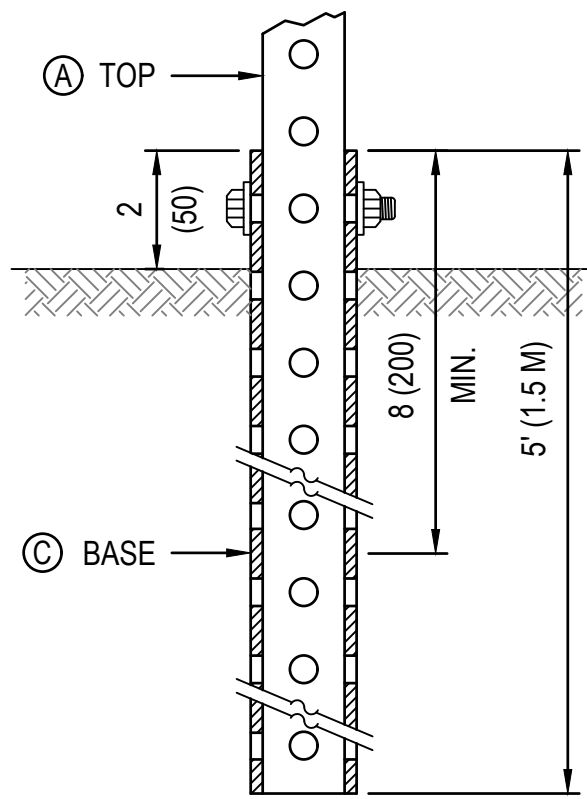
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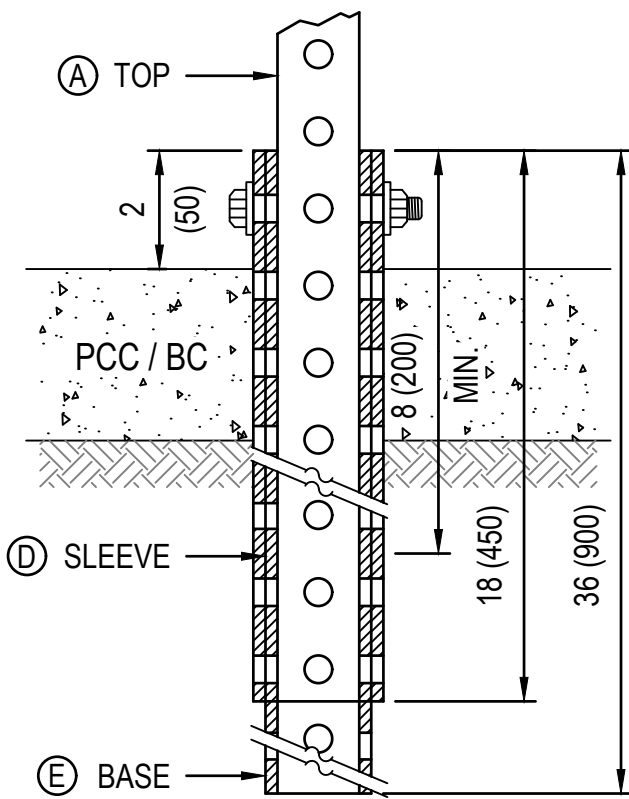
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1
2.3 TYPICAL ACCESSIBLE PARKING STALL DETAIL
SCALE: NO SCALE



GROUND MOUNT DETAIL



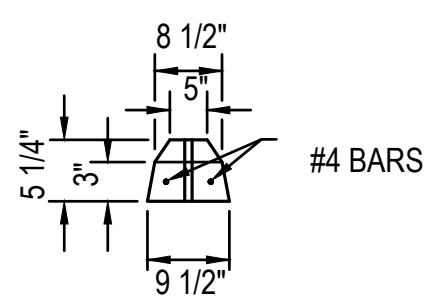
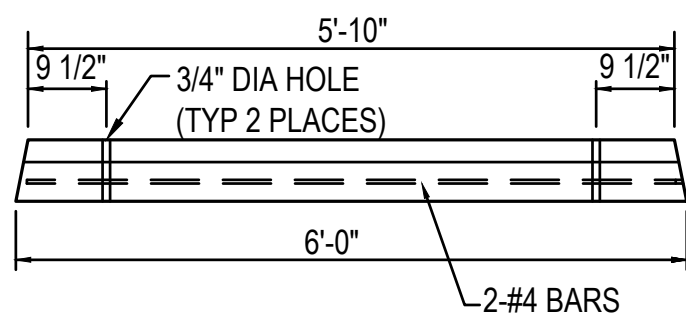
PAVEMENT MOUNT DETAIL

NOTES:

ALL SIGN POSTS AND COMPONENTS SHALL HAVE A BLACK POWDER COAT FINISH

(A)	2 x 2 x var. (51 x 51 var.)
(B)	1 3/4 x 1 3/4 x 12 (44 x 44 x 300)
(C)	2 1/4 x 2 1/4 x 60 (57 x 57 x 1500)
(D)	2 1/2 x 2 1/2 x 18 (64 x 64 x 450)
(E)	2 1/4 x 2 1/4 x 36 (57 x 57 x 900)

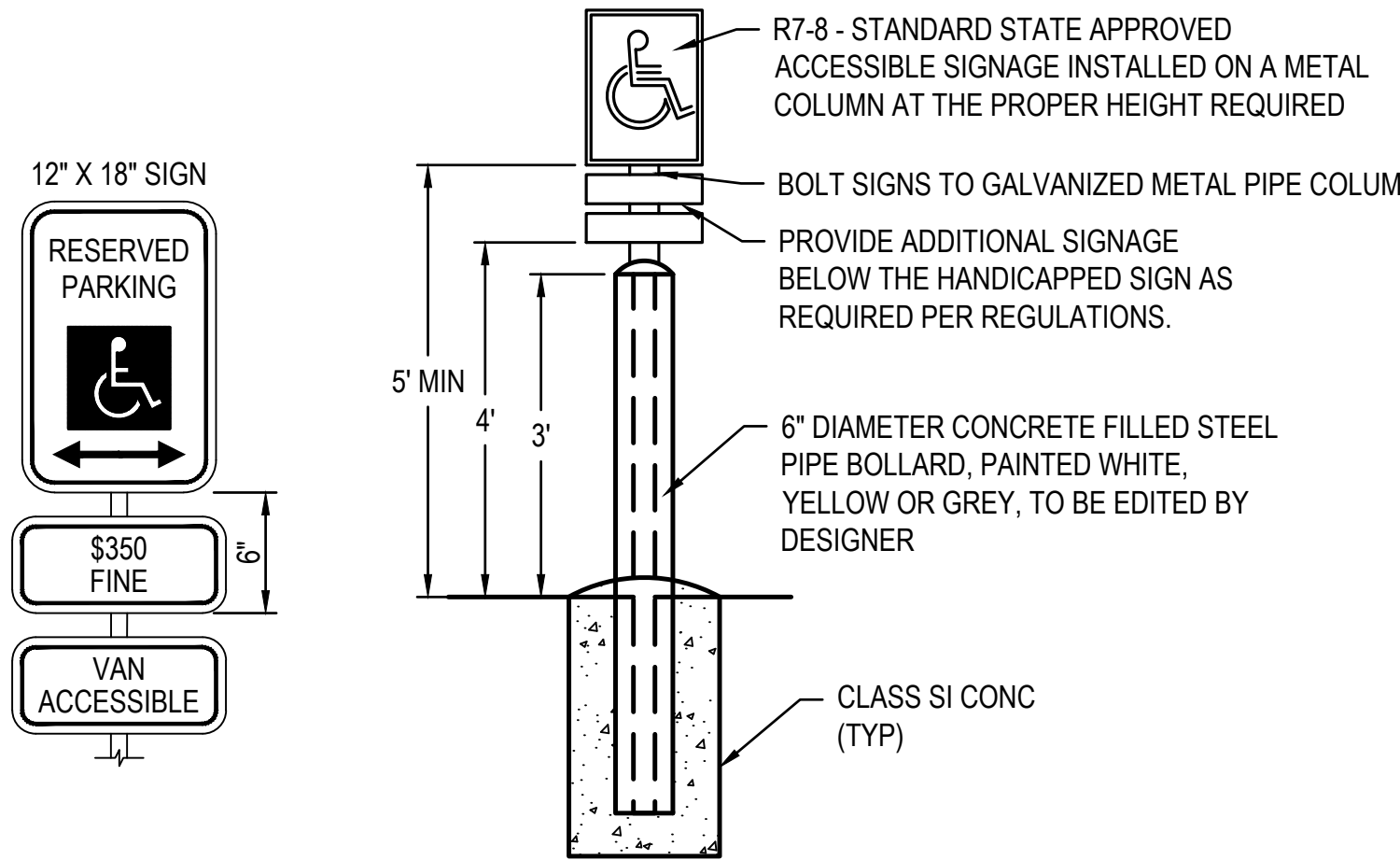
4
2.3 TELESCOPING STEEL SIGN SUPPORT
SCALE: NO SCALE



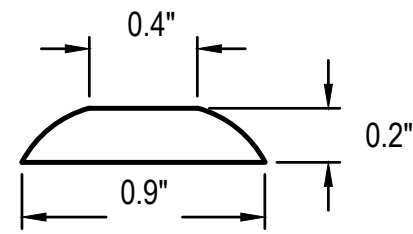
NOTE:

PARKING BLOCKS TO BE ANCHORED WITH 5/8" x 24" IRON PINS (2 EACH) DRILLED INTO THE PAVEMENT & FIT SNUG AS TO NOT RACK WHEN SHOVED.

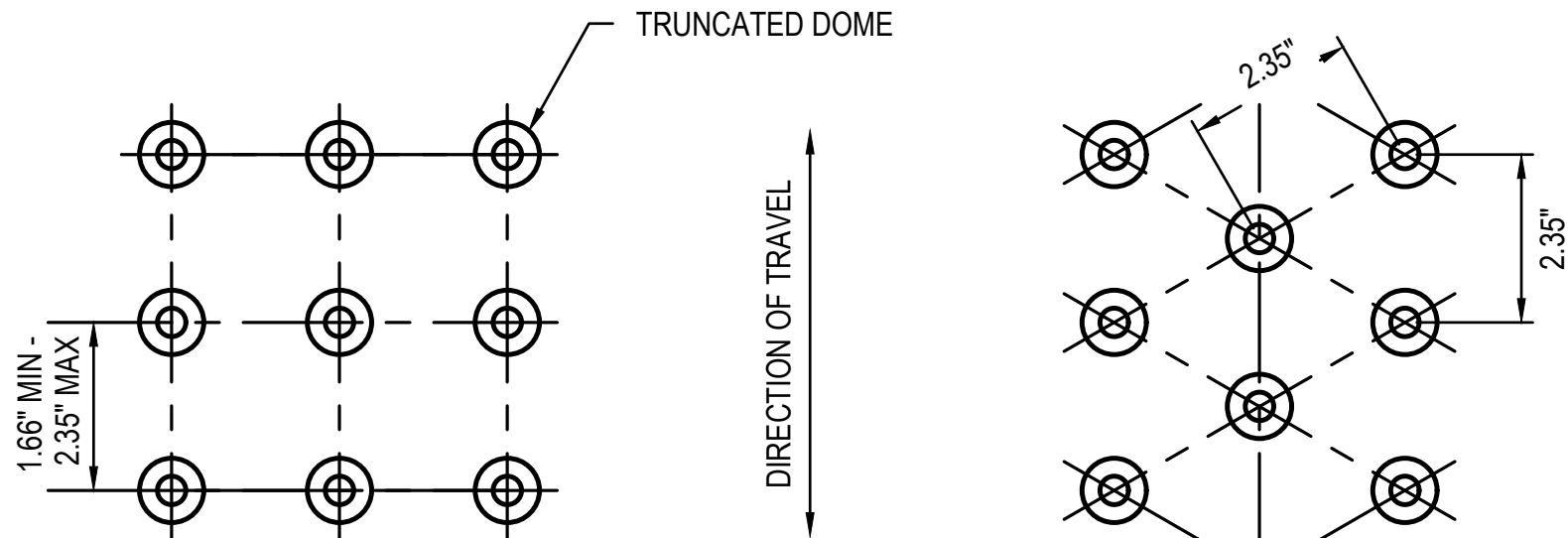
7
C2.3 PARKING BLOCK DETAIL
SCALE: NO SCALE



2
2.3 ACCESSIBLE SIGN & POST
SCALE: NO SCALE



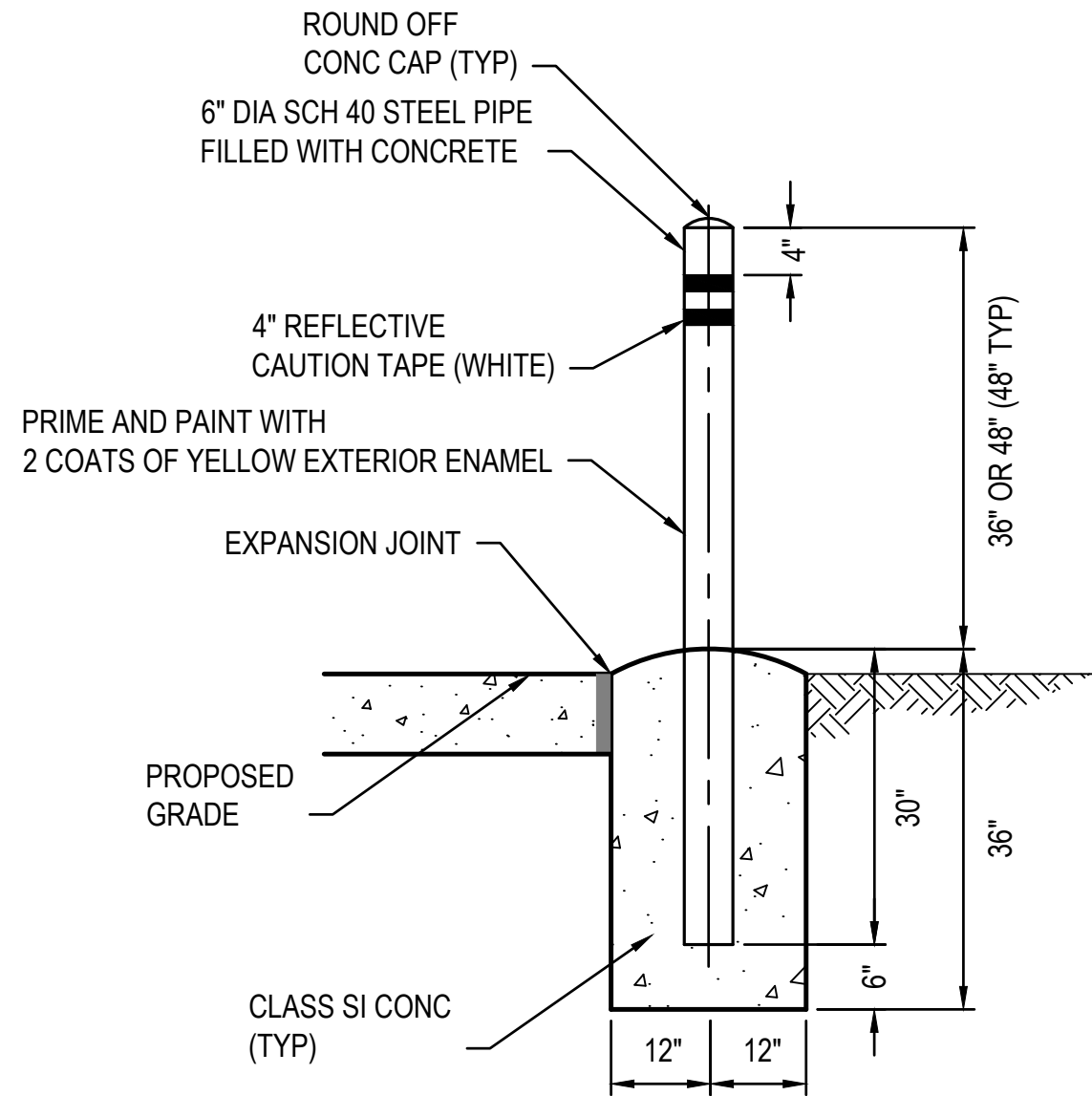
TRUNCATED DOME DETAIL



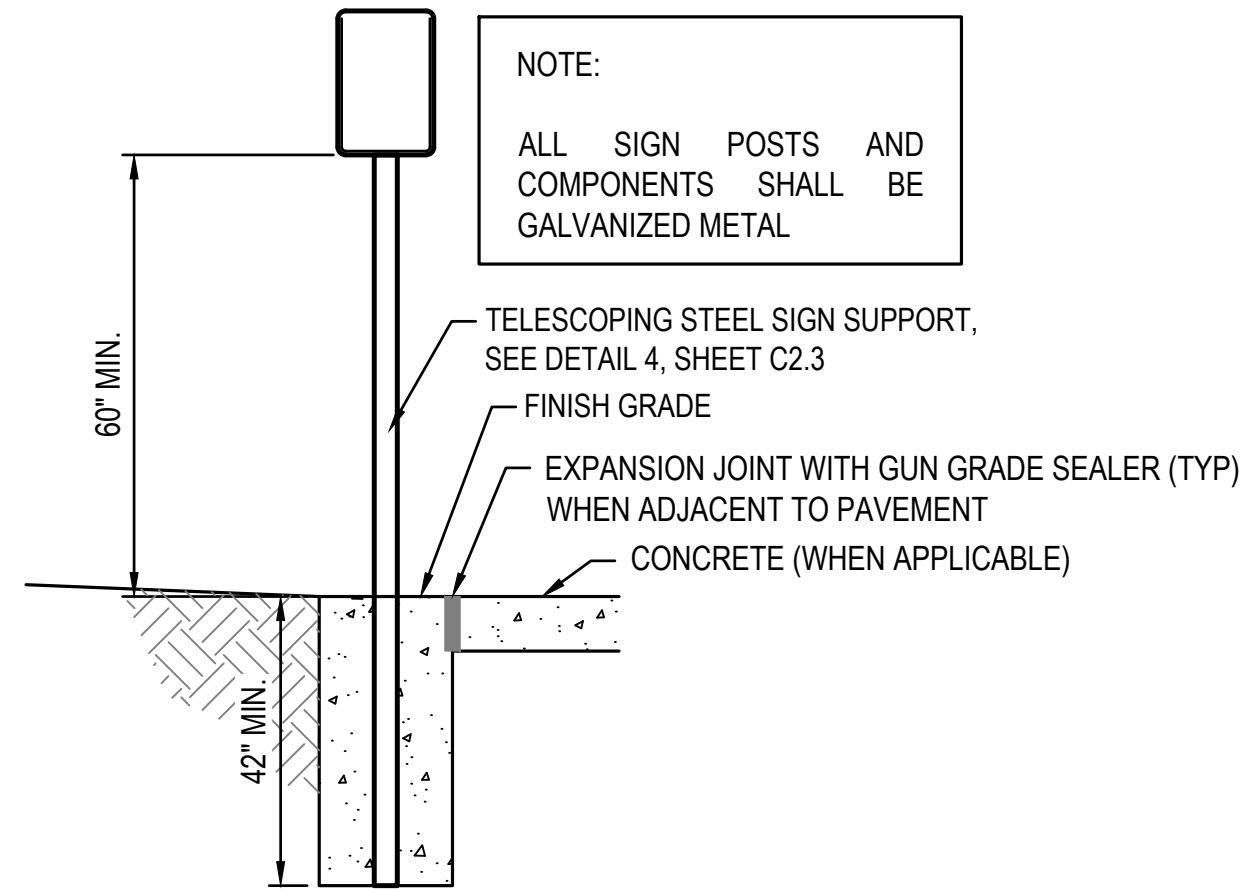
SQUARE PATTERN
(PARALLEL ALIGNMENT)

TRIANGULAR PATTERN

5
2.3 DETECTABLE WARNING DETAIL
SCALE: NO SCALE



3
2.3 PIPE BOLLARD DETAIL
SCALE: NO SCALE



6
2.3 TRUCK ENTRANCE SIGN DETAIL
SCALE: NO SCALE

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SITE DETAILS

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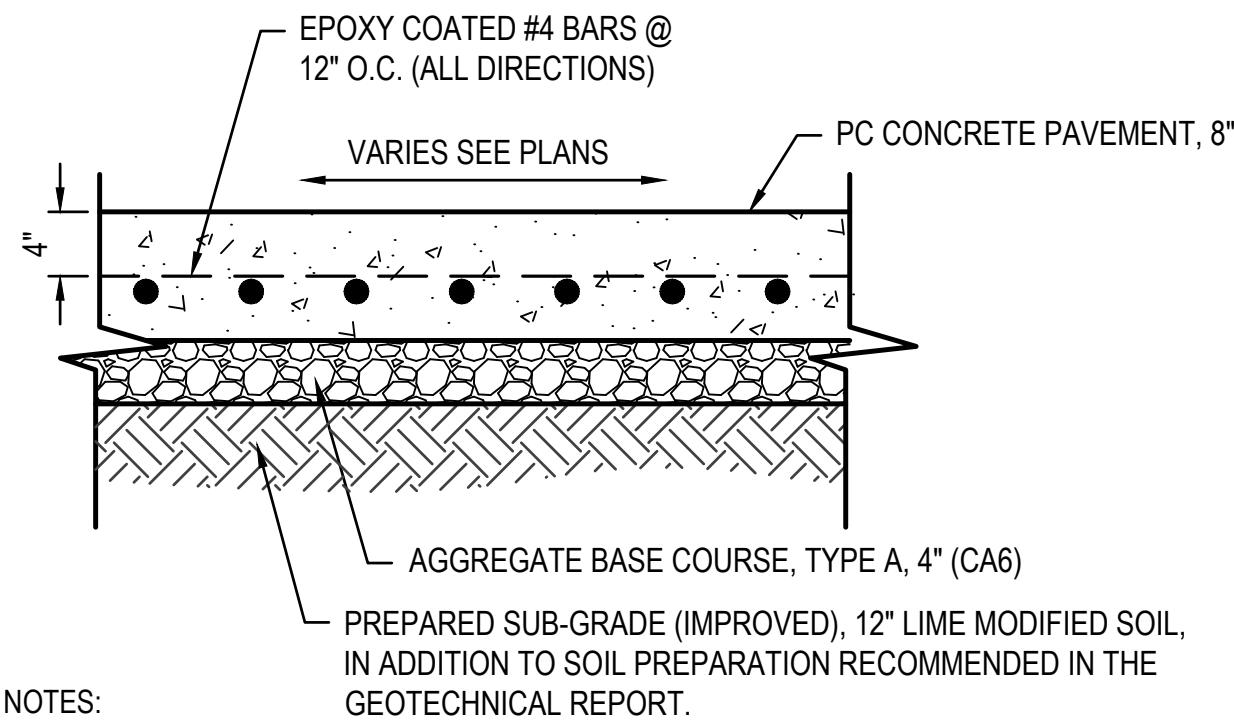
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C2.3

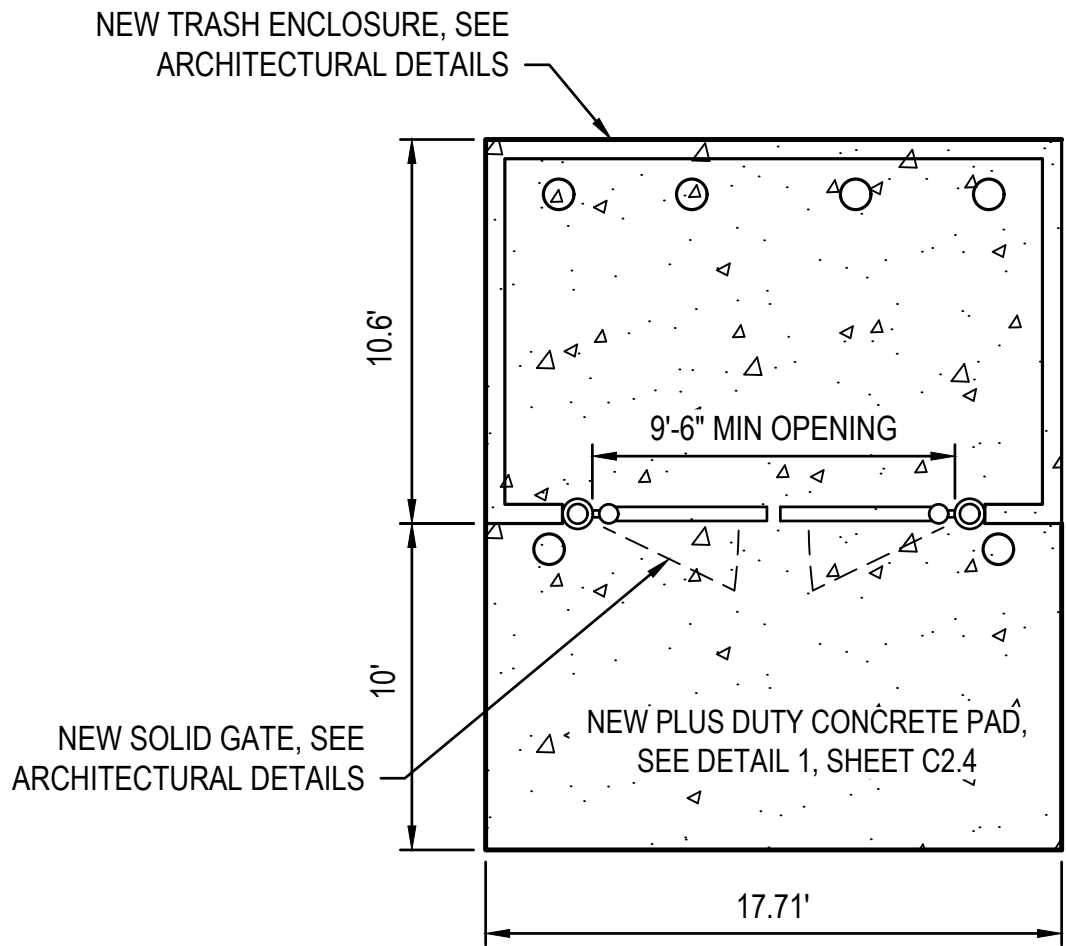
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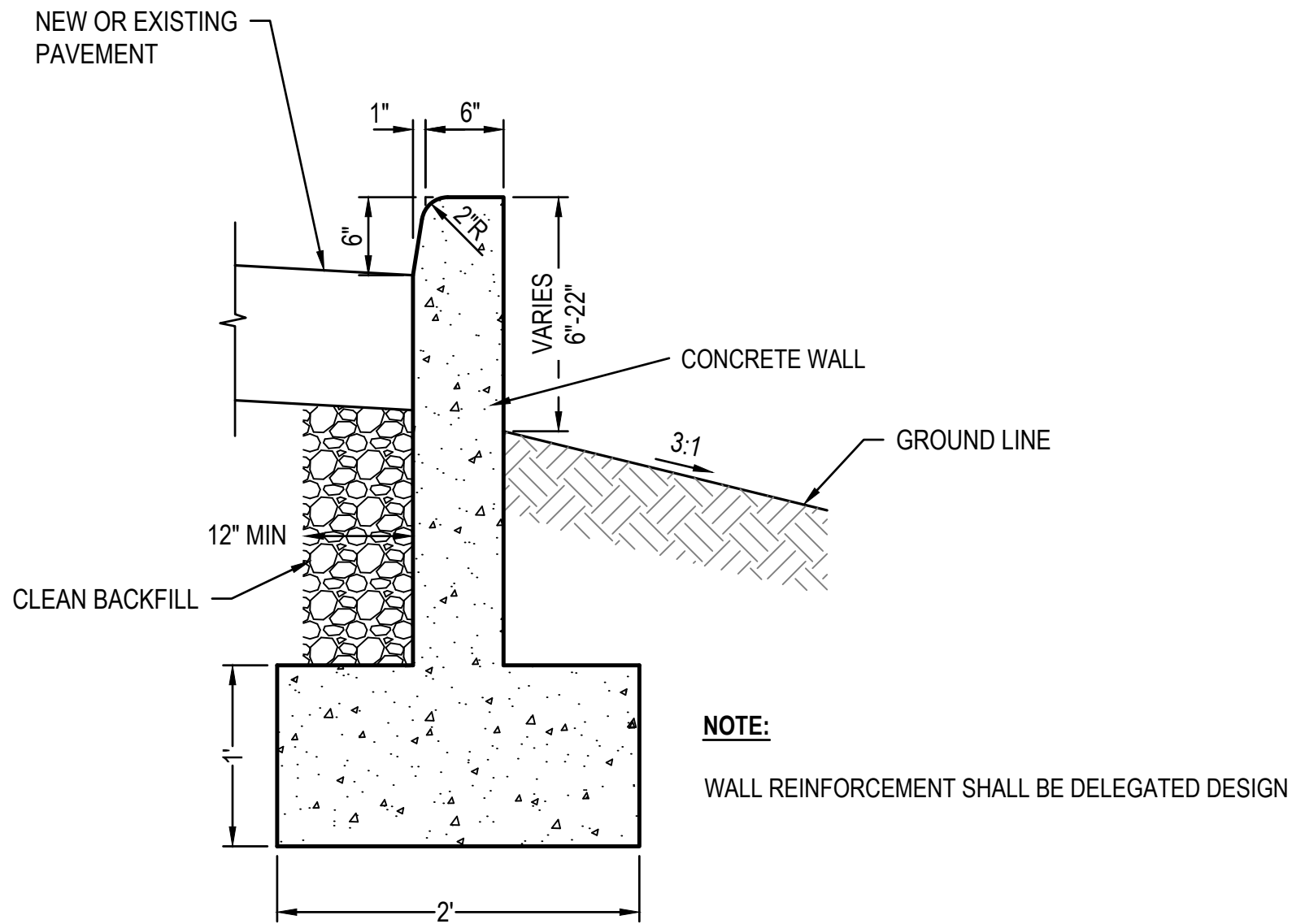
- NOTES:
- CONTRACTION JOINTS ARE TO BE ON $\pm 10'$ CENTERS, SEE DETAIL 9 ON SHEET C2.1
 - EXPANSION JOINTS ARE TO BE ON $\pm 100'$ CENTERS AND AT POINTS OF CURVATURE.
 - EXPANSION JOINT REQUIRED BETWEEN THE PAVEMENT AND EXISTING PAVEMENT OR STRUCTURES.
 - ALL EXPANSION AND CONTRACTION JOINTS SHALL BE SEALED WITH GUN GRADE LIMESTONE COLORED SEALANT.

1
2.4 PLUS DUTY CONCRETE PAD DETAIL
SCALE: NO SCALE



NOTE:
CONTRACTOR TO PROVIDE LOCKING MECHANISM FOR ENCLOSURE DOORS FOR OPEN POSITION DURING SERVICE.

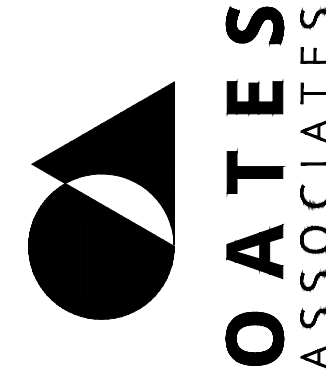
2
2.4 DUMPSTER PAVEMENT W/LIFT PAD
SCALE: NO SCALE



3
2.4 CONCRETE RETAINING WALL DETAIL
SCALE: NO SCALE

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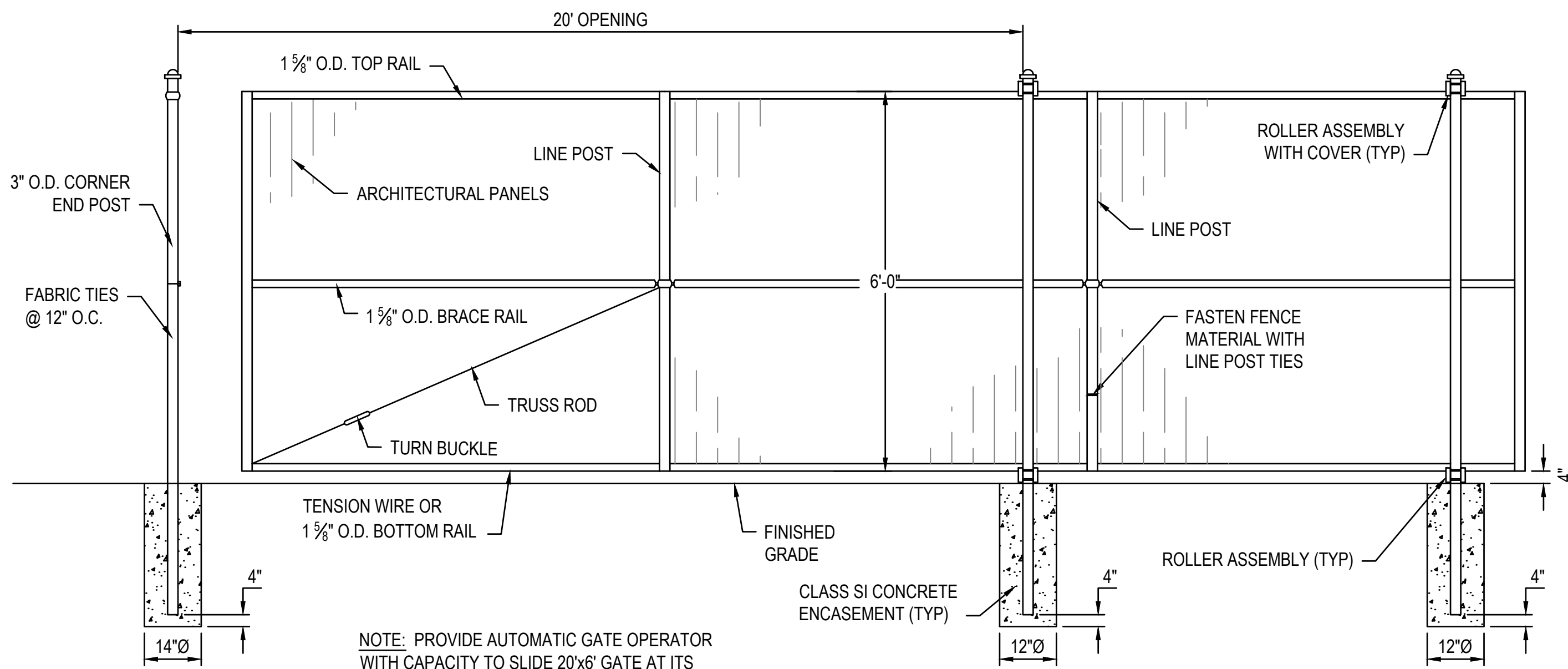
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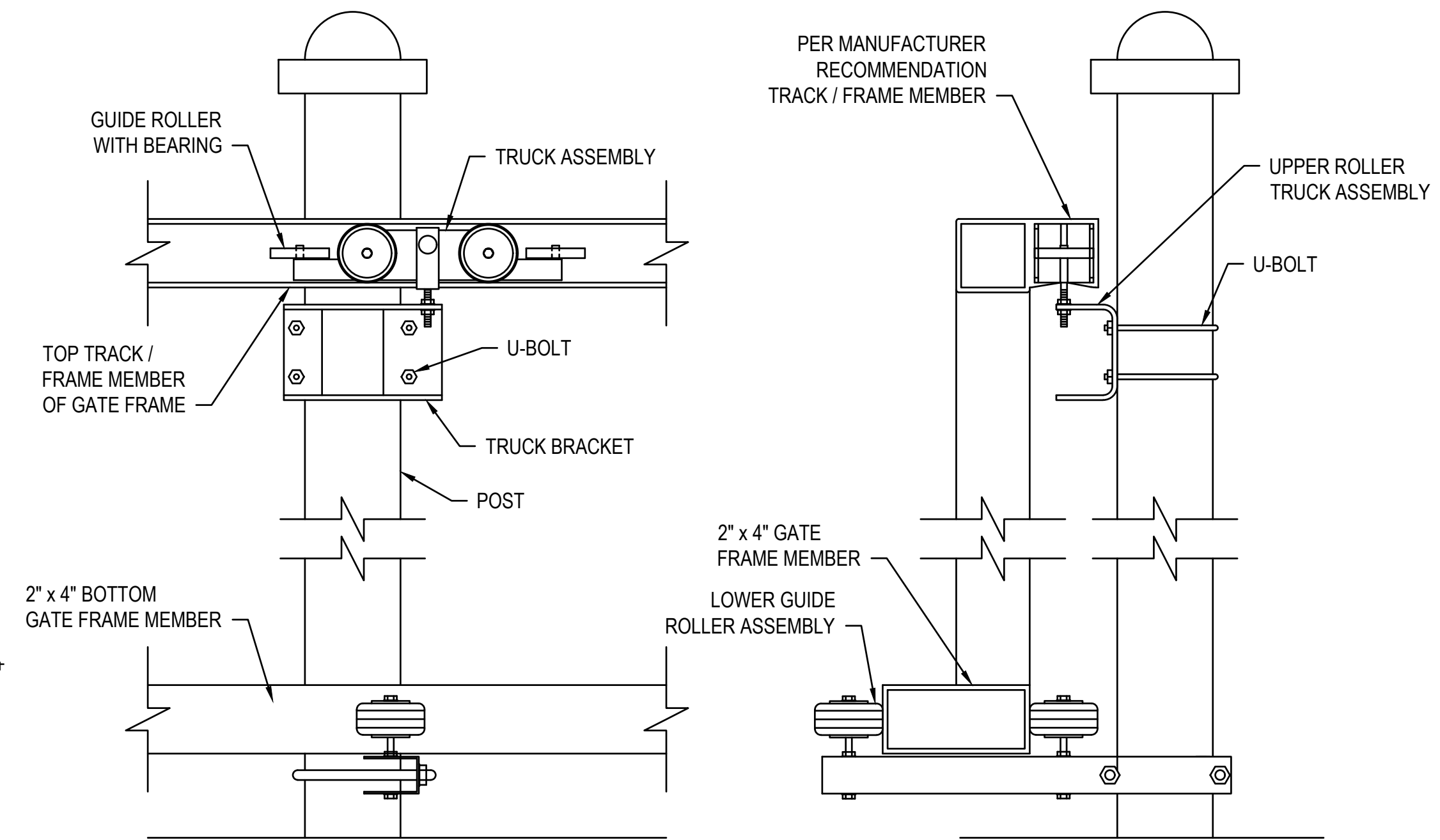
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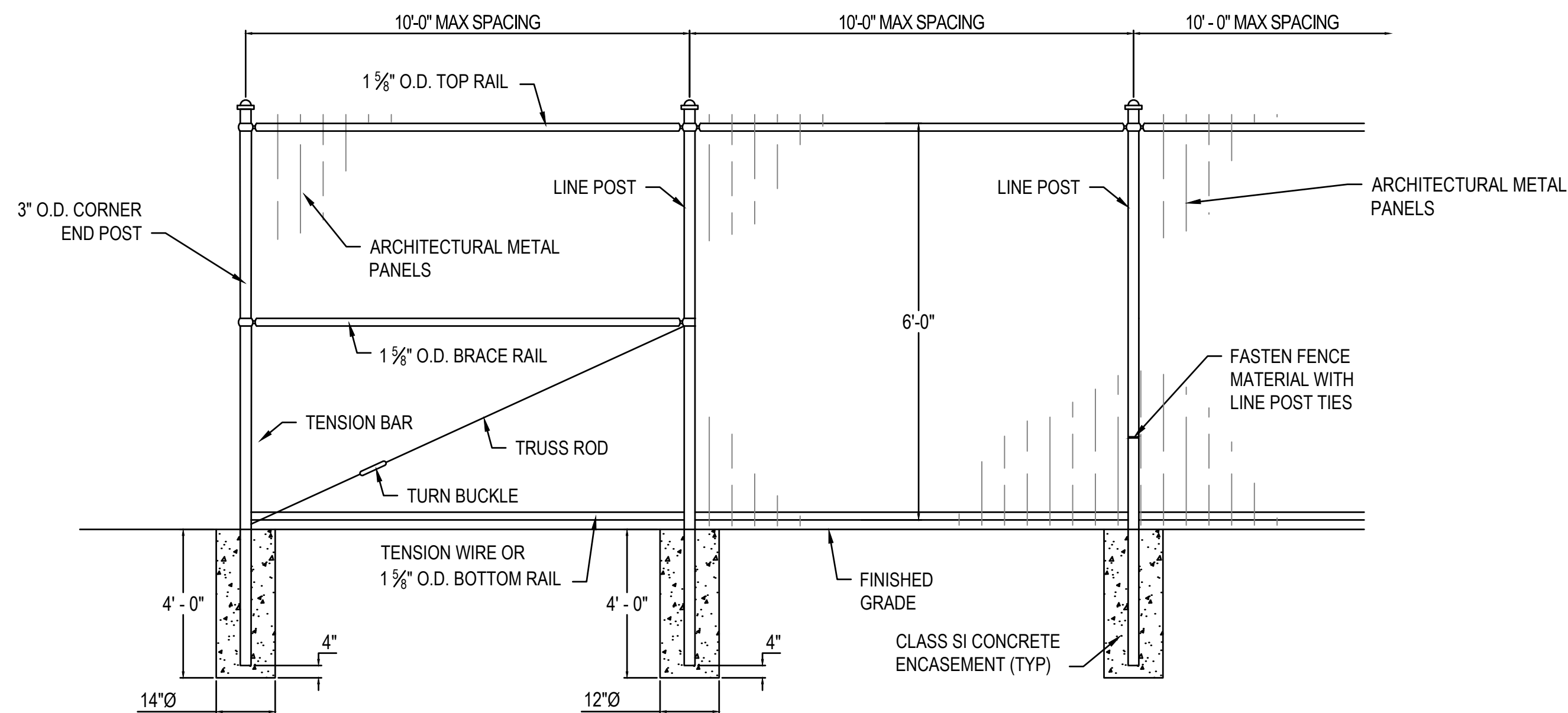


CANTILEVERED GATE



TRUCK AND GUIDE ROLLER ASSEMBLY

1 6' CANTILEVERED GATE AND ROLLER ASSEMBLY DETAIL
2.5 SCALE: NO SCALE

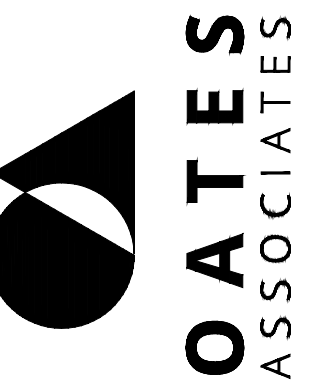


2 FENCE 6' HIGH DETAIL
2.5 SCALE: NO SCALE

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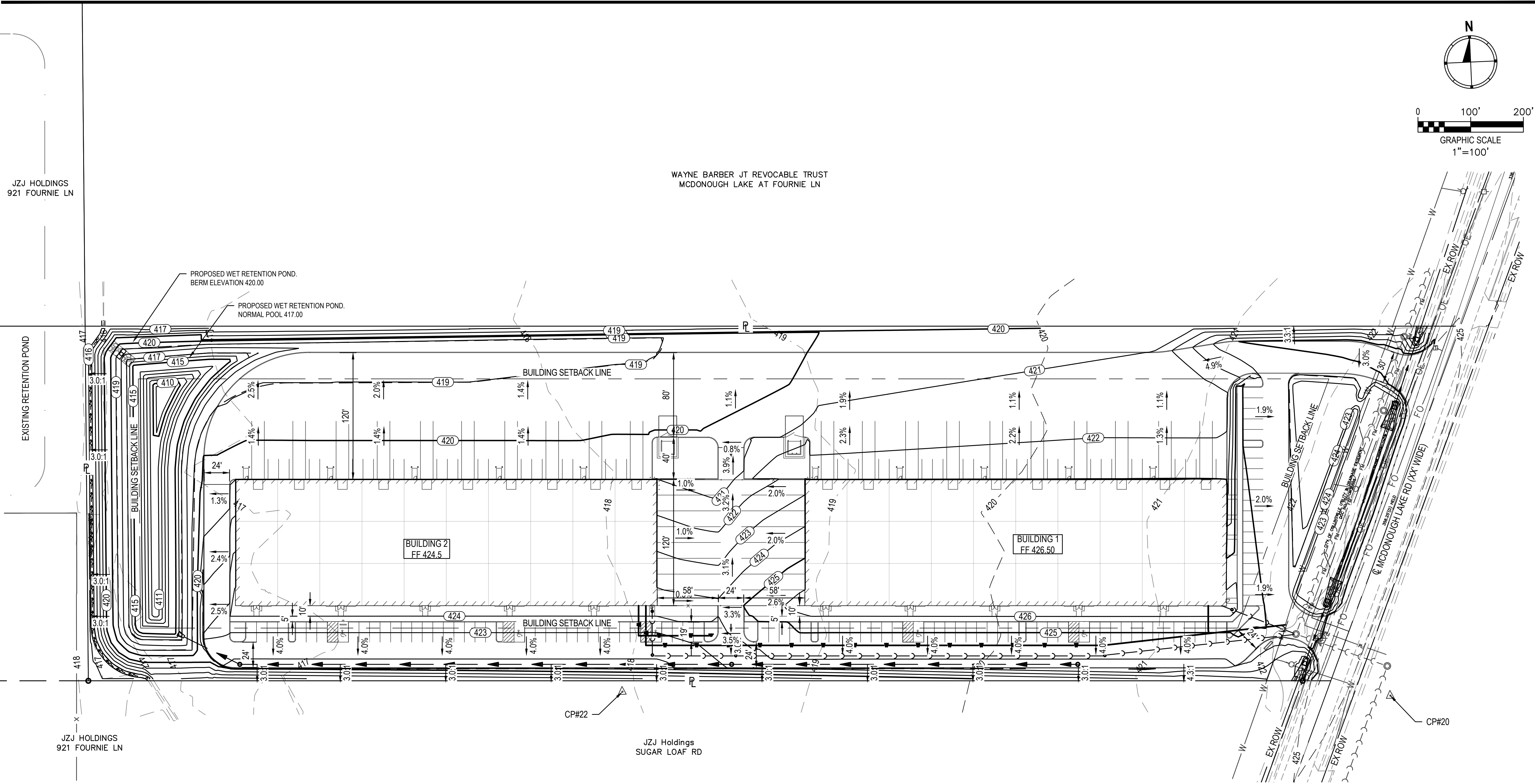
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C2.5

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EARTHWORK CALCULATIONS

CUT = 1,946 CY (IN PLACE, NO ADJUSTMENT FACTOR APPLIED) - SEE NOTES BELOW
FILL = 52,256 CY (IN PLACE, NO ADJUSTMENT FACTOR APPLIED) - SEE NOTES BELOW

NOTE:

ASSUMES FILL TO BUILDING FINISHED FLOOR ELEVATION AND FINISHED GRADE. DOES NOT ACCOUNT FOR BUILDING SLABS, FOUNDATION, OR PAVEMENT THICKNESS. DOES NOT ACCOUNT FOR REMOVAL OR FILL ASSOCIATED WITH SOIL REMEDIATION.

EARTHWORK HAS NOT BEEN ADJUSTED FOR TOPSOIL STRIPPING OR REPLACEMENT.

APPROXIMATE EARTHWORK VOLUMES HAVE BEEN PROVIDED FOR INFORMATION ONLY AND SHALL BE FIELD VERIFIED.

NOTE:

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO.

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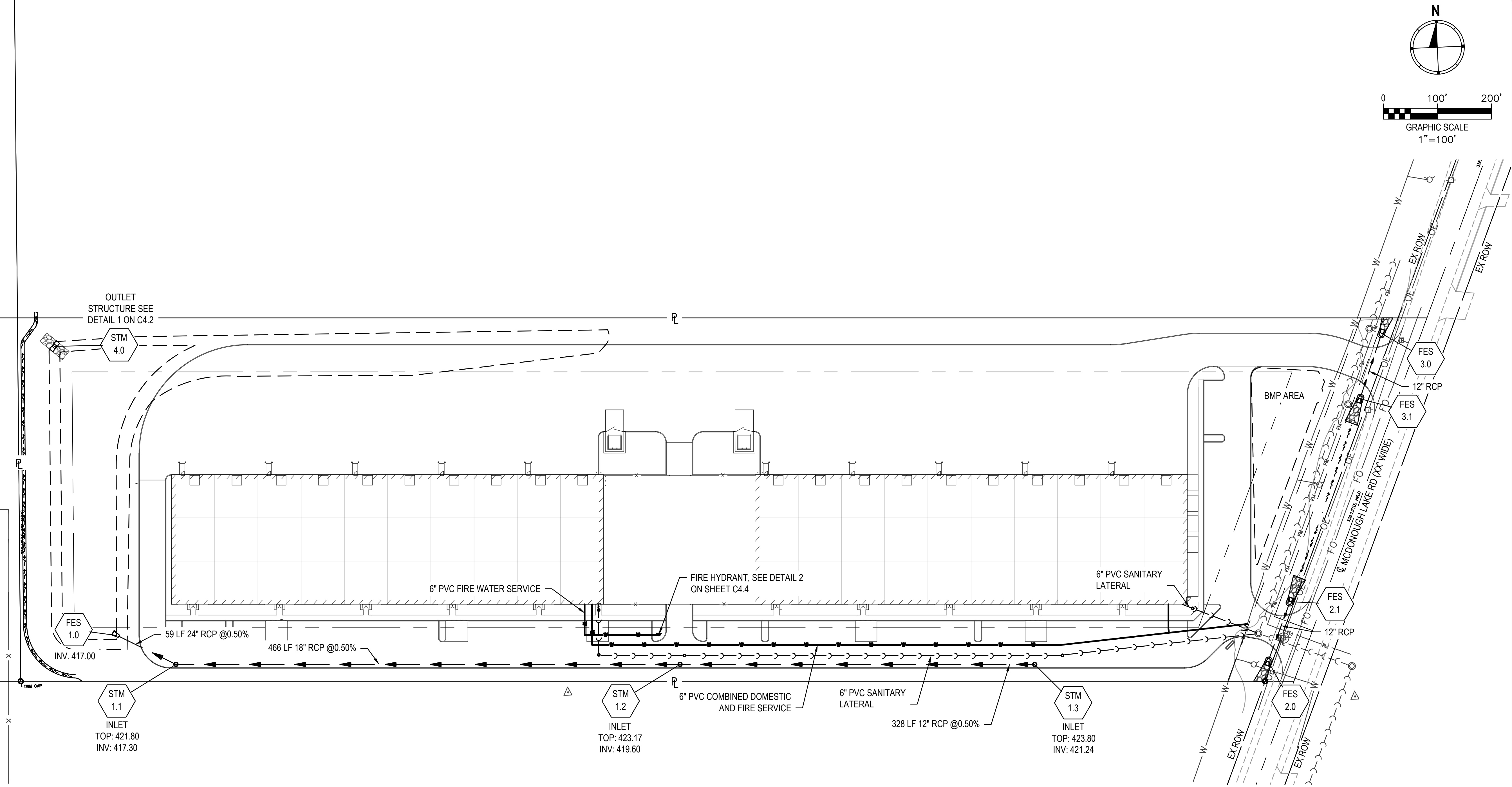
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MCDONOUGH HORSESHOE
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DRAINAGE AND UTILITY PLAN

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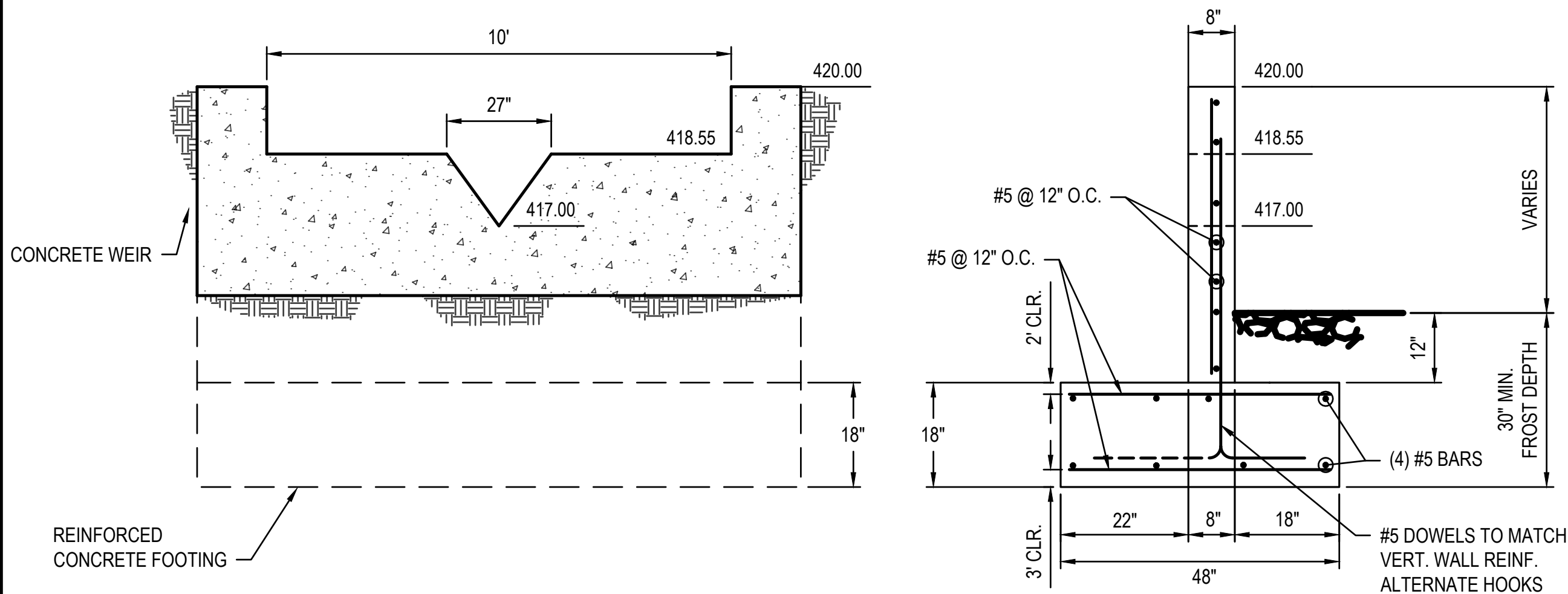
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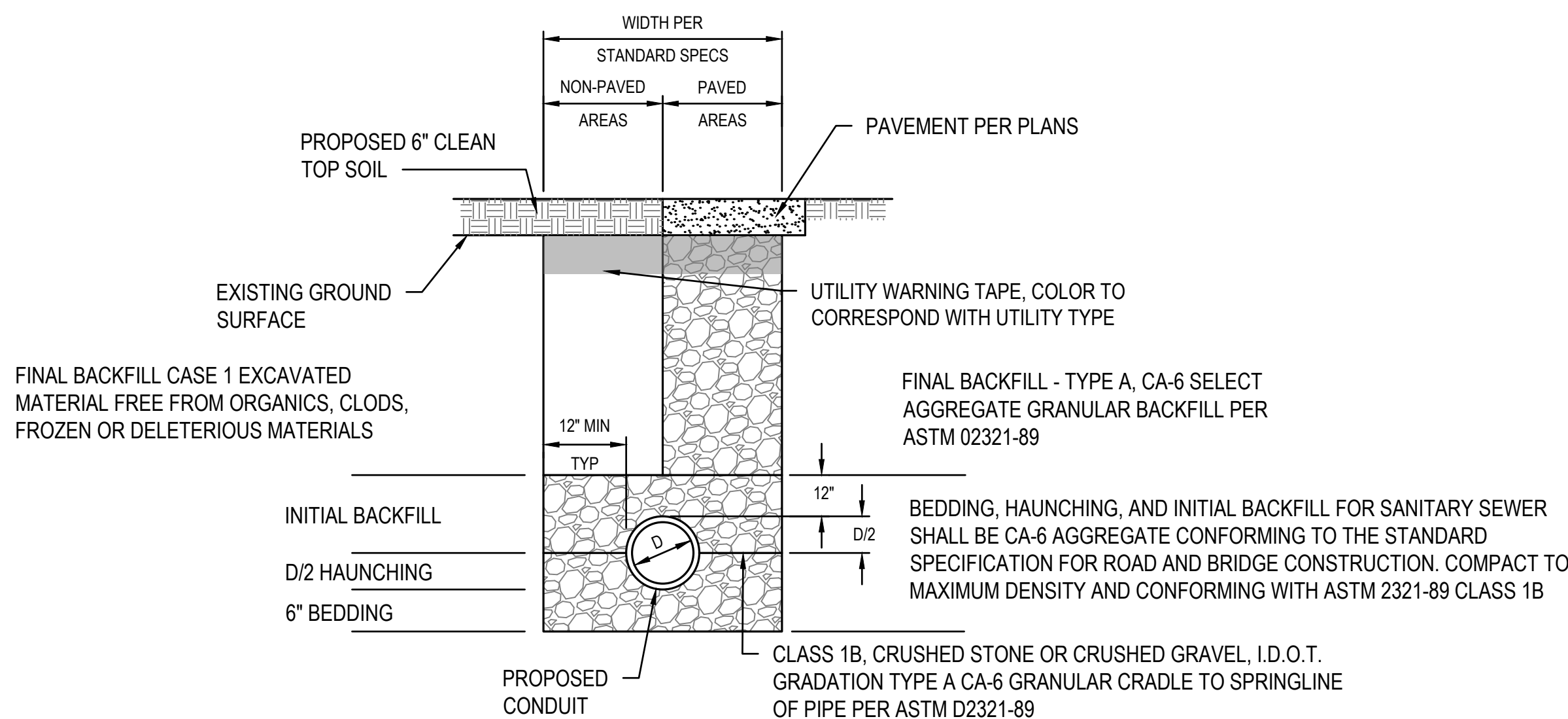
ELEVATION VIEW

SECTION VIEW

NOTES:

- WEIR EMBEDMENT SHALL BE AT LEAST 18".
- RIP RAP SHALL BE PLACED ON THE POND AND OUTFALL SIDES OF THE WEIR TO PREVENT EROSION.
- ELEVATIONS AND DIMENSIONS NOTED ARE REQUIRED TO CONTROL RUNOFF.

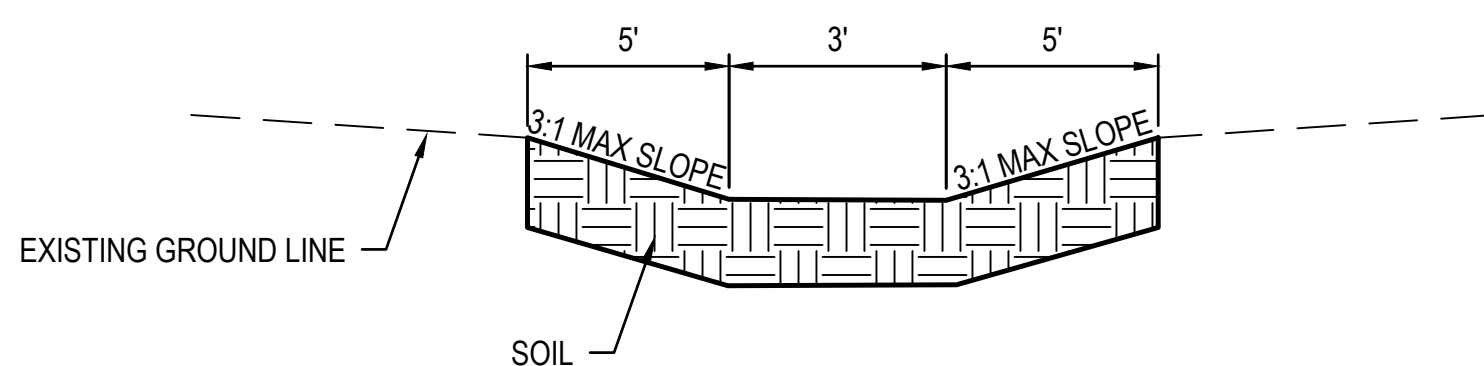
1 STM 4.0 BASIN OUTLET STRUCTURE DETAIL
C4.2 SCALE: NO SCALE



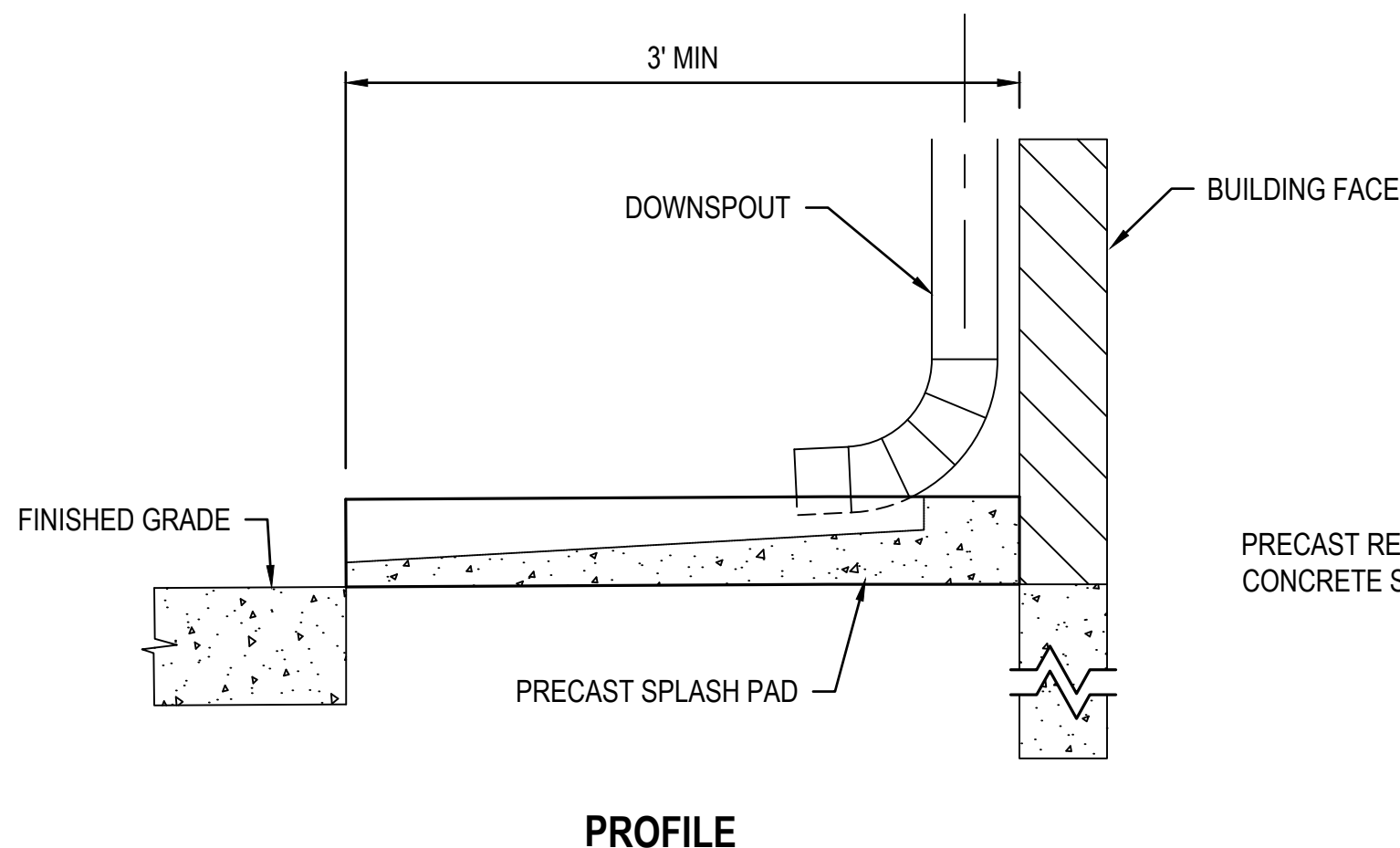
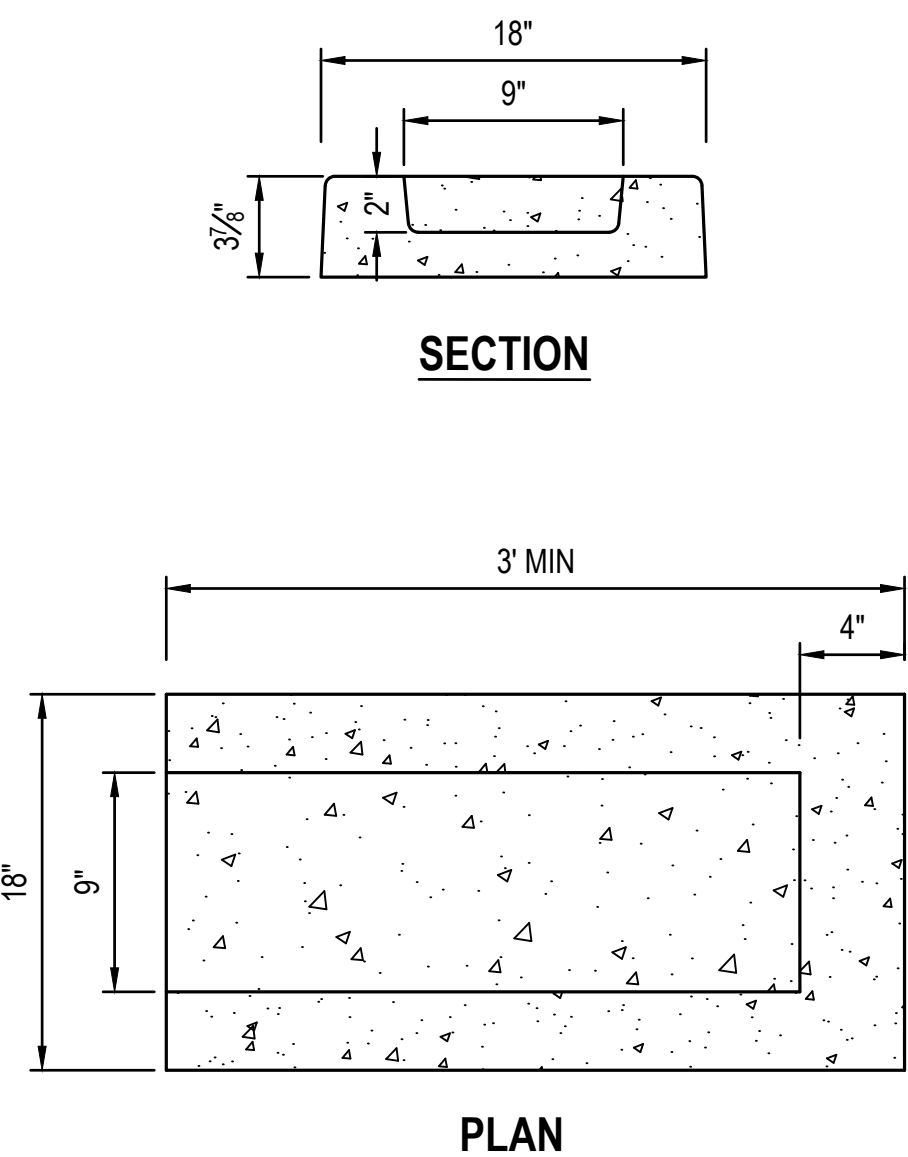
NOTES:

WATER MAIN BEDDING FOR CONDUITS SHALL CONFORM TO THE "ILLINOIS STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION " EIGHTH EDITION

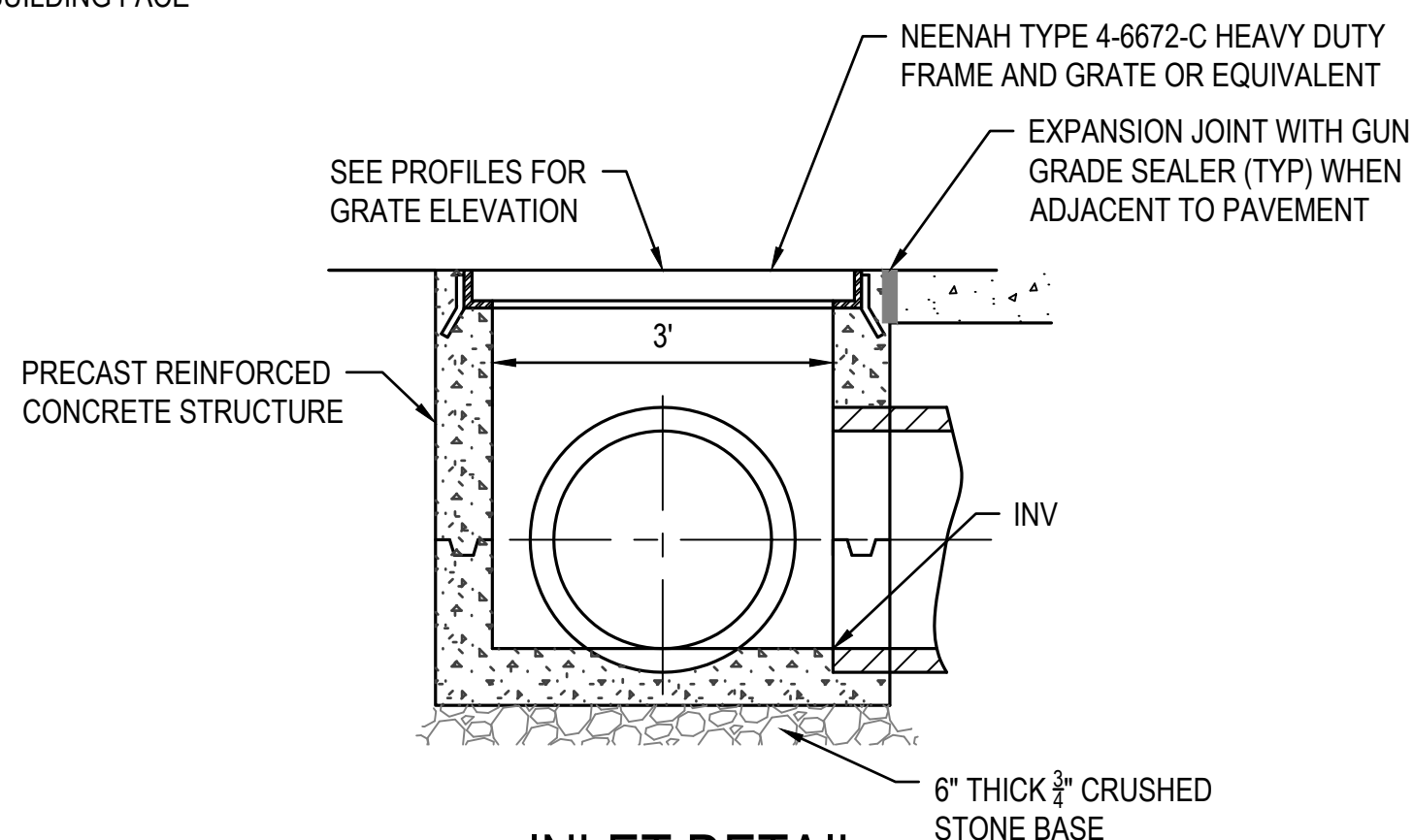
2 UTILITY INSTALLATION DETAIL
C4.2 SCALE: NO SCALE



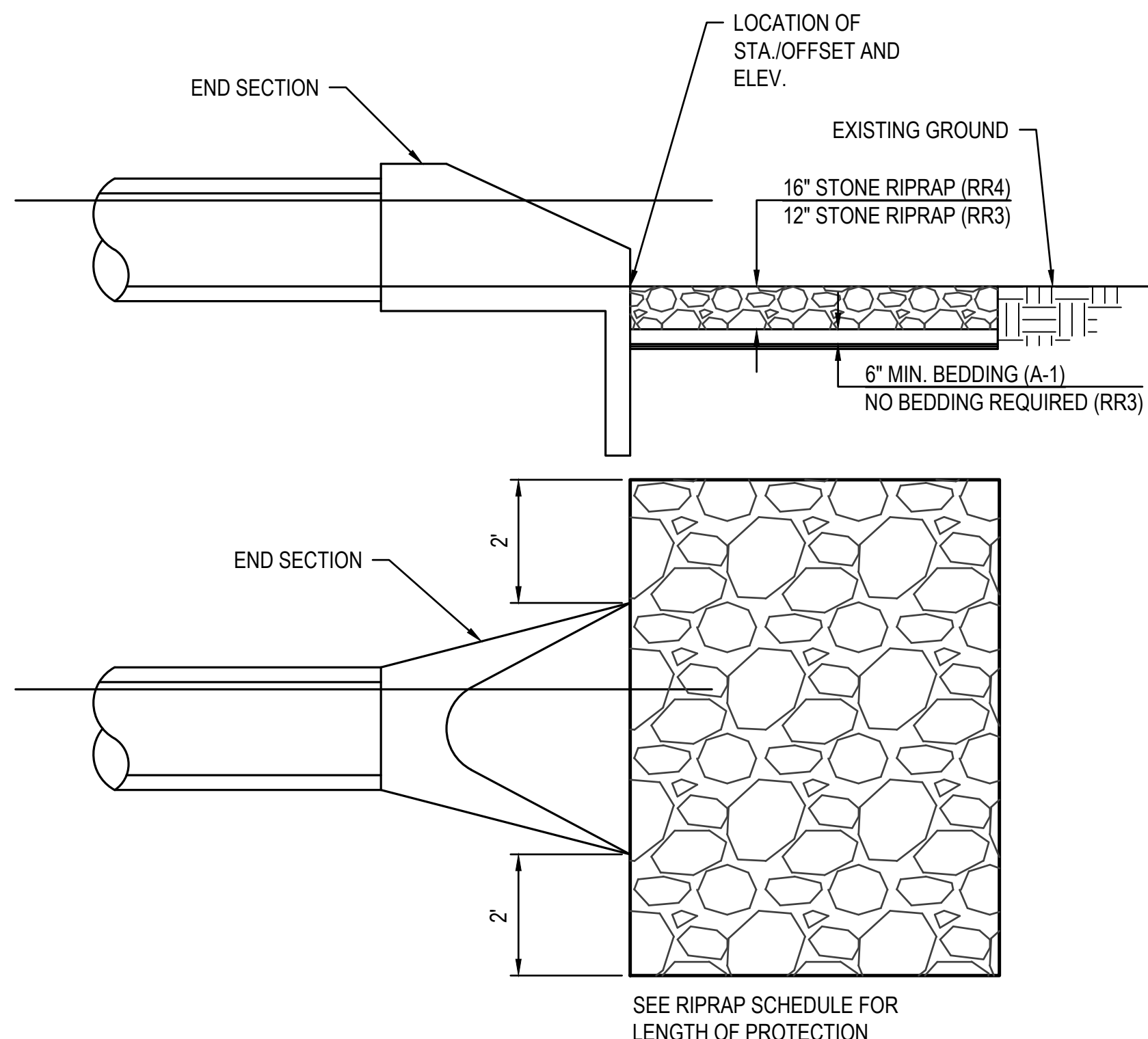
3 BYPASS SWALE DETAIL
C4.2 SCALE: NO SCALE



4 DOWNSPOUT PAD DETAIL
C4.2 SCALE: NO SCALE



5 INLET DETAIL
C4.2 SCALE: NO SCALE



6 TYPICAL RIP RAP DETAIL
C4.2 SCALE: NO SCALE

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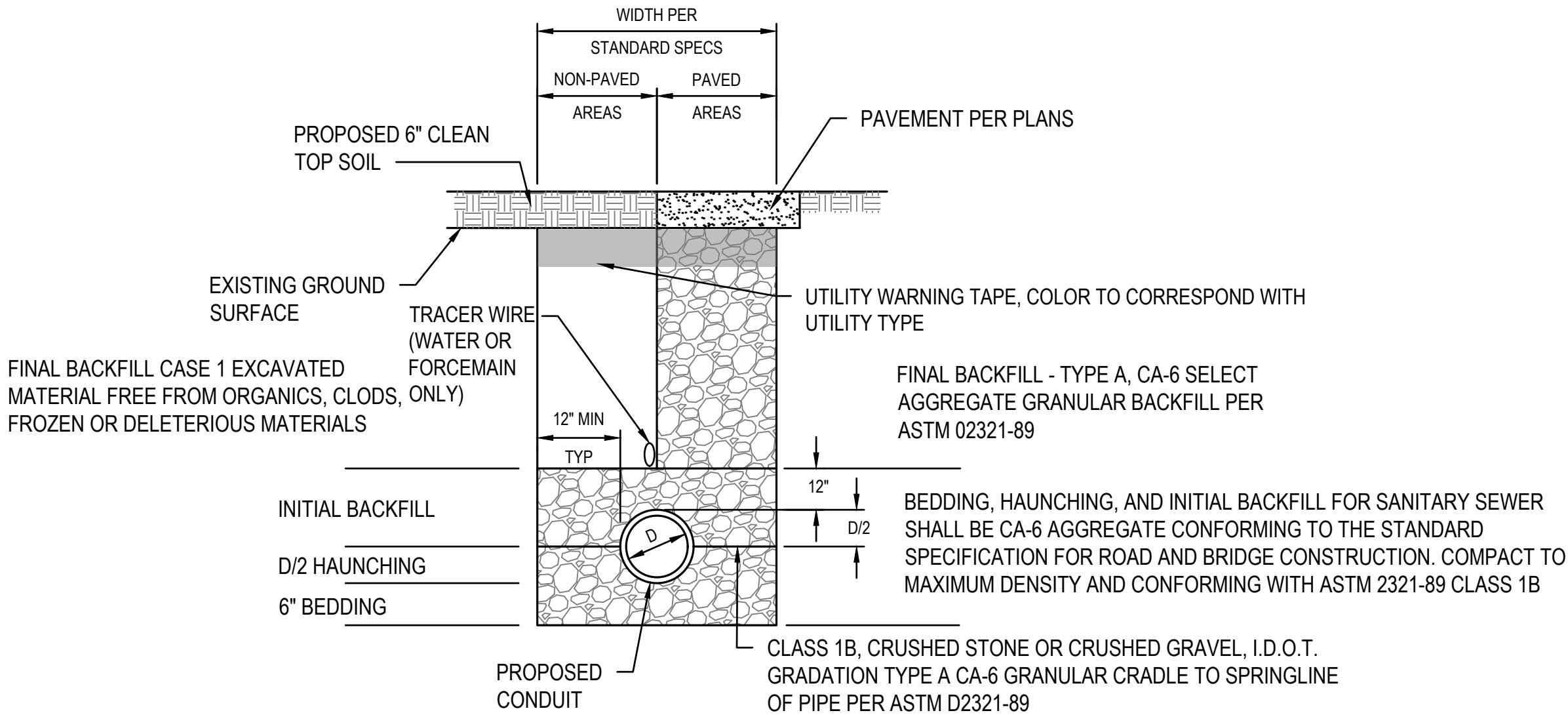
C4.2

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GRAVITY SANITARY SEWER SPECIFICATIONS

(These specifications supplement the project specifications)

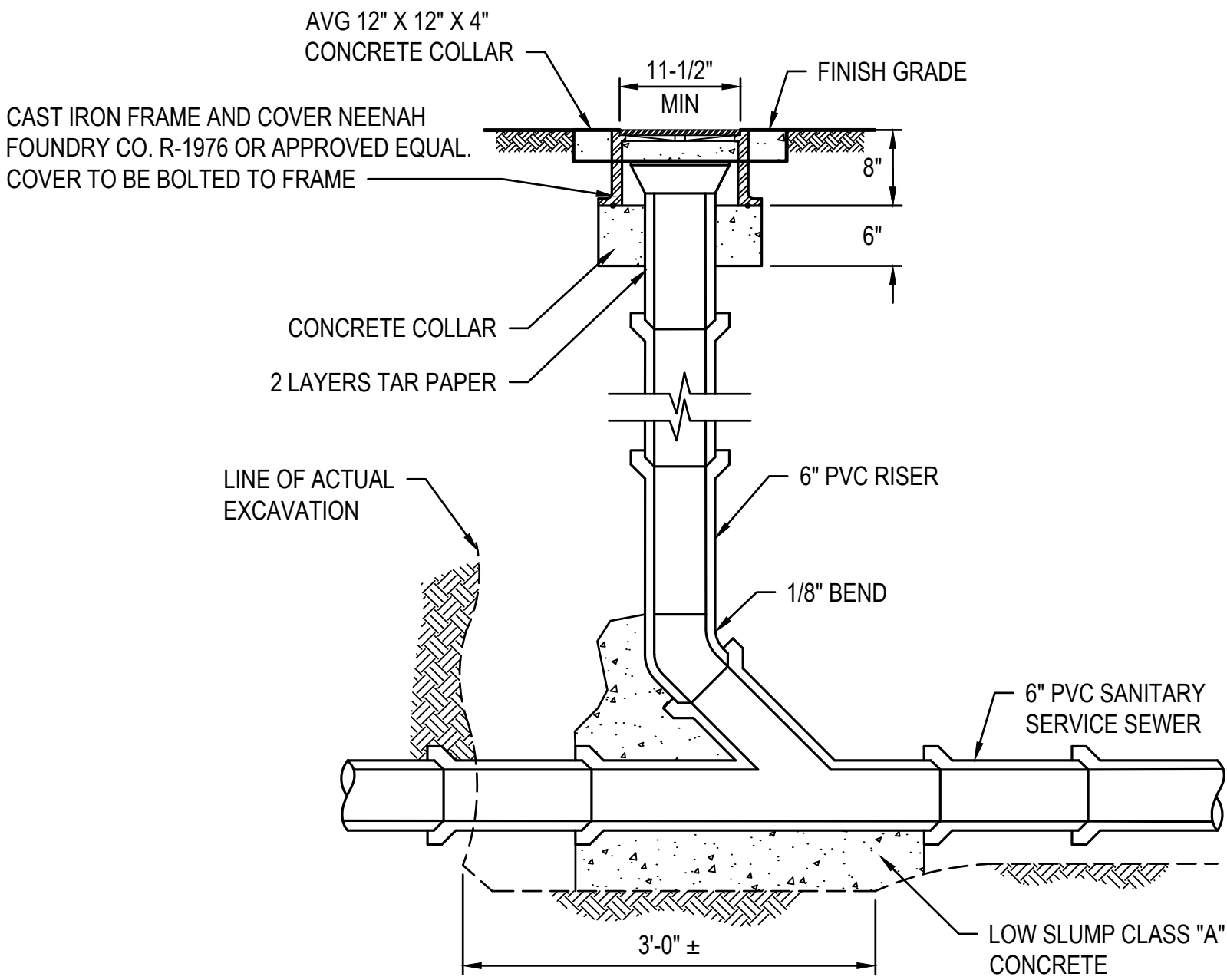
- ALL MATERIALS, INSTALLATION, AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS", THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH, THE ILLINOIS PLUMBING CODE, AND THE REQUIREMENTS OF THE CITY OF COLLINSVILLE.
- PRIOR TO COMMENCEMENT OF ANY WORK, THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE PLANS WITH THE ACTUAL DIMENSIONS AND CONDITIONS OF THE SITE. THE GENERAL CONTRACTOR MUST VERIFY THE ENGINEER'S LINES AND GRADES, INCLUDING VERIFYING THE INVERTS OR EXISTING MANHOLES PRIOR TO ORDERING STRUCTURES. IF A DISCREPANCY OCCURS FROM WHAT IS SHOWN ON THE PLANS, STANDARD SPECIFICATIONS, AND/OR DETAILS, THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE AFFECTED WORK. FAILING TO DO SO WILL BE CONSIDERED AS THE GENERAL CONTRACTOR HAVING PROCEEDED AT HIS OWN RISK AND EXPENSE.
- ALL SANITARY SEWER PIPES SHALL BE PVC SDR-35 (OR SDR-26 IF GREATER THAN 14 FEET DEEP) MEETING THE REQUIREMENTS OF ASTM D3034 WITH PIPE AND FITTINGS CONFORMING TO ASTM D3034 AND HAVING AN INTEGRAL BELL, GASKETED JOINT CONFORMING TO ASTM D3212.
- SANITARY SEWER INVERTS SHOWN ON THE PLANS HAVE BEEN CALCULATED TO THE CENTER OF THE STRUCTURE. THE SANITARY SEWER SLOPES SHOWN ON THE PLANS IS THE PERCENT GRADE FROM CENTER TO CENTER OF STRUCTURE. THE LENGTH OF SANITARY SEWERS SHOWN ON THE PLANS IS THE DISTANCE FROM CENTER TO CENTER OF STRUCTURE.
- BEDDING OF THE PIPE AND BACKFILL SHALL BE DONE IN ACCORDANCE WITH ASTM D2321 CLASS 1B, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" AND AS SHOWN IN THE PLANS. GRANULAR TRENCH BACKFILL SHALL BE USED AS INDICATED ON THE PLANS AND WHEN THE EDGE OF ANY TRENCH IS WITHIN 2 FT. OF ANY PAVEMENT, CURB, SIDEWALK, OR OTHER STRUCTURE. TRENCH BACKFILL SHALL BE COMPACTED WITH A ROLLER, VIBRATORY PLATE, OR OTHER COMPACTING DEVICE IN 12-INCH LIFTS.
- ALL GRAVITY SANITARY SEWER PIPES AND STRUCTURES SHALL BE TESTED IN ACCORDANCE WITH ARTICLE 31-1.13 METHOD A, EXFILTRATION OF AIR UNDER PRESSURE, AND METHOD D, DEFLECTION FOR FLEXIBLE THERMOPLASTIC PIPE, OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS". GRAVITY SEWER PIPES SHALL BE TELEVISION INSPECTED BY THE CITY OF COLLINSVILLE PRIOR TO THE WORK BEING ACCEPTED. CONTRACTOR SHALL REPAIR OR REPLACE ANY LINE OR STRUCTURE WHICH FAILS ANY OF THE REQUIRED TESTS, AND RETEST. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND THE CITY OF COLLINSVILLE. CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY OF COLLINSVILLE 48 HOURS IN ADVANCE OF ANY TESTING TO BE PERFORMED.
- A MINIMUM 10-FOOT HORIZONTAL AND 18-INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER AND SEWER MAINS IN ACCORDANCE WITH ARTICLE 41-2.01A AND 41-2.01B OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. WHERE PHYSICAL CONSTRAINTS PREVENT THIS REQUIREMENT FROM BEING MET, ALTERNATIVE METHODS FOR PREVENTING CROSS-CONTAMINATION BETWEEN THE SEWER AND WATER MAIN SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD DRAWINGS 18-24 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS", 8TH EDITION.
- PVC PIPE SHALL BE STORED UNDER COVER TO PROTECT FROM ULTRAVIOLET LIGHT.
- WHENEVER PIPE LAYING IS NOT ACTIVELY IN PROGRESS, OPEN ENDS OF ALL INSTALLED PIPE AND FITTINGS SHALL BE FITTED WITH A WATERTIGHT PLUG.
- PENETRATIONS ON ALL EXISTING MANHOLES SHALL BE CORE DRILLED. NO IMPACT DEVICES WILL BE ALLOWED FOR THE PURPOSE OF CONNECTING NEW SEWER MAINS TO EXISTING MANHOLES.
- ALL PENETRATIONS SHALL BE MADE WATERTIGHT BY THE USE OF NON-SHRINK GROUT / A-LOK® GASKETS, OR APPROVED EQUAL.
- SEE PLUMBING PLANS FOR CLEANOUT AND ACID NEUTRALIZATION BASIN LOCATIONS.
- ALL MANHOLES SHALL BE INSPECTED AND LEAKAGE TESTED FOR WATER TIGHTNESS IN ACCORDANCE WITH ASTM C 969-19 OR ASTM C 1244-20, PRIOR TO BEING PLACED INTO SERVICE.



NOTES:

WATER MAIN BEDDING FOR CONDUITS SHALL CONFORM TO THE "ILLINOIS STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION " EIGHTH EDITION

1 UTILITY INSTALLATION DETAIL
C4.3 SCALE: NO SCALE



2 CLEANOUT DETAIL
C4.3 SCALE: NO SCALE

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WATER MAIN SPECIFICATIONS

(These specifications supplement the project specifications)

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" 8TH EDITION, THESE PLANS, THE SPECIAL PROVISIONS, THE CONDITIONS OF THE I.E.P.A. PERMIT, THE CITY OF COLLINSVILLE "INFRASTRUCTURE DESIGN MANUAL", AND THE CITY OF COLLINSVILLE SUBDIVISION ORDINANCE.
- ALL WATER MAIN SHALL COMPLY WITH THE SPECIFICATIONS AS OUTLINED IN SECTION 40 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS", 8TH EDITION OR MOST CURRENT. COMMON WATER SERVICE FOR DOMESTIC WATER AND FIRE SUPPRESSION SHALL COMPLY WITH THE ILLINOIS PLUMBING CODE AND NFPA 24. WHEN IN CONFLICT THE STRICTER CODE SHALL GOVERN. WATER SERVICE SHALL BE PVC CONFORMING TO AWWA C900. FITTINGS SHALL BE PVC CONFORMING TO AWWA C900 OR DUCTILE IRON CONFORMING TO AWWA C110. JOINTS SHALL BE MECHANICAL RESTRAINED JOINTS.
- PRIOR TO COMMENCEMENT OF ANY WORK, THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE PLANS WITH THE ACTUAL DIMENSIONS AND CONDITIONS OF THE SITE. THE GENERAL CONTRACTOR MUST VERIFY THE ENGINEER'S LINES AND GRADES. IF A DISCREPANCY OCCURS FROM WHAT IS SHOWN ON THE PLANS, STANDARD SPECIFICATIONS, AND/OR DETAILS, THE GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE AFFECTED WORK. FAILING TO DO SO WILL BE CONSIDERED AS THE GENERAL CONTRACTOR HAVING PROCEEDED AT HIS/HER OWN RISK AND EXPENSE.
- ALL WATER MAIN AND WATER SERVICE WORK SHALL BE COORDINATED WITH THE PUBLIC WORKS DIRECTOR OF THE CITY OF COLLINSVILLE.
- ALL HYDRANTS SHALL BE 5-1/4" BARREL, 3-WAY MUELLER CENTURION MODEL A-423 OR KENNEDY GUARDIAN. A HYDRANT ASSEMBLY SHALL CONSIST OF A 6" RESILIENT WEDGE GATE VALVE ANCHORED TO THE HYDRANT BY USE OF AN ANCHORING COUPLING OR RESTRAINT JOINT GLANDS IN ACCORDANCEWITH AWWA AND IEPA GUIDELINES. USE OF RODS IS PROHIBITED. ASSEMBLY SHALL INCLUDE VALVE BOX.
- ALL HYDRANTS TO BE INSTALLED/ADJUSTED STRAIGHT (PLUMB) AND AT THE PROPER FINISHED GRADE PER MANUFACTURER'S SPECIFICATIONS.
- ALL VALVES SHALL BE LEFT OPEN, RESILIENT WEDGE GATE VALVES WITH INTEGRAL STAINLESS-STEEL NUTS AND BOLTS (BONNET AND PACKING BOLTS).
- ALL TAPPING SLEEVES SHALL BE STAINLESS STEEL SLEEVES WITH DUCTILE IRON FLANGE, ROMAC INDUSTRIES MODEL SST OR EQUAL. FLANGE BOLTS AND NUTS TO BE 316 STAINLESS STEEL.
- ALL WATER MAINS SHALL BE INSTALLED WITH TRACER WIRE PLACED ADJACENT TO THE PIPE.
- ALL WATER MAIN FITTINGS TO BE MECHANICAL JOINT AWWA C153 COMPACT DUCTILE IRON.
- TRACER WIRE TO BE COPPERHEAD #12 CCS HIGH STRENGTH, SOFT DRAWN 380# OR EQUAL, SHALL BE INSTALLED ADJACENT TO ALL WATERLINES AND CONNECTED TO HYDRANTS AND VALVES. WIRE TO BE PLACED OUTSIDE OF VALVE BOX AND THREADED THRU A PENETRATION AT 8" BELOW TOP OF BOX. ALL SPLICES SHALL BE SOLDERED AND MADE WATERTIGHT BY USE OF SILICONE FILLED WIRE NUTS.
- ALL THRUST BLOCKING SHALL BE WITH POURED CONCRETE BLOCKS AGAINST UNDISTURBED VERTICAL EARTH FACE.
- THE WATER MAIN SERVING THE FIRE SPRINKLER SYSTEM TO BE FLUSHED AT A RATE APPROPRIATE TO ITS SIZE, PRIOR TO CONNECTION TO THE SYSTEM. NOTIFY THE LOCAL AUTHORITY TWENTY-FOUR HOURS (24) IN ADVANCE OF THE FLUSHING TO WITNESS.
- DETAILED "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE CITY UPON COMPLETION OF THE PROJECT.
- ALL EXISTING FIRE HYDRANTS, METER LIDS AND FRAMES SHALL REMAIN THE PROPERTY OF THE CITY.
- ALL WATER MAINS AND SERVICES SHALL BE INSTALLED BY A STATE OF ILLINOIS LICENSED PLUMBER.
- CONTRACTOR SHALL NOTIFY THE COLLINSVILLE FIRE DEPARTMENT 48 HOURS PRIOR TO STARTING WORK.

THE FOLLOWING INSPECTIONS AND TESTING SHALL OCCUR FOR THE UNDERGROUND PIPING. THE LOCAL OFFICIAL SHALL HAVE A MINIMUM OF FORTY-EIGHT (48) HOUR NOTICE OF THE TEST. THEY SHALL INCLUDE BUT ARE NOT LIMITED TO:

- UNDERGROUND PIPING, THRUST BLOCKS, AND RESTRAINTS SHALL BE VISUAL INSPECTED PRIOR TO BEING COVERED. THE LOCAL AUTHORITY HAVING JURISDICTION SHALL BE CONSULTED ON WHAT RELEVANT DEPARTMENT SHALL COMPLETE THE INSPECTION. A COPY OF THE INSPECTION SHALL BE PROVIDED TO THE LOCAL FIRE OFFICIAL PRIOR TO THE FLUSHING AND HYDROSTATIC TEST.
- UNDERGROUND FLUSHING TO BE COMPLETED PRIOR TO THE FIRE SERVICE MAIN BEFORE THE BACKFLOW ASSEMBLY IS INSTALLED AND PUT INTO SERVICE. THE UNDERGROUND PIPING FLUSHING FLOW RATE SHALL BE NOT LESS THAN ONE OF THE OPTIONS LISTED IN NFPA 24. A COPY OF THE TESTING DOCUMENTS IS TO BE PRESENTED TO THE LOCAL FIRE OFFICIAL AT THE COMPLETION OF THE TEST.
- UNDERGROUND HYDROSTATIC TO BE COMPLETED PRIOR TO THE FIRE SERVICE MAIN FROM BEING COVERED. THE PIPING SHALL BE HYDROSTATICALLY TESTED AT TWO HUNDRED PSI (200) AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR TWO (2) HOURS.

- ALL WORK SHALL BE INSPECTED BY WATER DEPARTMENT STAFF PRIOR TO BACKFILLING.
- ALL WATER METER LIDS AND VALVE BOXES SHALL BE ADJUSTED TO THE PROPER FINISH GRADE.
- CONTRACTOR SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE CITY OF COLLINSVILLE.
- THRUST BLOCK SIZING AND RESTRAINT LENGTHS ARE REQUIRED TO BE SIZED BY THE CONTRACTOR BASED ON THE CALCULATED THRUST FORCES AND SUBMITTED TO THE ENGINEER. CONCRETE FOR ANY REQUIRED THRUST BLOCK SHALL BE NO LEANER THAN ONE (1) PART CEMENT, TWO AND ONE-HALF (2-1/2) PARTS SAND, AND FIVE (5) PARTS STONE.

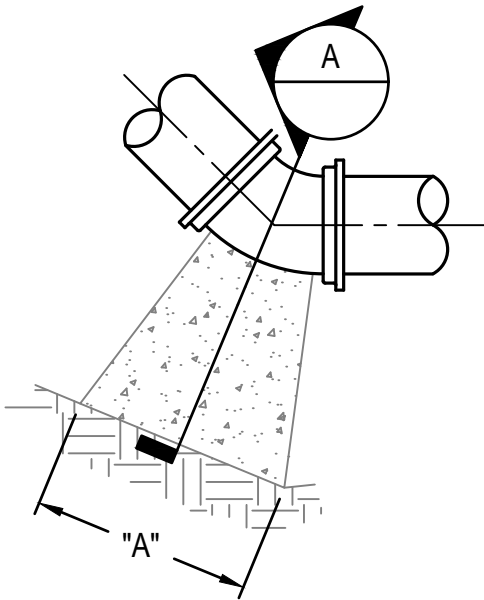
THRUST BLOCK SIZING TABLE & NOTES:

- COVER OVER TOP OF PIPE SHALL BE BELOW FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT, INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON SAID PLANS.
- THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
- NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES,.
- THRUST BLOCKING MUST FIT IN EASEMENT, IN SOME CASES ADDITIONAL RESTRAINT MAY BE REQUIRED.
- BASED ON 200 PSI (150 PSI STATIC PRESSURE PLUS 50 PSI WATER HAMMER) AND 1000 PSF SOIL BEARING.
- POLYETHYLENE ENCASEMENT ON ALL D.I. PIPE AND FITTINGS.
- PIPE JOINTS AND BOLTS MUST BE ACCESSIBLE.
- ALLOW SUFFICIENT CLEARANCE BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
- ALL ANCHOR BOLTS SHALL BE COR-BLUE, MINIMUM 1/2" DIAMETER. COAT EXPOSED ROD WITH ASPHALT CEMENT AFTER CONCRETE HAS SET.
- ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL HAVE THE FASTENER AREAS FELT WRAPPED AND TAPED PRIOR TO THE CONCRETE POUR TO ALLOW FUTURE ACCESS TO THE FASTENERS AT THE JOINTS.
- THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
- PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
- FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
- FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.
- PER NFPA 24 THRUST BLOCKS ARE REQUIRED TO BE SIZED BASED ON CALCULATED THRUST FORCES. CONTRACTOR SHALL PROVIDE CALCULATIONS TO VERIFY BLOCK SIZING WHEN NFPA 24 IS APPLICABLE.

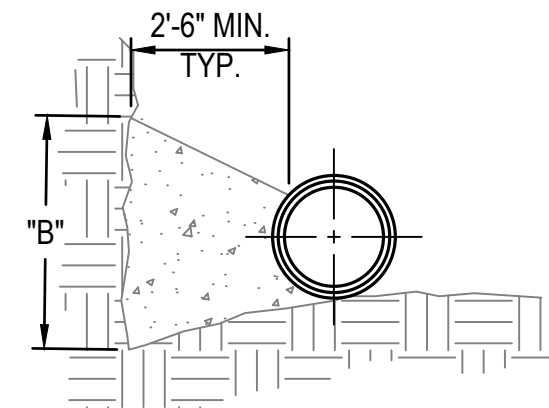
REQUIRED BEARING AREA ON UNDISTURBED SOIL AND TYPICAL DIMENSIONS

PIPE SIZE	90° BENDS			45° BENDS			22.50° BENDS			11.25° BENDS			TEES/PLUGS		
	AREA (SF)	"A" (in.)	"B" (in.)	AREA (SF)	"A" (in.)	"B" (in.)	AREA (SF)	"A" (in.)	"B" (in.)	AREA (SF)	"A" (in.)	"B" (in.)	AREA (SF)	"A" (in.)	"B" (in.)
6"	12.0	48	36	6.5	39	24	3.3	27	18	1.7	20	12	8.5	41	30
8"	21.3	64	48	11.5	56	30	5.9	36	24	3.0	24	18	15.1	61	36
10"	33.3	89	54	18.0	73	36	9.2	45	30	4.6	28	24	23.6	81	42
12"	48.0	116	60	26.0	89	42	13.2	53	36	6.6	32	30	33.9	91	54
14"	65.3	112	84	35.3	85	60	18.0	62	42	9.0	37	36	46.2	101	66
16"	85.3	128	96	46.1	101	66	23.5	71	48	11.8	48	36	60.3	121	72

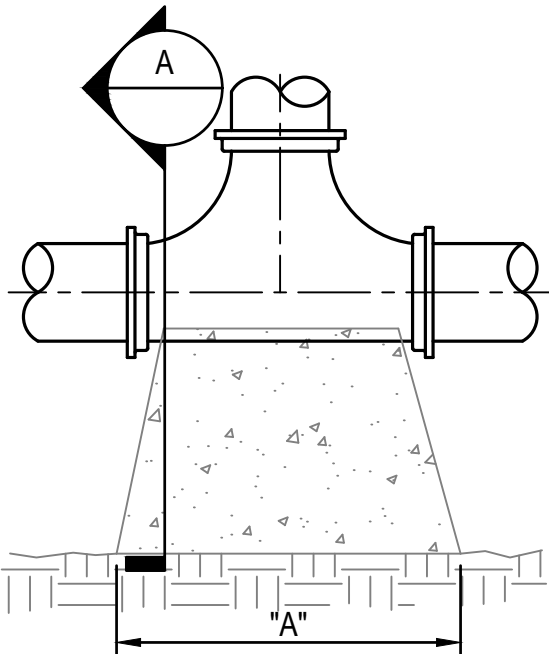
- AREA IN SQUARE FEET. "A" & "B" IN INCHES
- BEARING TABLE AREA BASED ON 200 PSI MINIMUM WITH SOIL BEARING CAPACITY OF 1000 LBS/SQUARE FOOT
- FOR HIGHER WATER PRESSURES OR LOWER SOIL PRESSURES, CONSULT ENGINEER FOR ADJUSTMENTS
- BEARING TABLE AREA INCLUDES FACTOR OF SAFETY OF 1.50
- ADDITIONAL FACTOR OF SAFETY AND BEARING AREA MAY BE REQUIRED AS DIRECTED BY THE ENGINEER



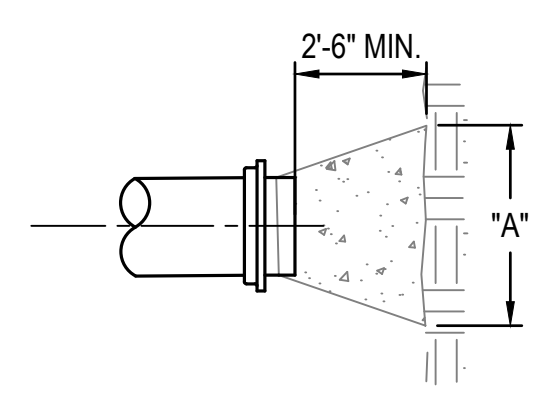
BENDS



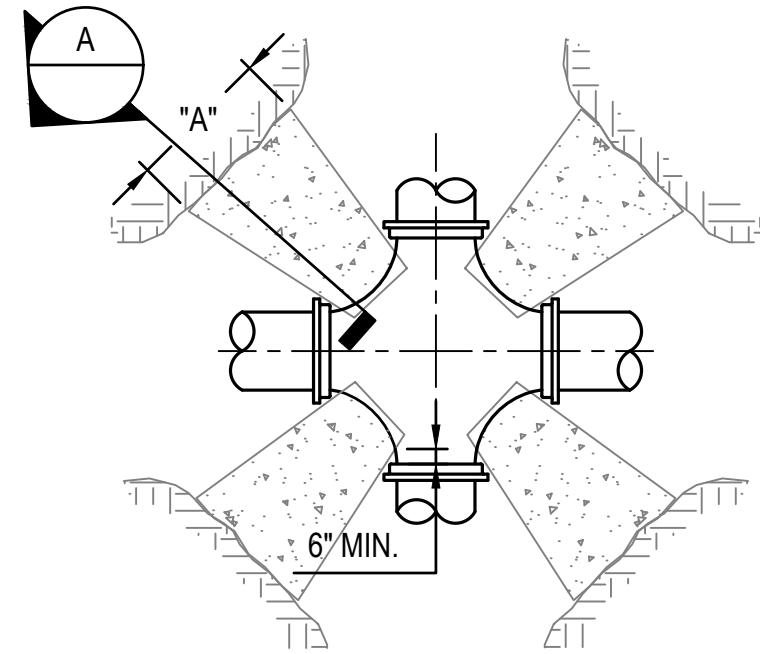
SECTION - A-A



TEES



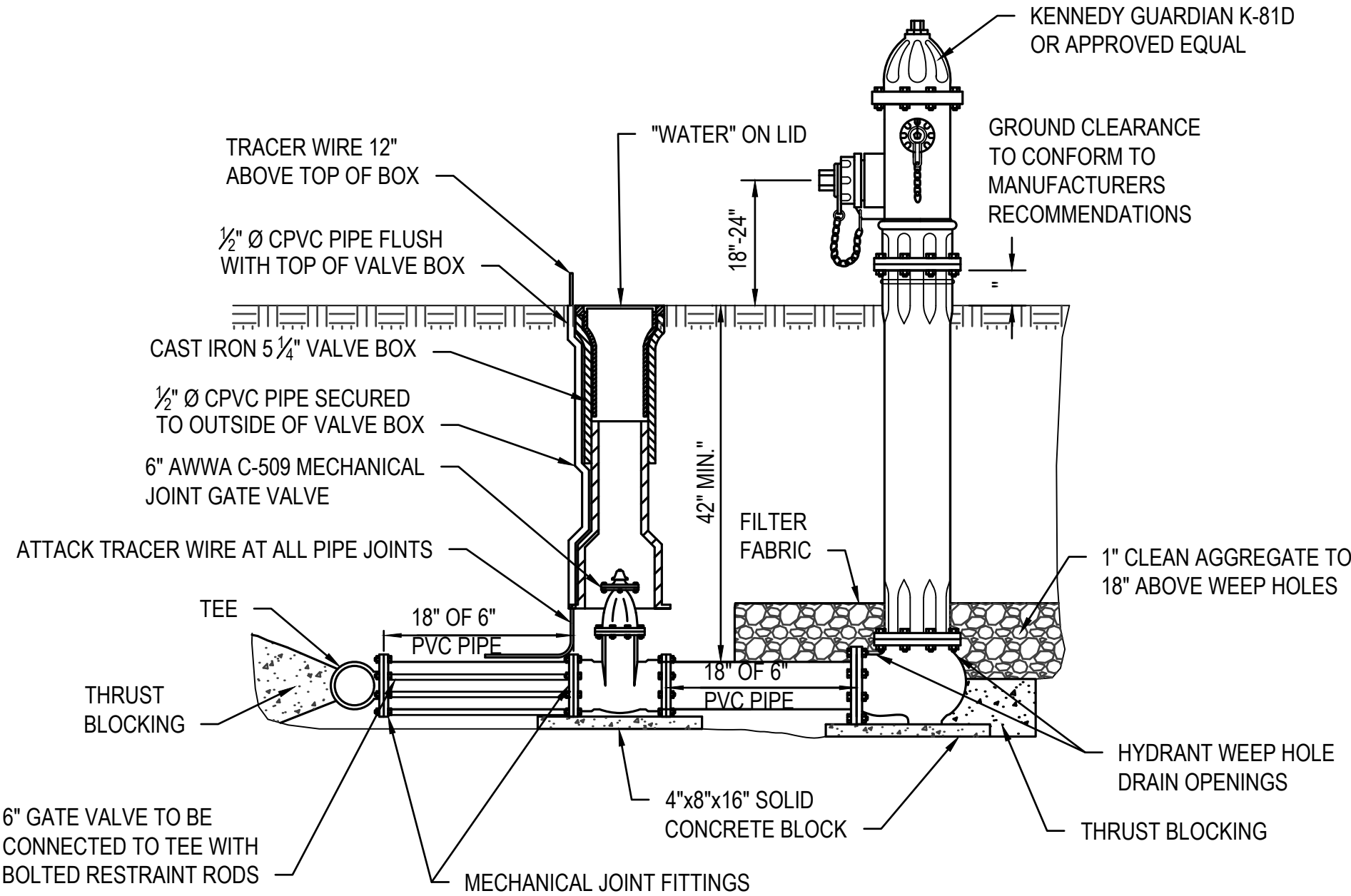
PLUGS



CROSSES

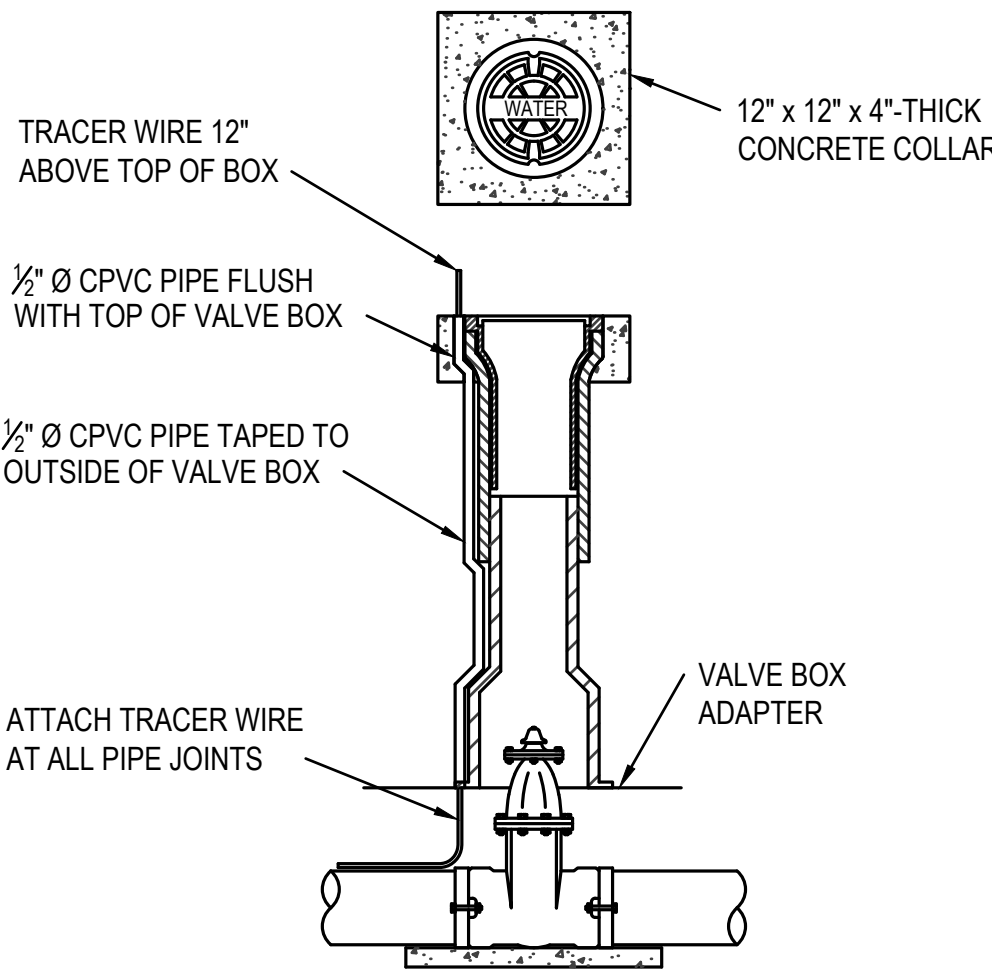
BENDS, TEES & CROSSES

SCALE: NOT TO SCALE



FIRE HYDRANT & VALVE (SPECIAL)

SCALE: NO SCALE



GATE VALVE INSTALLATION DETAIL

SCALE: NO SCALE

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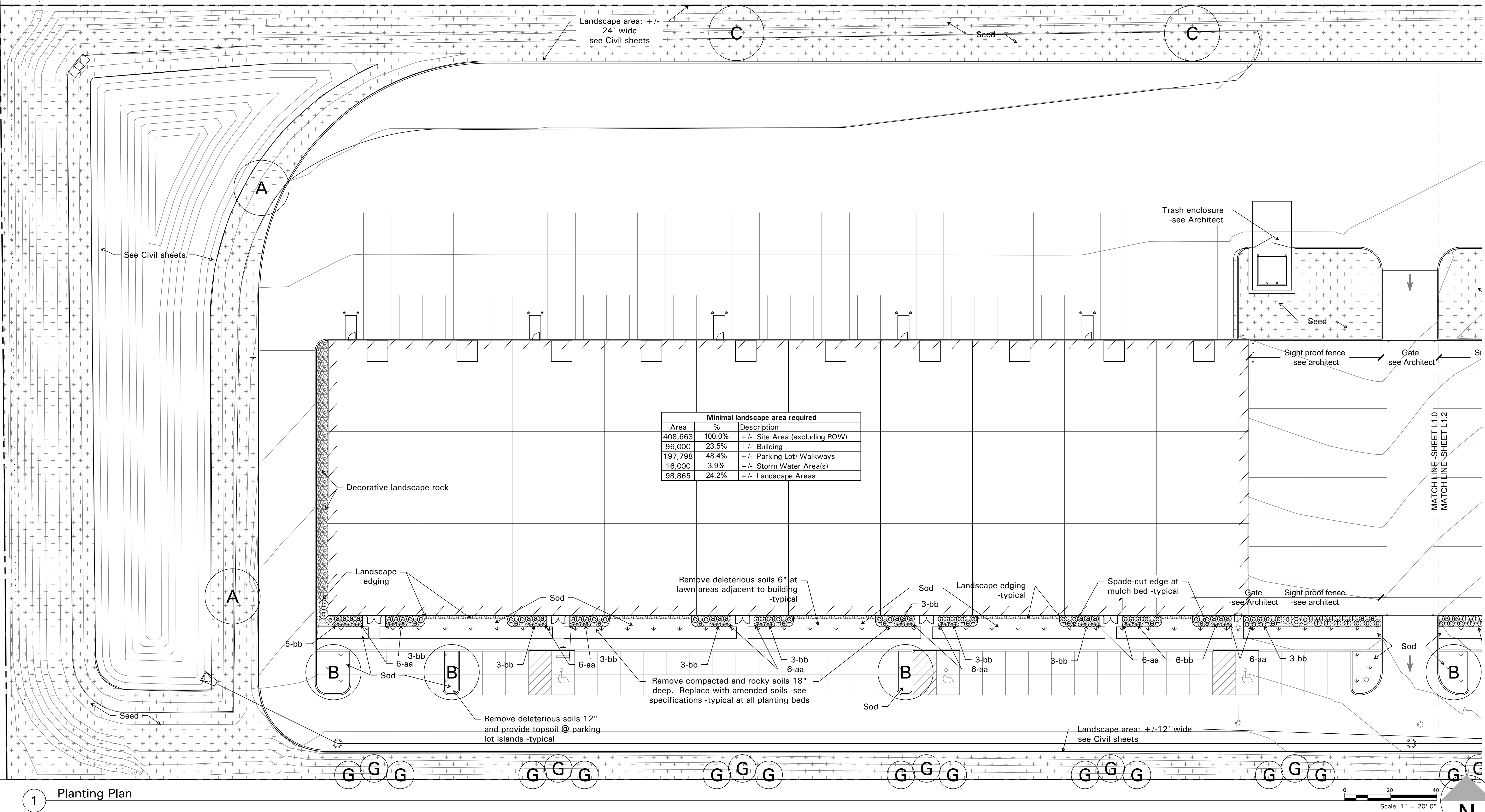
C4.4

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Surveyor/ Civil Engineer:
Oats & Associates, Inc
100 Lanter Court, Suite 1
Collinsville, IL, 62234

Architect:
UHLIG Architecture, Inc.
12473 Robyn Rd.
St. Louis, MO 63127



1 Planting Plan

Sec. 17.080.050 Tree Preservation

Proposed site is an existing agricultural field and does not have existing trees.

Sec. 17.080.090. Landscape credit.

No credits are requested

Sec. 17.080.100. Landscape guidelines

See Plan

Sec. 17.080.120. Commercial landscaping standards

A. Plan prepared by Illinois Registered Landscape

B. n/a

C. Additional Information

- 1 Site Plan provided
- 2 See Civil Site Plan for impervious calculations
- 3 See tabulation as part of Sec. 17.080.120
- 4 See Plan and planting Schedule
- 5 All proposed landscape materials are native and/or drought tolerant. Proposed inground automatic irrigation system shown on sheets L2.0 and L2.1
- 6 No trees existing trees found on site
- 7 No trees existing trees found on site

Sec. 17.080.050. Tree preservation.

n/a

Sec. 17.080.060. Tree protection during construction

n/a

Sec. 17.080.070. Tree replacement or mitigation.

n/a

Sec. 17.080.080. Plant material and standards

- A. All proposed plants are not found on undesirable tree list and are native and hardy to areas
- B. See Landscape Planting Schedule this sheet
- C. See plan
- E. All plants are longed lived
- G. Majority of plants are native to area
- H. Roses are set away from pedestrian areas
- I. Groundcover/ Lawns

- 1 All landscape will contribute to erosion control
- 2 All lawn areas will be seeded -see Civil for erosion control
- 3 No groundcover is proposed
- 4 No low growing evergreen plants are proposed

Sec. 17.080.090. Landscape credit.

No landscape credit is requested

Sec. 17.080.100. Landscape guidelines.

See Plan

Sec. 17.080.120. Commercial landscaping standards

A. Required quantity of Plant Materials		Notes/ Comments		Percent of points
Description	sf			
Site Area	417,620	835	Landscape Points Required	
	500			
B. Quantity of Required Materials		Points	Proposed quantity	Proposed Points
Native Shade Trees		4.0	23	92
Native Evergreen Trees		3.0	44	132
Native Ornamental and Intermediate Trees		2.0	8	16
Native Shrubs		2.0	37	74
Native Ornamental Grasses, Sedges, Rushes (per two plants)		1.0	106	212
Native Forbs and Wildflowers		2.0	134	268
			Total Points Provided:	866
			Required Points	835
			Difference	31

A minimum of twenty (20) percent of required points shall come from ornamental grasses, sedges, rushes, or shrubs.

A minimum of five (5) percent of required points shall come from perennials, annuals, bulb, forbs, and wildflowers that provide variation in color. Short lived materials, such as annual flowers may be used to accent or supplement the basic permanent landscape plan.

If applicable, ten (10) percent of total required points shall be utilized for BMPs in stormwater management or 83.5 points required

Native Shade Trees	4.0	5	20
Native Evergreen Trees	3.0	8	24
Native Ornamental and Intermediate Trees	2.0	8	16
Native Shrubs	2.0	12	24
		Total Points Provided:	84

No more than fifteen (15) percent of required points shall come from stormwater retention/detention facilities.

A minimum of fifty (50) percent of shade trees shall be located in parking lot islands or along the parking lot perimeter.

Perennials, bulbs, annuals, and flowers shall be planted at a minimum of seventy-eight (78) percent per fifty (50) square feet, at twelve (12) inches on center.

Existing landscaping that is in a vigorous growing condition and meets the intent of this section may count toward meeting the point requirements upon approval of the City.

Sec. 17.080.130. Parking lot requirements

Landscape island are single islands and greater than 250 sq. ft. with shade tree and lawn

Any single parking rows does not exceed 20 spaces

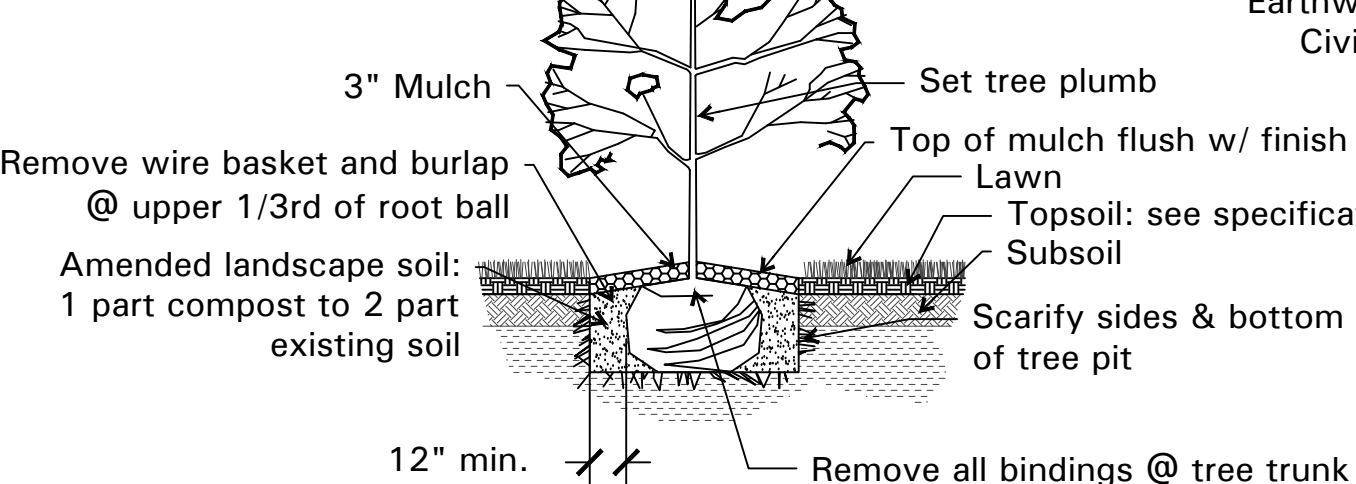
Sec. 17.080.140. Transition buffers: when required

No transition buffer required

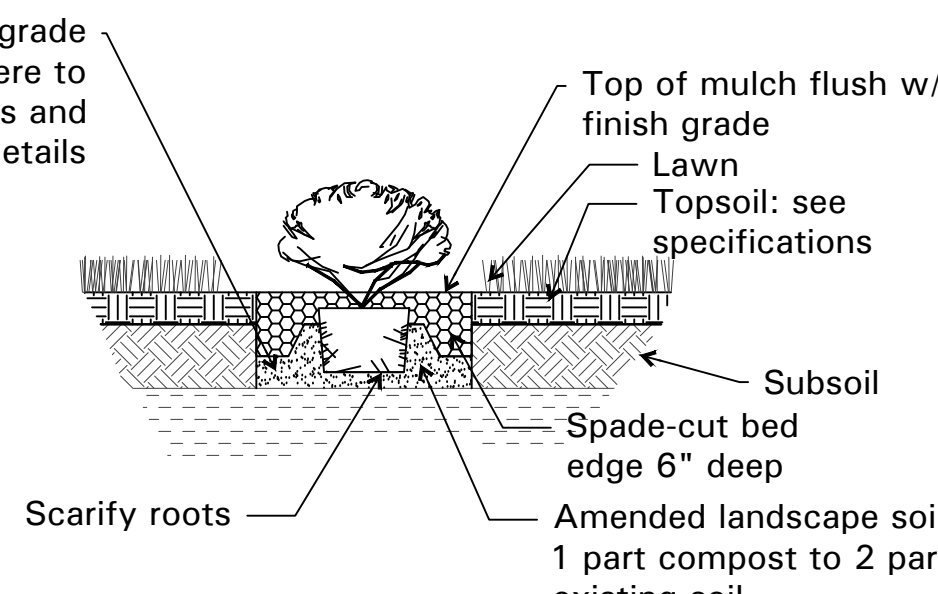
Landscape Schedule					
Key	Qty.	Common Name	Botanical Name	Size	Comment
A	5	Red Maple	Acer rubrum 'Franksred'	2.5" Cal.	B&B Native Cultivar Shade Tree
B	11	Elm	Ulmus americana 'Princeton'	2.5" Cal.	B&B Native Cultivar Shade Tree
C	7	Red Oak	Quercus rubra	2.5" Cal.	B&B Native Shade Tree
D	3	Redbud	Cercis canadensis 'Appalachian Red'	2" Cal.	B&B Native Cultivar Ornamental Tree
E	2	White Redbud	Cercis canadensis 'Royal White'	2" Cal.	B&B Native Cultivar Ornamental Tree
F	3	Upright Oak	Quercus robur 'Fastigiata'	2" Cal.	B&B Native Cultivar Ornamental Tree
G	36	Beld Cypress	Taxodium distichum var. distichum	6' Tall	B&B Native Cultivar Evergreen Tree
H	8	Juniper Tree	Juniperus virginiana 'Canaertii'	6' Tall	B&B Native Cultivar Evergreen Tree
a	67	Boxwood	Buxus sinica var. insularis 'Winter Gem'	18-24"	5 Gal. Evergreen Shrub
b	5	Ground Cover Juniper	J. x procumbens 'Greenmound'	18-24"	5 Gal. Evergreen Shrub
c	25	Nine Bark	Physocarpus opulifolius 'Amber Jubilee'	18-24"	5 Gal. Native Cultivar Shrub
d	12	Climbing Hydrangea	Hydrangea anomala petiolaris	18-24"	5 Gal. Native Cultivar Shrub
e	73	Little Blue Stem	Schizachyrium scoparium 'Standing Ovation'	18-24"	5 Gal. Native Cultivar Grass
f	33	Muhly Grass	Muhlenbergia reverchonii 'Undaunted'	18-24"	5 Gal. Native Cultivar Grass
aa	66	Purple Cone Flower	Echinacea 'Wild Berry'	1 Gal.	Native Cultivar Forb
bb	68	Shasta Daisy	Leucanthemum superbum 'Whoops-a-Daisy'	1 Gal.	Native Cultivar Forb
9,100 +/- Sq. Ft. Fescue Sod					
88,250 +/- Sq. Ft. Fescue Seed Mix with 10% Annual Rye, provide straw blanket					
2,800 +/- Sq. Ft. Double Ground Bark Mulch					
1,200 +/- Sq. Ft. 3-4" deep Slate Chips (large) with weed fabric -provide sample to owner for approval					
590 +/- Lin. Ft. EDG-KING by Ola-Ola (install per manufacturer recommendations)					
+/- Sq. Ft. Irrigation					

NOTE:

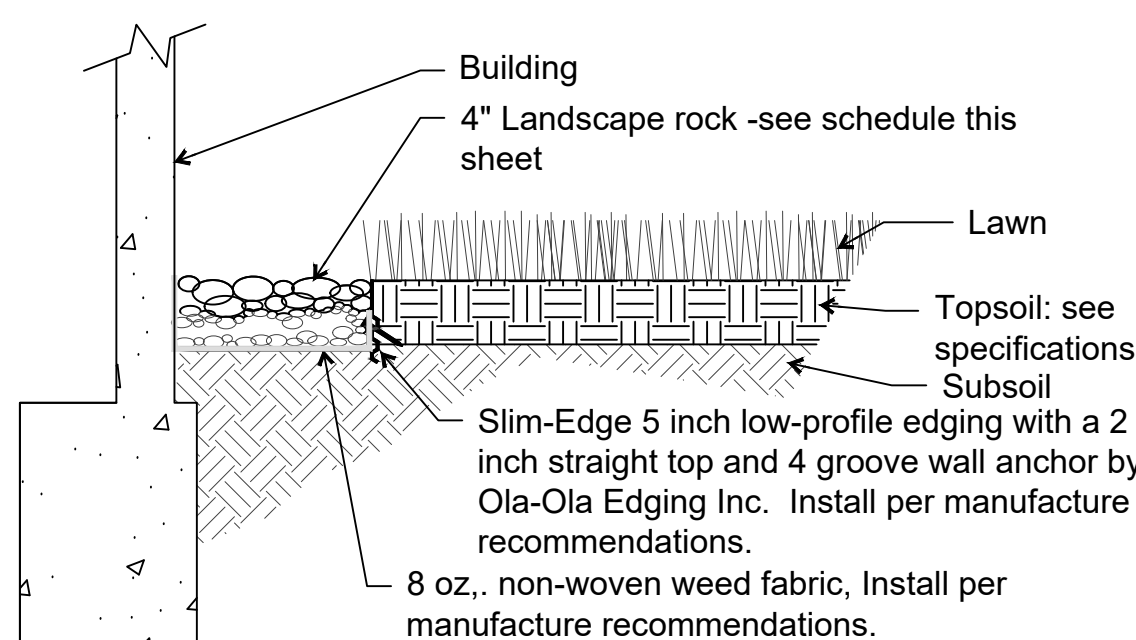
Ensure vegetation, or trees, when they overhang the circulation route, are 80" above the walking surface per 86 ANSI 4.4.1



SHADE TREE PLANTING DETAIL



SHRUB PLANTING DETAIL



MAINTENANCE STRIP AT BUILDING WITH WEED FABRIC AND EDGING

LANDSCAPE PLAN NOTES:

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10. All planting and sod areas to be irrigated by an automated irrigation system. See sheets L2.0 and L2.1 for irrigated areas.
11. See all specifications for full requirements.
12. Plan(s) do not constitute contractor means and methods. Job site safety and project coordination is responsibility of contractor(s).

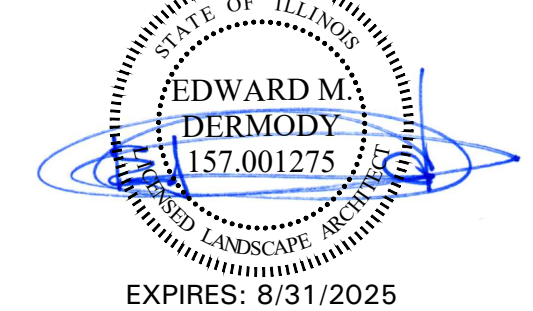
Landscape Development Plan for:
McDonough Horseshoe Service Center
Collinsville, IL

Drawing prepared for:
Oates Associates, Inc
100 Lanter Court, Suite 1
Collinsville, IL, 62234

Revisions:

No.	Description	Date:
1	City Comment	3/26/25

3/26/25



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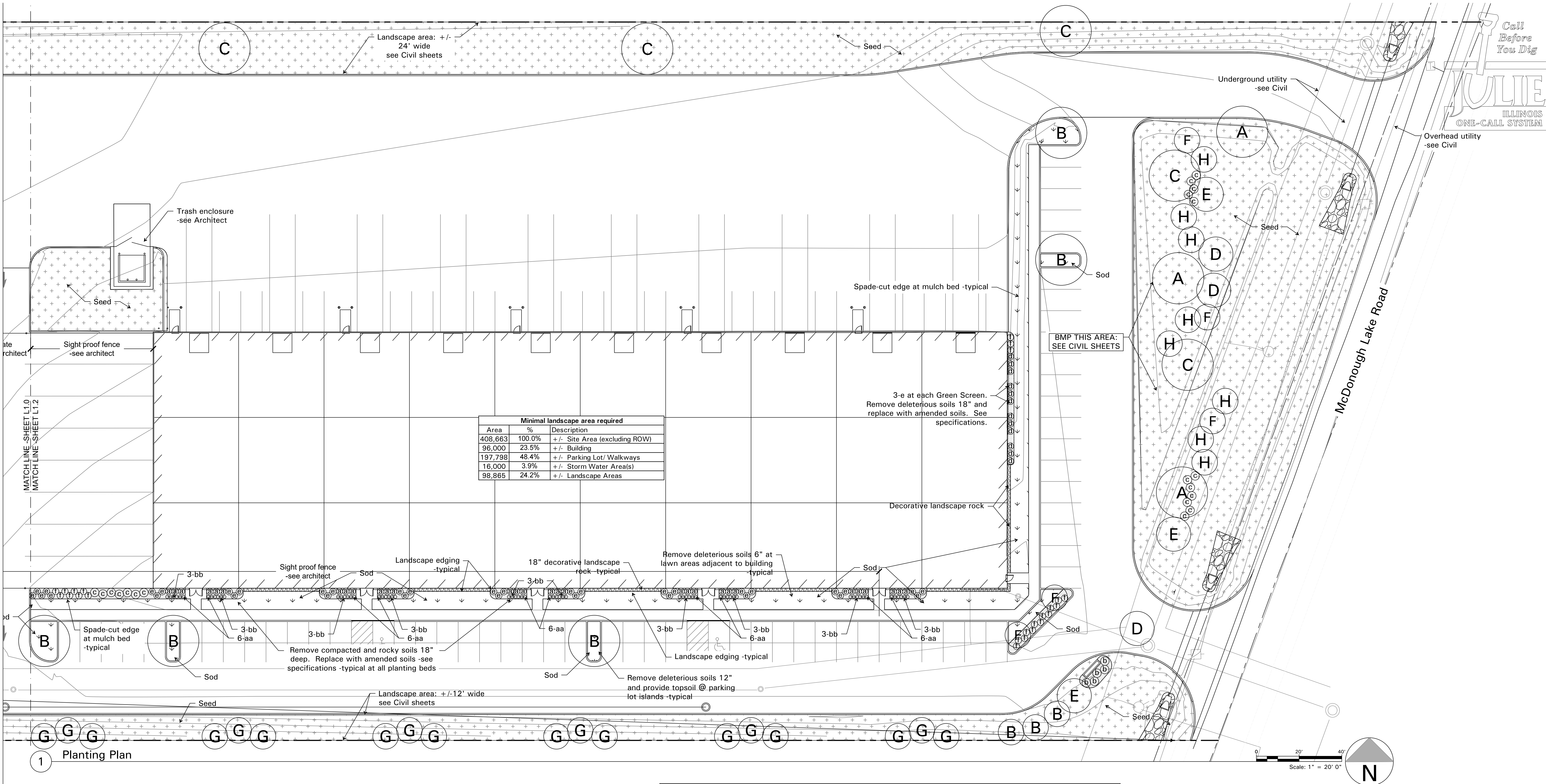
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Drawn by: EMD
Checked by: EMD
Sheet Title
Planting Plan

Project Number: 418.004

Sheet Number

L1.0



Sec. 17.080.050 Tree Preservation
Proposed site is an existing agricultural field and does not have existing trees.

Sec. 17.080.090. Landscape credit.
No credits are requested

Sec. 17.080.100. Landscape guidelines
See Plan

Sec. 17.080.120. Commercial landscaping standards
A. Plan prepared by Illinois Registered Landscape
B. n/a
C. Additional Information
1 Site Plan provided
2 See Civil Site Plan for impervious calculations
3 See tabulation as part of Sec. 17.080.120
4 See Plan and planting Schedule
5 All proposed landscape materials are native and/or drought tolerant. **Proposed inground automatic irrigation system shown on sheets L2.0 and L2.1**
6 No trees existing trees found on site
7 No trees existing trees found on site

Sec. 17.080.050. Tree preservation.
n/a

Sec. 17.080.060. Tree protection during construction
n/a

Sec. 17.080.070. Tree replacement or mitigation.
n/a

Sec. 17.080.080. Plant material and standards
A. All proposed plants are not found on undesirable tree list and are native and hardy to areas
B. See Landscape Planting Schedule this sheet
C. See plan
E. All plants are long lived
G. Majority of plants are native to area
H. Roses are set away from pedestrian areas
I. Groundcover/ Lawns
1 All landscape will contribute to erosion control
2 All lawn areas will be seeded -see Civil for erosion control
3 No groundcover is proposed
4 No low growing evergreen plants are proposed

Sec. 17.080.090. Landscape credit.
No landscape credit is requested

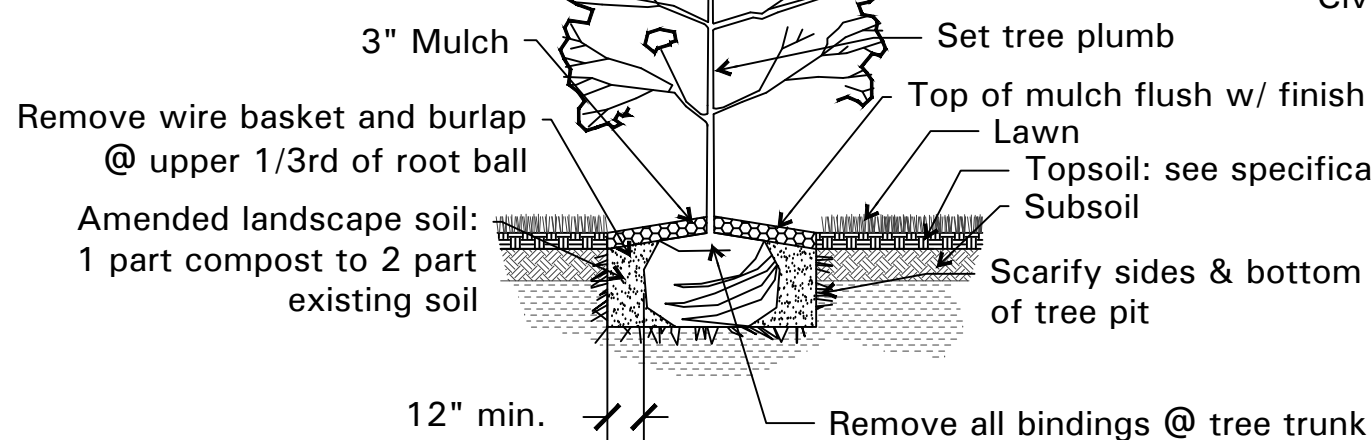
Sec. 17.080.100. Landscape guidelines.
See Plan

Sec. 17.080.120. Commercial landscaping standards						
A.	Required quantity of Plant Materials					
	Description	sf	Notes/ Comments			
	Site Area	417,620	835	Landscape Points Required	Percent of points	
	500					
B.	Quantity of Required Materials		Points	Proposed quantity	Proposed Points	%
	Native Shade Trees		4.0	23	92	10.6%
	Native Evergreen Trees		3.0	44	132	15.2%
	Native Ornamental and Intermediate Trees		2.0	8	16	1.8%
	Native Shrubs		2.0	37	74	8.5%
	Shrubs		1.0	72	72	8.3%
	Native Ornamental Grasses, Sedges, Rushes (per two plants)		1.0	106	212	24.5%
	Native Forbs and Wildflowers		2.0	134	268	30.9%
				Total Points Provided	866	100.0%
				Required Points	835	
				Difference	31	
	Landscape Point Diversity Requirement:					
	A minimum of twenty (20) percent of required points shall come from ornamental grasses, sedges, rushes, or shrubs.					
A minimum of five (5) percent of required points shall come from perennials, annuals, bulb, forbs, and wildflowers that provide variation in color. Short lived materials, such as annual flowers may be used to accent or supplement the basic permanent landscape plan.						
If applicable, ten (10) percent of total required points shall be utilized for BMPs in stormwater management or 83.5 points required						
		4.0	5	20		
		3.0	8	24		
		2.0	8	16		
		2.0	12	24		
			Total Points Provided	84		
No more than fifteen (15) percent of required points shall come from stormwater retention/detention facilities.						
A minimum of fifty (50) percent of shade trees shall be located in parking lot islands or along the parking lot perimeter.						
Perennials, bulbs, annuals, and flowers shall be planted at a minimum of seventy-eight (78) percent per fifty (50) square feet, at twelve (12) inches on center.						
Existing landscaping that is in a vigorous growing condition and meets the intent of this section may count toward meeting the point requirements upon approval of the City.						
Sec.	17.080.130. Parking lot requirements					
	Landscape island are single islands and greater than 250 sq. ft. with shade tree and lawn					
	Any single parking rows does not exceed 20 spaces					
Sec. 17.080.140. Transition buffers; when required						
No transition buffer required						

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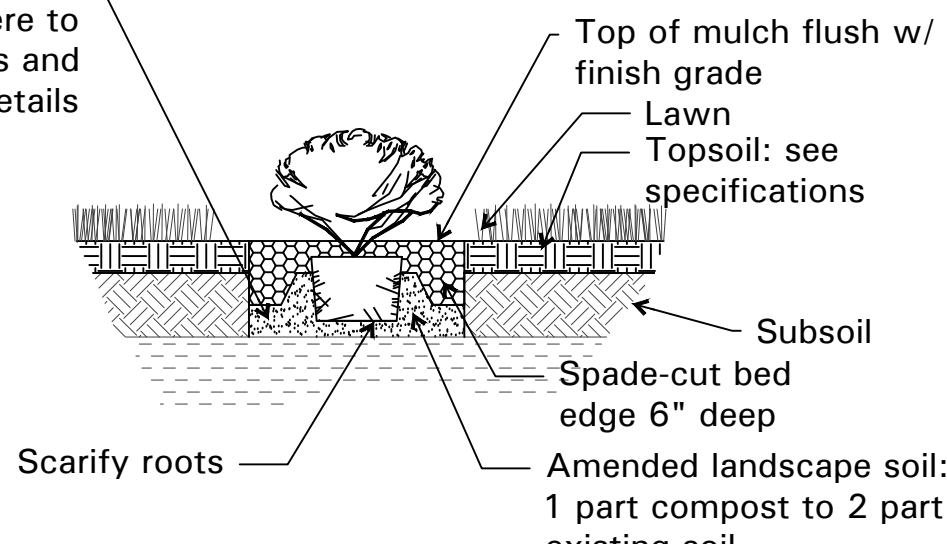
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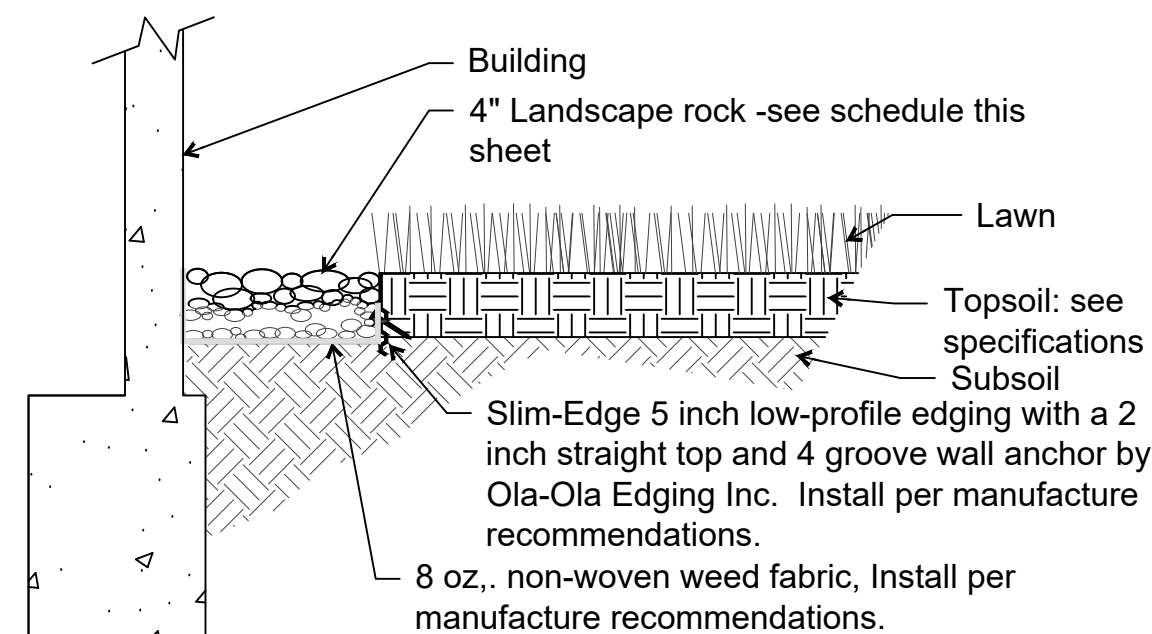


SHADE TREE PLANTING DETAIL

Below 12 inches finish grade shall follow and adhere to Earthwork specifications and Civil drawings and details



SHRUB PLANTING DETAIL



MAINTENANCE STRIP AT BUILDING WITH WEED FABRIC AND EDGING

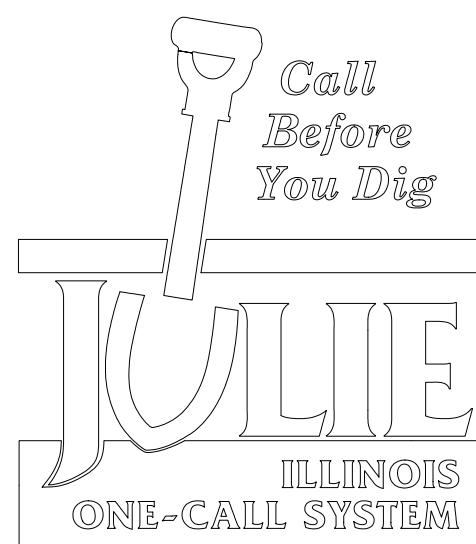
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DERMODY & ASSOCIATES
Uisce beatha
da
ILLINOIS
ONE-CALL SYSTEM
LANDSCAPE ARCHITECTS
p h # 3 1 4 . 2 0 5 . 8 8 7 1
Surveyor/ Civil Engineer:
Oats & Associates, Inc
100 Lanter Court, Suite 1
Collinsville, IL, 62234
Architect:
UHLIG Architecture, Inc.
12473 Robyn Rd.
St. Louis, MO 63127

Landscape Development Plan for:
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Drawing prepared for:
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Revisions:
No. Description Date:
1 City Comment 3/26/25
3/26/25
EDWARD M. DERMODY
157.001275
EXPIRES: 8/31/2025
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Landscape Architect
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Planting Plan
Project Number: 418.004
Sheet Number
L1.1



DERMODY & ASSOCIATES

Uisce beatha



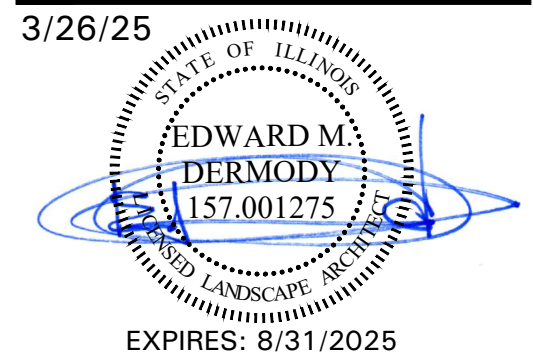
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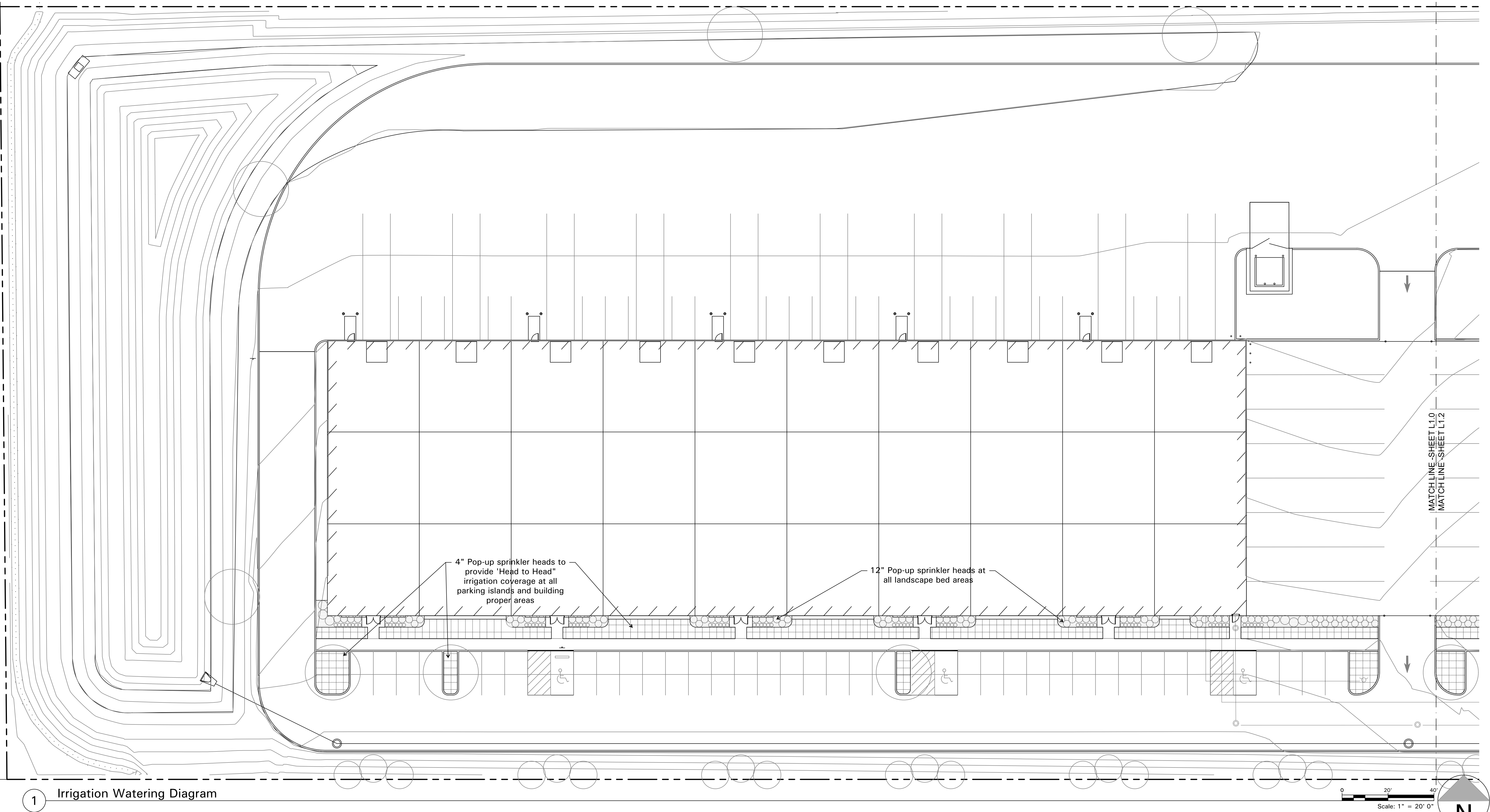
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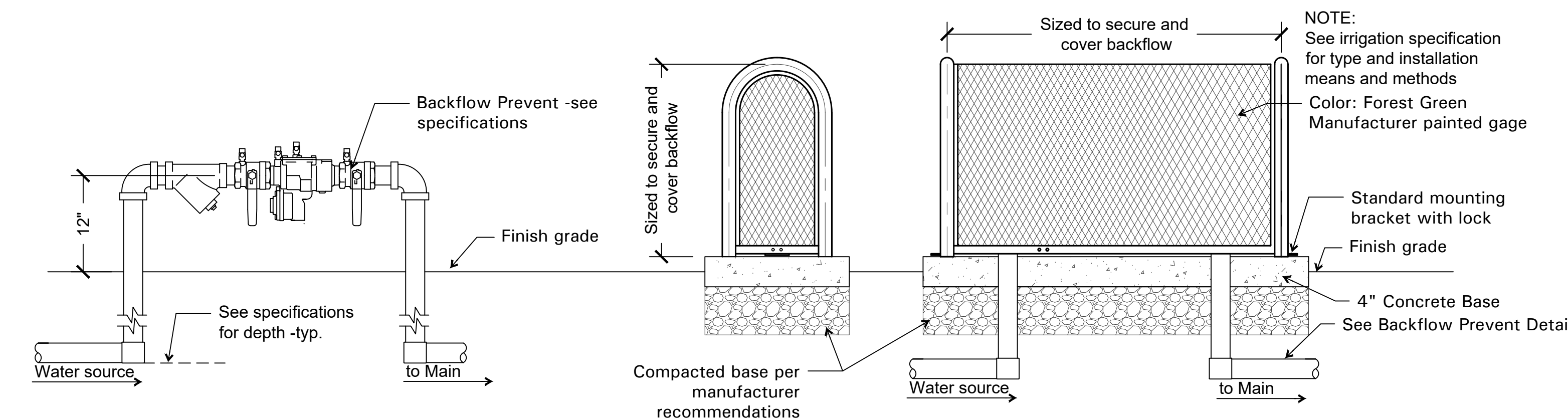
Sheet Title
Irrigation Watering Diagram

Project Number: 418.004

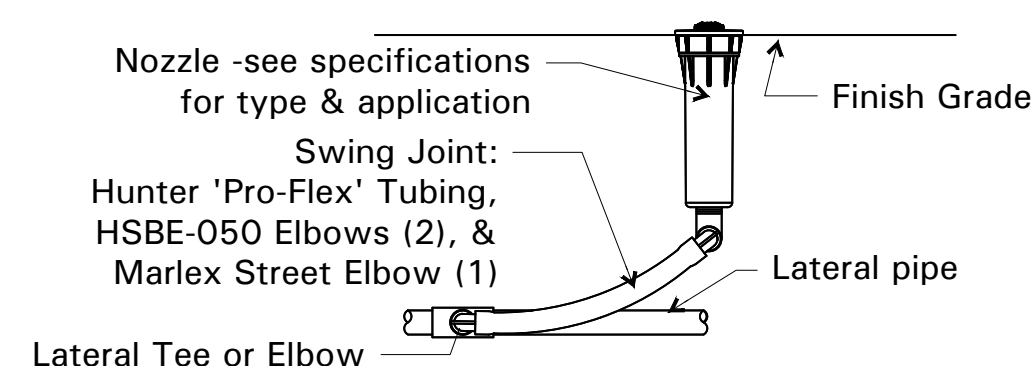
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L2.0



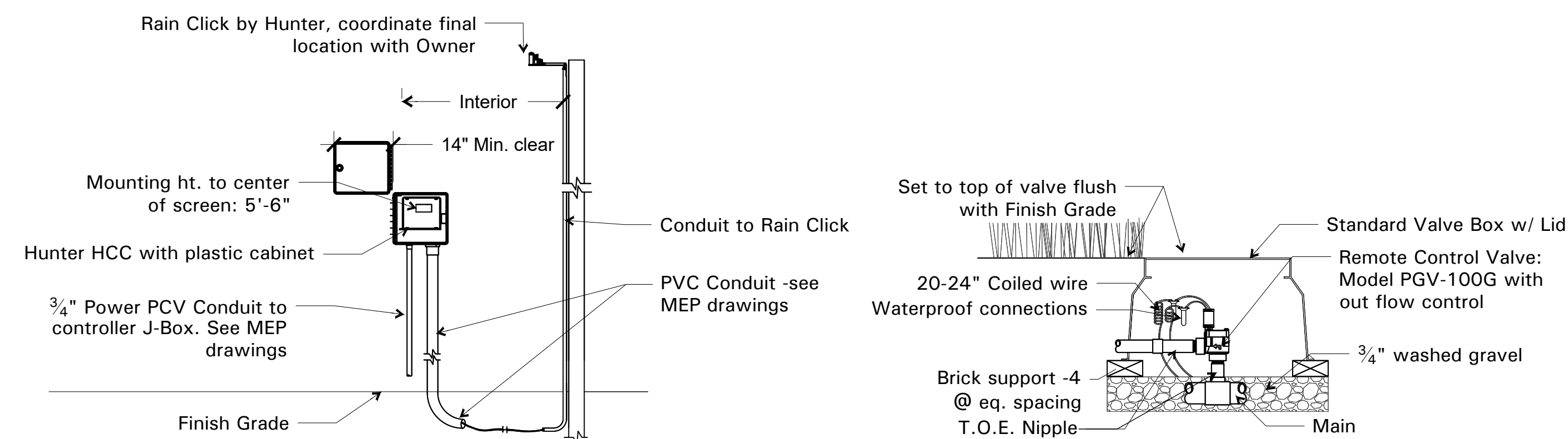
1 Irrigation Watering Diagram



A Backflow Prevent with Metal Cage

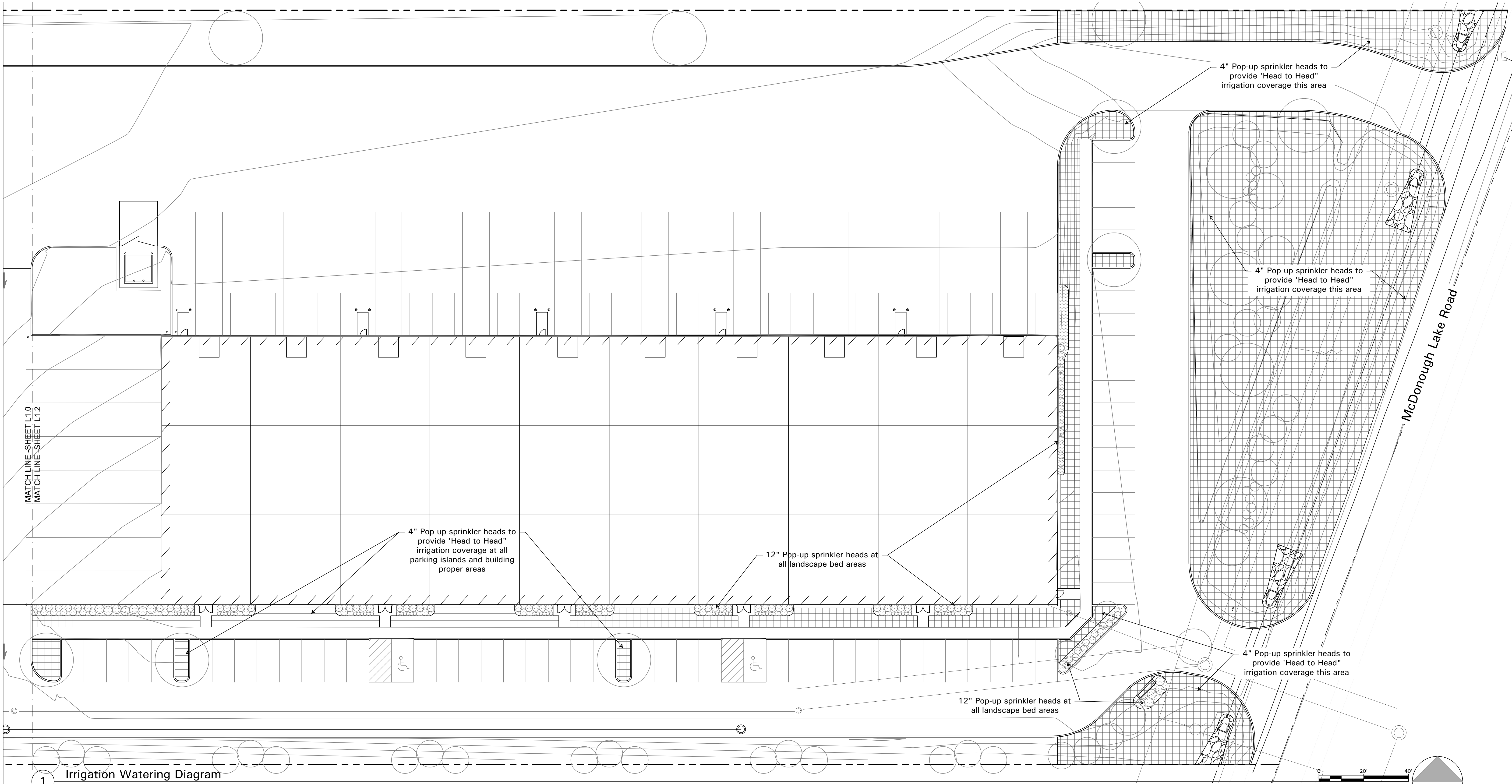


B Pop-up Sprinkler Head Detail

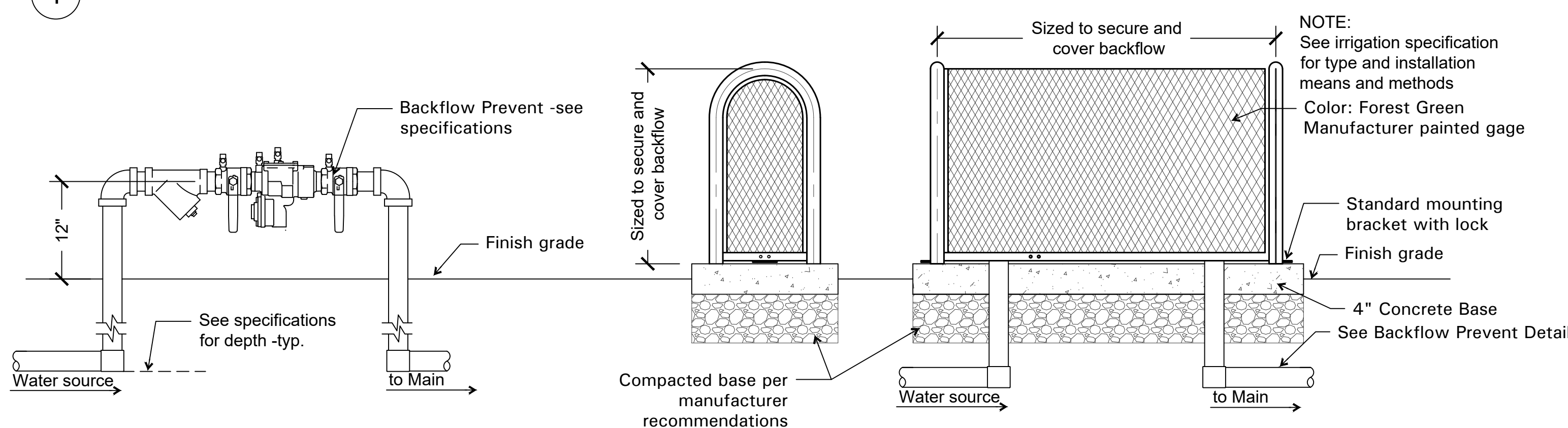


C Controller Mounting with Solar Sync

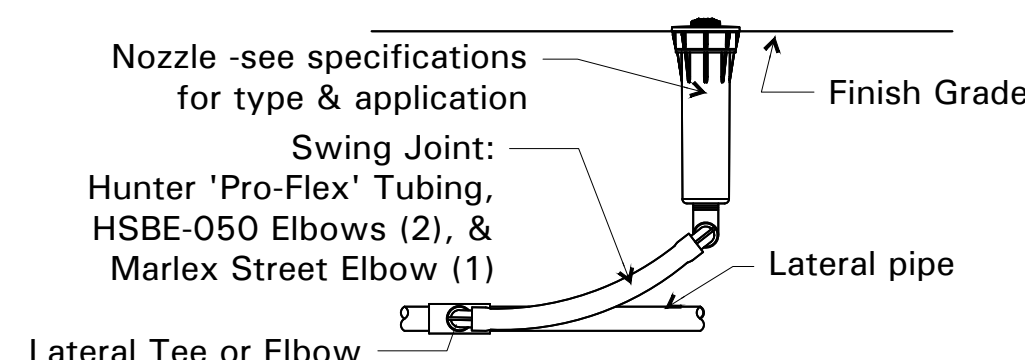
4 Valve Detail



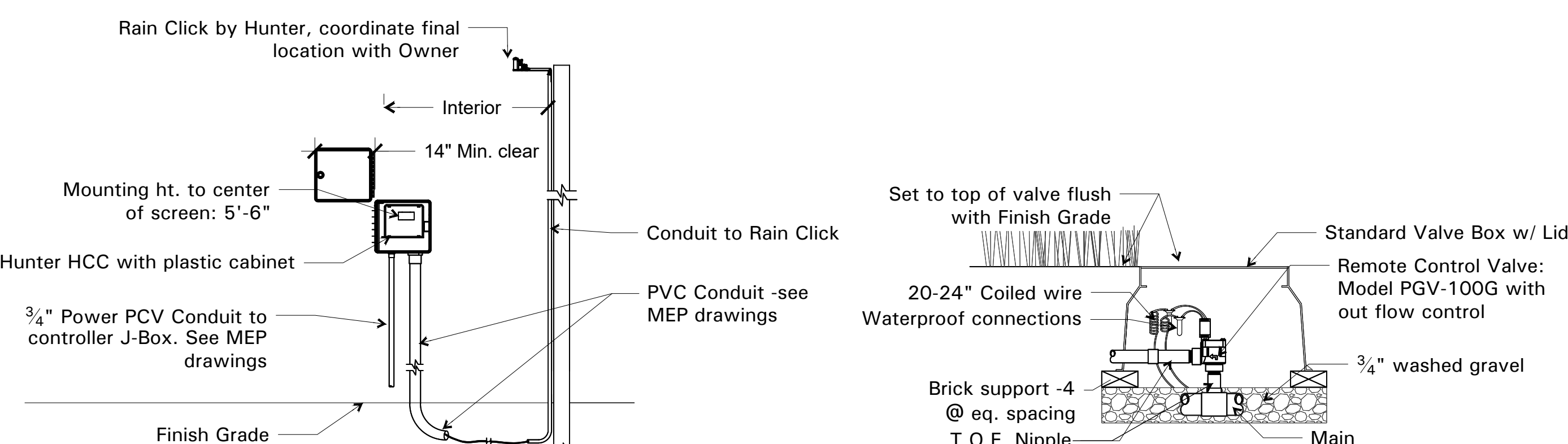
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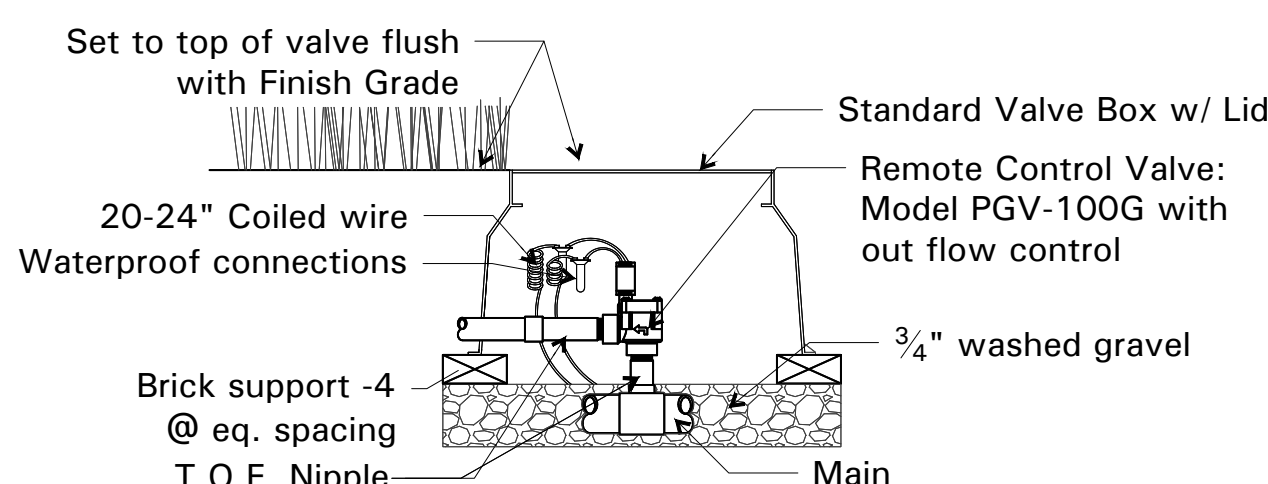
A Backflow Prevent with Metal Cage



B Pop-up Sprinkler Head Detail



C Controller Mounting with Solar Sync



4 Valve Detail

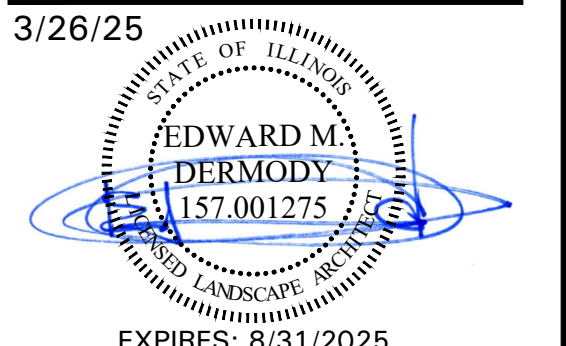


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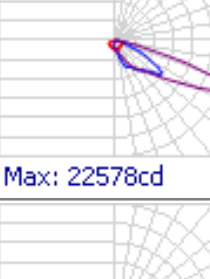
Sheet Title
Irrigation Watering
Diagram

Project Number: 418.004

Sheet Number

L2.1

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Filename	Lumen Multiplier	Light Loss Factor	Total Lamp Lumens	Wattage	Plot
	S2	8	Lithonia Lighting	RSX2 LED P4 50K R3 HS	RSX LED Area Luminaire Size 2 P4 Lumen Package 5000K CCT Type R3 Distribution with HS shield	RSX2_LED_P4_50K_R3_HS.ies	1	0.9	17548	189.54	 Max: 18650cd
	S3	9	Lithonia Lighting	RSX2 LED P6 50K R3 HS	RSX LED Area Luminaire Size 2 P6 Lumen Package 5000K CCT Type R3 Distribution with HS shield	RSX2_LED_P6_50K_R3_HS.ies	1	0.9	21243	246.63	 Max: 22578cd
	W1	10	Lithonia Lighting	RSX2 LED P4 50K R4	RSX Area Fixture Size 2 P4 Lumen Package 5000K CCT Type R4 Distribution	RSX2_LED_P4_50K_R4.ies	1	0.9	25328	189.54	 Max: 14938cd
	W2	2	Lithonia Lighting	RSX2 LED P4 50K R3	RSX Area Fixture Size 2 P4 Lumen Package 5000K CCT Type R3 Distribution	RSX2_LED_P4_50K_R3.ies	1	0.9	25000	189.54	 Max: 18023cd

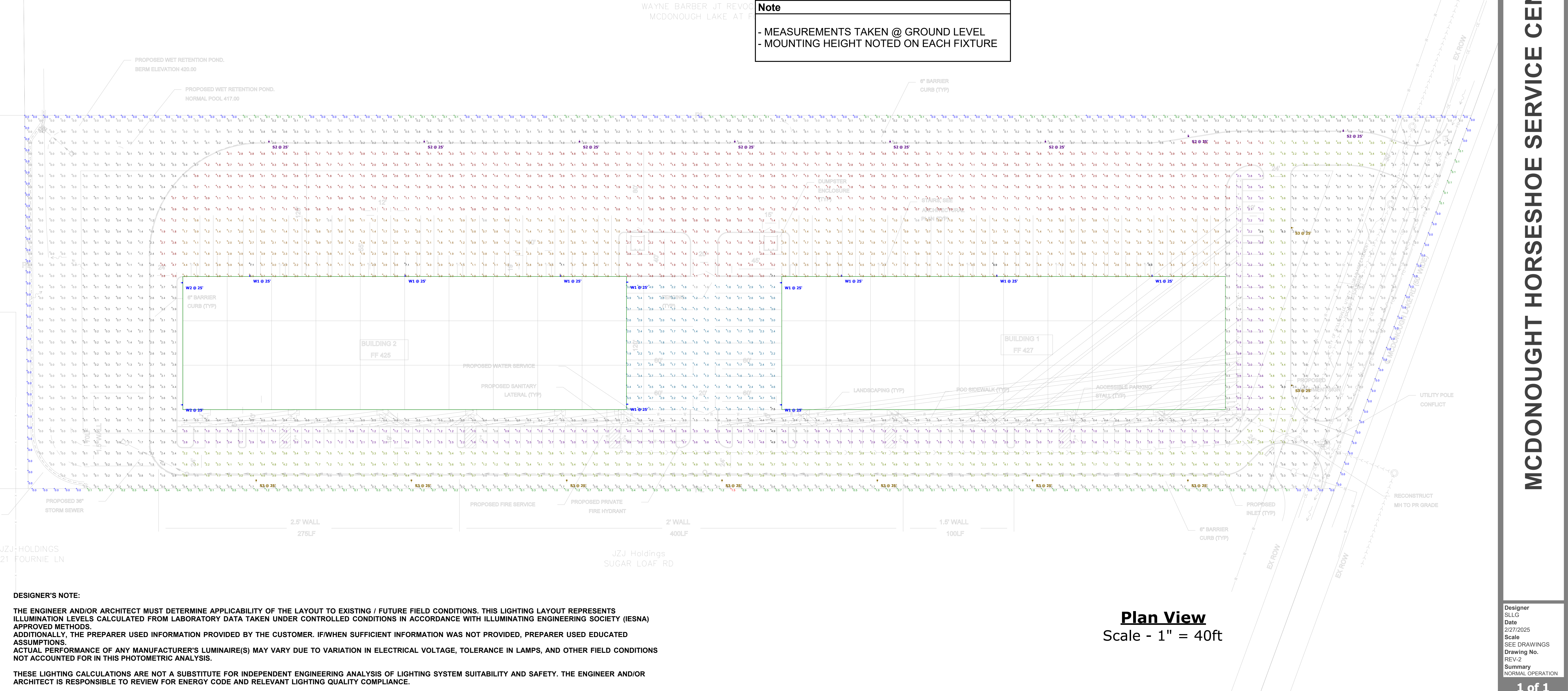
Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DOCKS - BUILDING 1		2.2 fc	6.9 fc	0.6 fc	11.5:1	3.7:1
DOCKS - BUILDING 2		2.2 fc	7.1 fc	0.6 fc	11.8:1	3.7:1
DRIVE LANE		3.0 fc	6.3 fc	0.5 fc	12.6:1	6.0:1
FENCED OUTSIDE STORAGE		2.4 fc	7.5 fc	1.0 fc	7.5:1	2.4:1
PARKING LOT - BOTTOM		2.0 fc	4.9 fc	0.8 fc	6.1:1	2.5:1
PARKING LOT - EAST		2.0 fc	3.9 fc	0.6 fc	6.5:1	3.3:1
PROPERTY LINE		0.2 fc	1.5 fc	0.0 fc	N/A	N/A
SITE		1.6 fc	7.5 fc	0.0 fc	N/A	N/A
TRUCK COURT		2.0 fc	7.1 fc	0.6 fc	11.8:1	3.3:1

Note

- MEASUREMENTS TAKEN @ GROUND LEVEL

- MOUNTING HEIGHT NOTED ON EACH FIXTURE



DESIGNER'S NOTE:

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY (IESNA) APPROVED METHODS. ADDITIONALLY, THE PREPARER USED INFORMATION PROVIDED BY THE CUSTOMER. IF/WHEN SUFFICIENT INFORMATION WAS NOT PROVIDED, PREPARER USED EDUCATED ASSUMPTIONS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE(S) MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER FIELD CONDITIONS NOT ACCOUNTED FOR IN THIS PHOTOMETRIC ANALYSIS.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR ENERGY CODE AND RELEVANT LIGHTING QUALITY COMPLIANCE.