UNION VILLAGE BATH HOUSE AND PAVILION

BAXTER ST.
TURTLE CREEK TWP, OHIO

Owner:
UNION VILLAGE DEVELOPMENT
COMPANY

3855 Lower Market St. Suite 100D Lebanon, Ohio 45036 513-202-3170

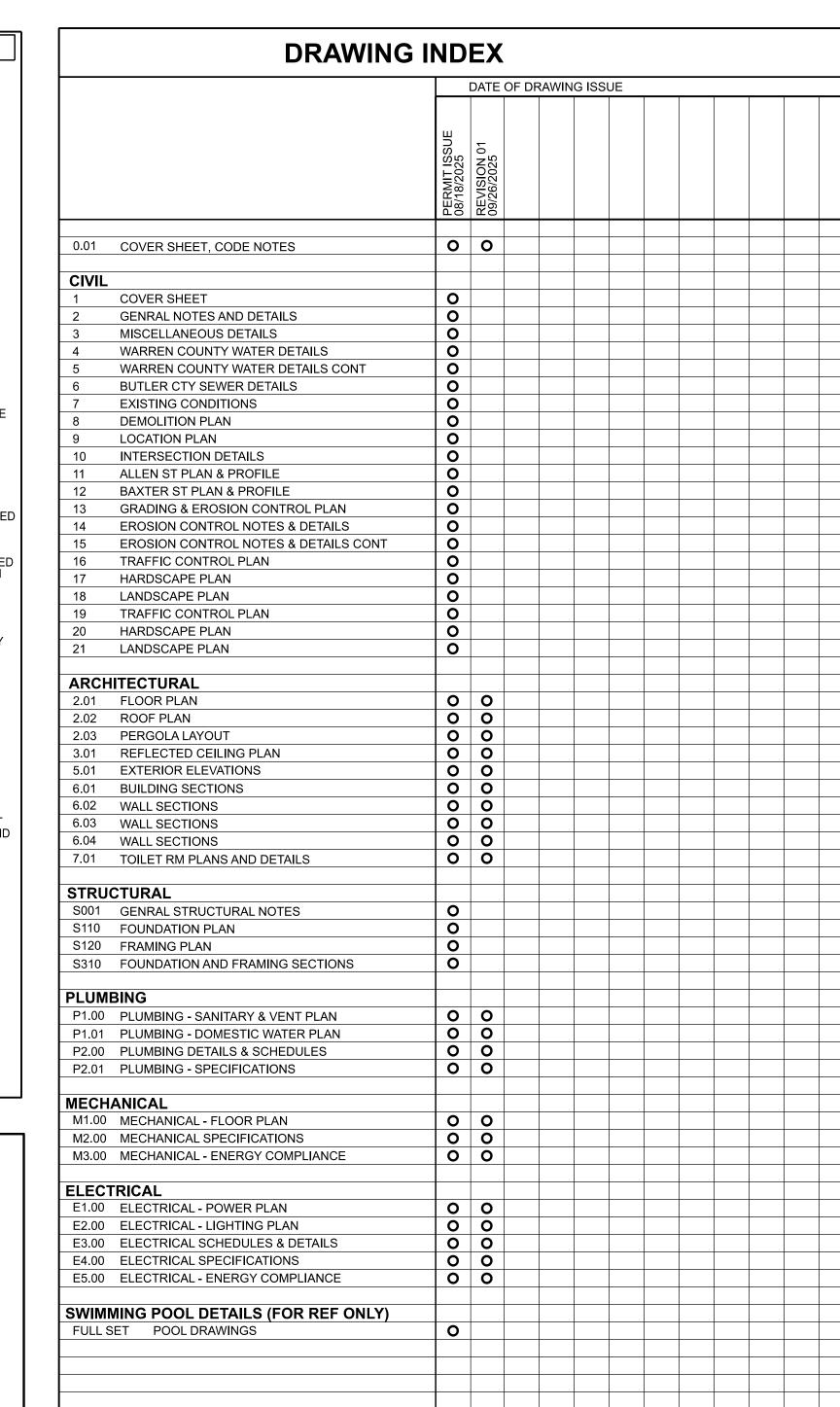
Civil Engineer:
THE KLEINGERS GROUP

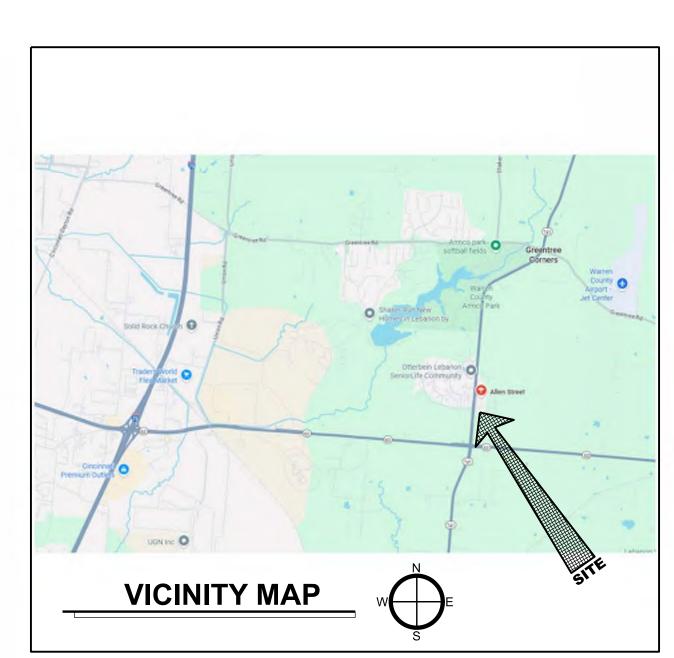
6219 Centre Park Dr. West Chester, Ohio 45069 (513) 779-7851 www.kleingers.com Architect / Structural Engineer PHOENIX ARCHITECTURE, LLC

9467 Kenwood Road Cinicnnati, Ohio 45242 513-745-9209 www.phoenix-arch.com

MEP Engineer:
MARQUE ENGINEERING
2230 Park Ave.
Suite 100
Cincinnati, Ohio 45206
(513) 901-0042
www.marqueeng.com

General Construction Notes - ANY WORK STARTED BEFORE ISSUANCE OF BUILDING PERMIT IS AT OWNER'S AND -CODE COMPLIANCE - ALL WORK SHALL COMPLY WITH OBC. SECURE ALL REQD PERMITS. COMPLY WITH REQUIREMENTS OF LOCAL CODES/REGULATIONS, AND LOCAL OFFICIALS HAVING JURISDICTION. DISPLAY PERMITS AS REQD BY CODE OFFICIALS. COMPLY WITH OBC CH-7 FOR MEMBRANE AND THRU PENETRATIONS OF EXIST OR NEW FIRE RATED - OBC 712 - PENETRATIONS THRU FIRE RATED WALLS & HORIZONTAL ASSEMBLIES THRU PENETRATIONS SHALL BE PROTECTED IN ACCORDANCE WITH OBC 712.3 AND 712.4. PENETRATIONS THRU NON RATED HORIZ ASSEMBLIES SHALL COMPLY WITH OBC 712.4.2. – OBC 906 - FIRE DEPARTMENT COORDINATION - PROVIDE FIRE EXTINGUISHERS IN COMPLIANCE WITH OBC, IFC AND NFPA. COORDINATE FOR APPROVAL OF LOCAL FIRE DEPARTMENT. MAX DIST FROM ANY POINT TO FE = 75FT. PROVIDE AND COORD KNOX BOX SPEC AND LOCATION WITH FIRE DEPT. OBC 901.1 -FIRE PROTECTION SYSTEMS - COMPLY WITH OBC FOR ANY NEW SYSTEMS, OR MODIFICATIONS TO EXISTING AUTOMATIC FIRE SUPPRESSION SYSTEM (SUPERVISED IN ACCORDANCE WITH OBC). SPRINKLER CONTRACTOR IS REPSONSIBLE TO PROVIDE STAMPED ENGINEERED DRÁWINGS AND SECURE HIS OWN PERMITS OBC 1006 - MEANS OF EGRESS ILLUMINATION - SEE CODE ANALYSIS AND ELECTRIC DWGS FOR EXIT, NIGHT AND EMERGENCY LIGHTING REQUIREMENTS. – ACCESSIBILITY - COMPLY WITH OBC CH 11 - ACCESS ROUTES AND TENANT SPACE SHALL BE ACCESSIBLE. INCLUDE, BUT NOT LIMITED TO THE FOLLOWING: TOILET ROOMS, HARDWARE, THRESHOLDS, CONTROLS, EGRESS, WARNINGS, AND SIGNAGE. PROVIDE TACTILE SIGNAGE IN COMPLIANCE WITH OBC 1007 AND OBC 1110. TO CONDUCT COORDINATION MEETINGS TO AVOID CONFLICTS OF SYSTEMS AND SUB-CONTRACTORS WORK. PROVIDE ENGINEERING COORDINATION DRAWINGS IF NECESSARY. LOCATE ALL COMPONENTS IN MANNER TO NOT INTERFERE WITH ANY OTHER INSTALLATION. REPORT CONFLICTS IMMEDIATELY TO OWNERS REP. ANY COSTS FOR REMEDIAL DIE TO FAILURE TO REPORT CONFLICT, SHALL BE THE CONTRACTORS -VERIFICATION - GENERAL CONTRACTOR IS RESPONSIBLE TO SURVEY THE EXISTING CONDITIONS OF THE PROPOSED CONSTRUCTION. VERIFY FOR ALL PORTIONS OF PROPOSED WORK. REPORT ANY ISSUES/DISCREPANCIES TO ARCHITECT AND OWNER PRIOR TO -REQUIRED ENGINEERING - FOR PREFABRICATED SYSTEMS, CONTRACTORS ARE REQUIRED TO PROVIDE ENGINEERING DOCUMENTATION FOR SYSTEMS WHICH THEY PROVIDE WHICH TO PROVIDE ENGINEERING DOCUMENTATION FOR SYSTEMS WHICH THEY PROVIDE WHICH ARE NOT ENGINEERED ON THE STRUCTURAL DRAWINGS/SPECS. THIS SHALL INCLUDE LIGHT GAUGE METAL FRAMING, STAIRS, ROOFING SYSTEMS, INTERIOR AND EXTERIOR METAL STUDS, BULKHEADS, SUSPENDED CEILING FRAMING AND HANGERS, EXTERIOR METAL WALL AND ROOF PANELS, SHEET METAL, FLASHINGS, COPINGS, WINDOWS, CURTAINWALL, FENCING. INCLUDE DOCUMENTATION FOR: GAUGE, SIZE, ANCHORS, CONNECTIONS, SPLICES, LIMITING HEIGHTS AND BRACING. DOCUMENTATION PROVIDED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO. COMPLY WITH ALL CURRENT APPLICABLE CODES/ORDINANCES FOR ALL MATERIALS, PRODUCTS, SYSTEMS, AND INSTALLATIONS. -WALL / CEILING SUPPORT - AT LOCATIONS OF WALL OR CEILING HUNG EQUIPMENT, ACCESSORIES -PROVIDE METAL STRAP ANCHORS (TO BE APPROVED BY ARCHITECT), OR FIRE RETARDANT WOOD BLOCKING. REINFORCE AT CEILING HUNG FIXTURES. -ALIGNMENT -- SEE ALSO FLOOR & CEILING PLAN NOTES - COORD STUD LOCATIONS SO THAT FACES OF WALLS, FEATURES, BULKHEADS, AND/OR PARTITION TYPES ALIGN AS INDICATED. PROVIDE FLUSH AND CONTINUOUS FINISH FACE. PROVIDE CONTROL JOINTS -MANUFACTURERS' INSTALLATION REQUIREMENTS -- ALL MATERIALS SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURERS REQUIREMENTS TO MAINTAIN ALL WARRANTIES. REPORT ALL CONFLICTS IMMEDIATELY, AND PRIOR TO COMMENCEMENT OF CONSTRUCTION, TO OWNERS REPRESENTATIVE. ANY COSTS FOR REMEDIAL WORK AND MATERIAL COSTS DUE TO FAILURE TO REPORT CONFLICT, SHALL BE THE CONTRACTORS - DISSIMILAR MATERIALS - PROVIDE FLASHING OR ASPHALTIC PAINT TO ISOLATE DISSIMILAR METALS/ MATERIALS TO INHIBIT CORROSION/DETERIORATION -Hazardous Materials - Phoenix Architecture, LLC shall have no responsibility for the discovery, presence, handling, removal, disposal or exposure of persons to hazardous materials of any form including mold. The existing or constructed building may, as a result of post-construction, use,





	Key to Plan Symbols					
	X ROOM NAME AND NUMBER X X X X X INTERIOR ELEVATIONS (MULTIPLE) ELEVATION NUMBER					
	PARTITION TYPE TAG V					
	DETAIL SHEET NUMBER					
	ELEVATION NUMBER WALL SECTION TAG					
EXTERIOR ELEVATIONS DETAIL SHEET NUMBER DETAIL SHEET NUMBER		XXX				
	\triangle	DRAWING REVISION TAG	SEMI RECESSED FIRE EXTINGUISHER CABT (FEC)			
	€	WALL MOUNNTED FIRE EXTINGUISHER (FE)	II			
		Genera	al Plan Notes			
Α.	INTERIOR D	IMENSIONING IS TO FACE OF STUI	D, CMU METAL FRAMING, UNLESS NOTED OTHERWISE			
B.	EXTERIOR D WINDOW DI	EXTERIOR DIMENSIONS ARE TO FACE OF MASONRY, PRECAST, GLASS OR ALUMINUM UNO. NON EDGE WINDOW DIMENSIONS ARE TO CENTERLINE OF WINDOW, OR CENTERLINE OF WINDOW MULLION.				

METAL STUD FRAMING - COMPLY WITH MFG RECOMMENDED TABLES FOR UNBRACED LENGTH / GAUGE

PROPOSED BUILDING: BUILDING - 1 STORY - CONSTR USE GROUP A-3	CUCTION TYPE VB - NON SUPPRESSED		
PROPOSED - BLDG STORIES: 1 - BLDG HGT - 24'-8" - BLDG AREA TOTAL - 1609 SF	ALLOWABLE (OBC 504.3, 504.4, 506.2) - 1 STORY - 40 FT HEIGHT - 6000 SF		
OBC TABLES 601 / 602 BUILDI	NG ELEMENTS: REQD FIRE RESISTANCE : VB CONS	ST ₀	HR
	AME (INCL COLUMNS, GIRDERS, TRUSSES)	0	HR
2. OBC 601 - BEARING WALLS	- EXTERIOR OBC 601 (NOT LESS THAN ITEM #4)	0	HR
3. BEARING WALLS - INTERIOF	R OBC 601		
	SHEET. INFORMATION REQD FOR PROXIMITY TO	0	HR
	OTHER BLDG ON SAME SITE.	0	HR
5. OBC 601 - NON BEARING WA		0	HR
6. OBC 601 - FLOOR CONSTRU		0	HR
	CTION (INCL SUPPORTING BEAMS/JOISTS)		

AREA LIMITED TO 160 OCCUPANTS BASED ON TOILET ROOM FIXTURES PROVIDED

OBC Building Code Analysis

PROPOSED PROJECT IS THE CONSTRUCTION OF A NEW BUILDING

AS A BATH HOUSE AND PAVILION AND A PERGOLA FOR A NEW

PROJECT DESCRIPTION

APPLICABLE CODES

NEIGHBORHOOD POOL AREA

2024 OHIO BUILDING CODE 2017 OHIO FIRE CODE

2024 OHIO MECHANICAL CODE

2017 NATIONAL ELECTRICAL CODE - OHIO

2021 INTERNATIONAL ENERGY CONSERVATION CODE

2024 OHIO PLUMBING CODE

30 FEMA	ALE							
NTERIC	OR CALCS	REQD UNISEX	REQD MALE	REQD FEMALE	Ξ	PROV MALE	PROV FEMALE	PROV UNISEX
female	WATER CLOSETS (1/40 F occ)			2			2	
female	LAVATORIES (1/150 occ)			1			2	
male	WATER CLOSETS (1/75 occ)		2			2		
male	URINALS (optional)		0			1		
male	LAVATORIES (1/200occ)		1			2		
	WATER FOUNTAIN (1/500)	1						2
	SERVICE SINK (1)	1						1

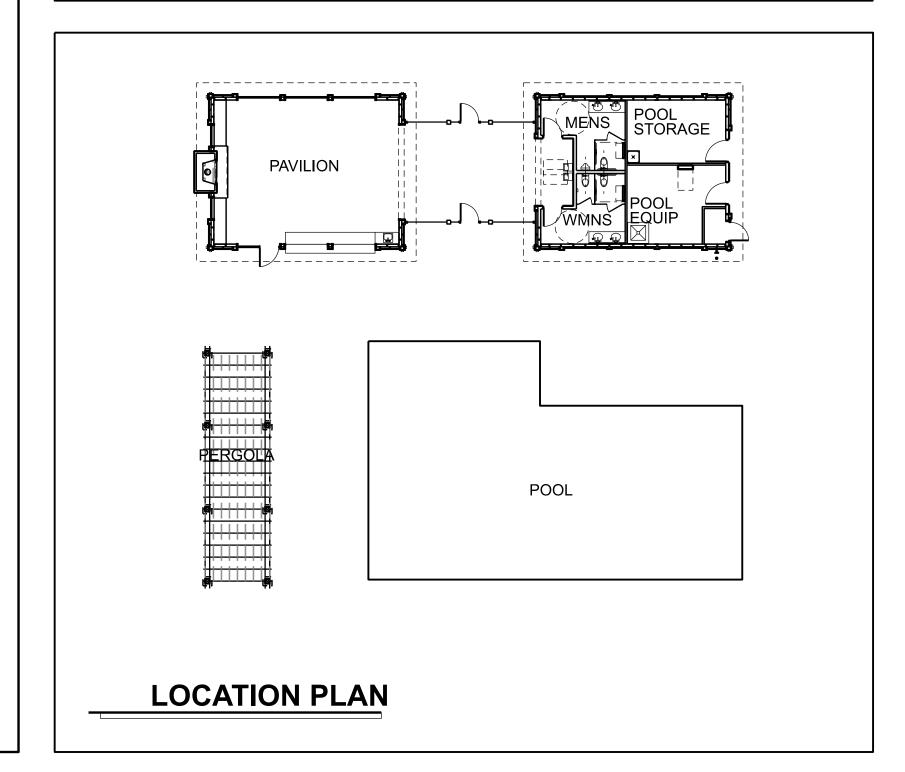
OBC CHAPTER 29 - PLUMBING FIXTURES (A-3) - CALCULATED: 160 occ = 80 MALE,

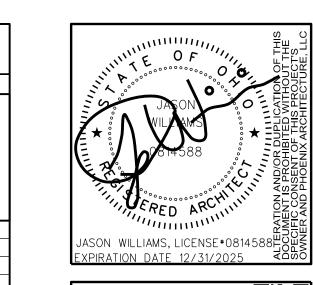
maintenance, operation or occupation, contain or be caused to contain mold substances which can

present health hazards and result in bodily injury, property damage and/or necessary remedial measures and costs for which Phoenix Architecture, LLC shall have no responsibility.

-HAZARDOUS MATERIALS - OWNER IS RESPONSIBLE FOR TESTING AND REMOVAL OF HAZARDOUS MATLS

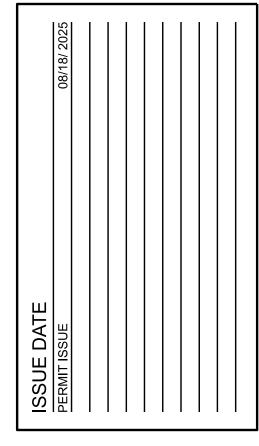
2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the code official. The number of occupants shall be determined by this code. When the actual occupant load will be significantly different than that determined by Section 1004 of the building code, the building official may establish an alternate basis for determining the occupant load. This alternate basis shall be included in the special stipulations and conditions section of the certificate of occupancy issued for that structure pursuant to Section 111.







UNION VILLAGE BATH HOUSE AND PAVILION



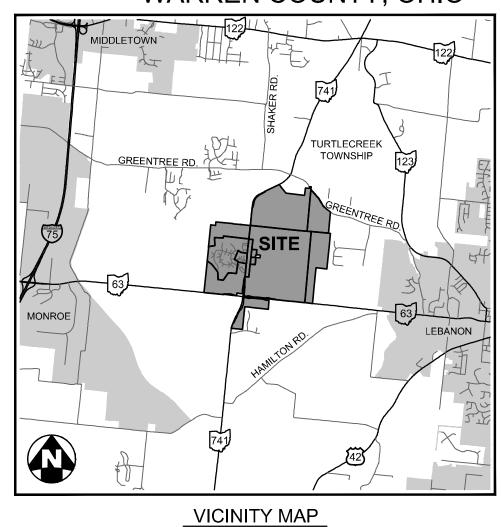
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JOB NO. 9164.01

COVER
SHEET

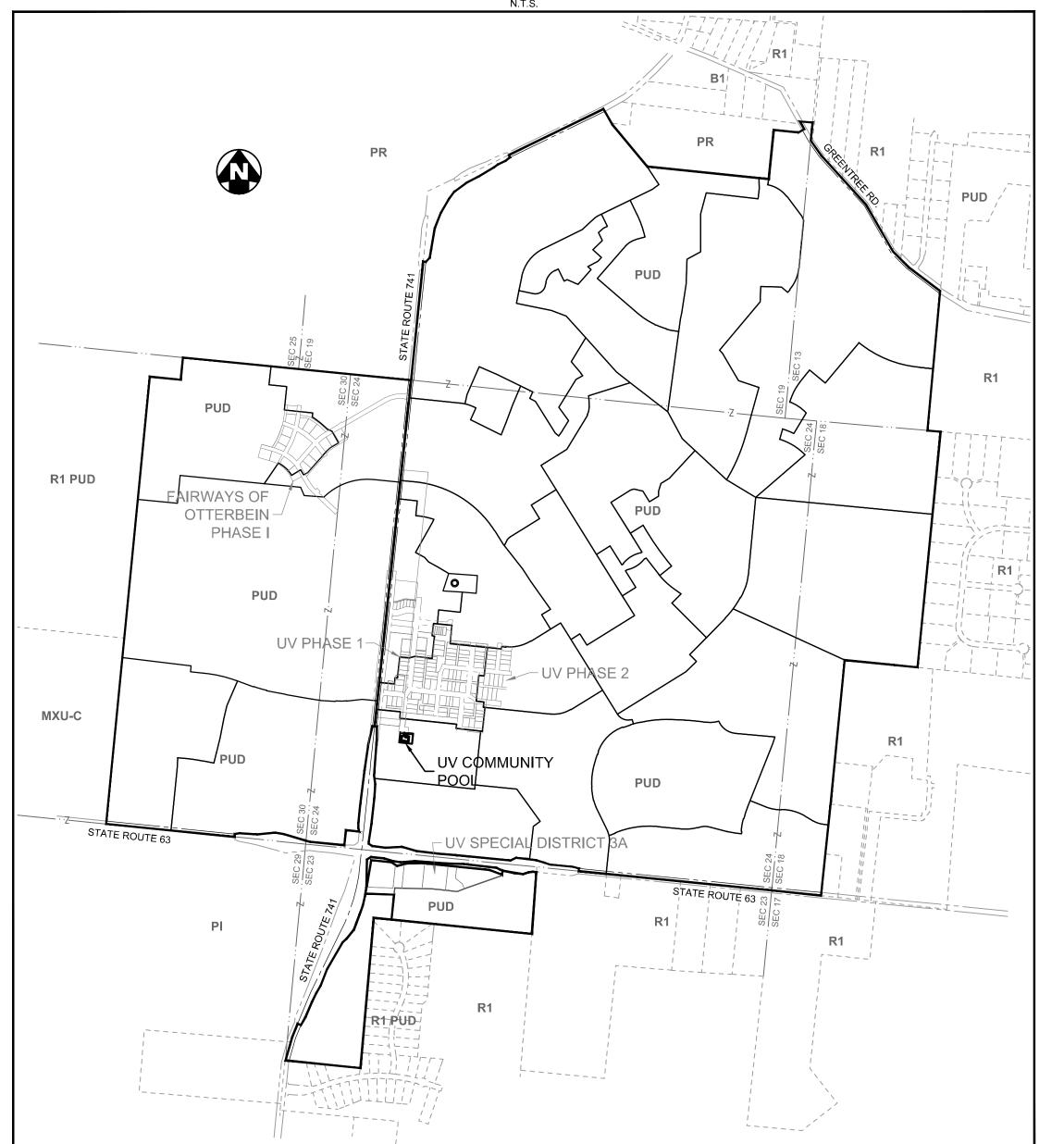
CONSTRUCTION DRAWINGS

UNION VILLAGE COMMUNITY POOL SITE PLAN

SECTION 24 & 30, TOWN 4, RANGE 3, B.T.M. TURTLECREEK TOWNSHIP WARREN COUNTY, OHIO



Sheet List Table			
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4	EXISTING CONDITIONS		
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6	GRADING & EROSION CONTROL PLAN		
7	HARDSCAPE PLAN		
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9	LANDSCAPE DETAILS		
10	IRRIGATION ZONES PLAN		
11	LANDSCAPE SPECIFICATIONS		
12	LANDSCAPE SPECIFICATIONS		



SITE MAP

SITE DATA

OWNER:

SCHEDULE:

UNION VILLAGE DEVELOPMENT COMPANY 3855 LOWER MARKET ST, SUITE 100D

LEBANON, OHIO 45036 CONTACT: MATT OBRINGER (513) 202-3170

APPLICANT: UNION VILLAGE DEVELOPMENT COMPANY

> LEBANON, OHIO 45036 CONTACT: MATT OBRINGER

(513) 202-3170 0.48 ACRES

EXISTING ZONING: PLANNED UNIT DEVELOPMENT (PUD)

FIELD SURVEY BY THE KLEINGERS GROUP, JANUARY 2025

BEARINGS ARE BASED ON WARREN COUNTY MONUMENT 169 AND 159 VERTICAL DATUM IS BASED ON WARREN COUNTY MONUMENT 159. ELEVATION = 859.14 (NAVD 88)

IMPROVEMENTS: PUBLIC STREET AND ROADWAY FACILITIES ARE TO BE OWNED AND MAINTAINED BY TURTLECREEK

CENTRAL WATER SUPPLY ARE TO BE OWNED AND MAINTAINED BY WARREN COUNTY WATER & SEWER

EXISTING PRIVATE WATERMAINS SHOWN ON THIS PLAN WILL BE IDENTIFIED AS TO BE ABANDONED, TO REMAIN OR RELOCATED WITH THE STAGE 3 SUBMITTAL

WASTEWATER DISPOSAL SYSTEM IS TO BE OWNED AND MAINTAINED BY BUTLER COUNTY

DEPARTMENT OF ENVIRONMENTAL SERVICES

COVENANTS: UNION VILLAGE DEVELOPMENT COMPANY (UVDC) AND TURTLE CREEK TOWNSHIP HAVE ENTERED INTO A SERVICES AGREEMENT FOR THE ROAD MAINTENANCE. THE ROW'S WILL BE DEDICATED TO TURTLECREEK TOWNSHIP AND THROUGH A SERVICE AGREEMENT WITH UVDC MAINTAINED BY

TURTLECREEK TOWNSHIP. THE COMMON AREAS, ALLEYS, LANES, PARKING LOTS ETC. WILL BE MAINTAINED BY THE COMMUNITY AUTHORITY OF UNION VILLAGE (CAUV) ESTABLISHED FOR THE UNION VILLAGE PROJECT. THE CAUV WILL COLLECT MILLAGE FROM THE PROPERTIES WITHIN UNION VILLAGE TO COVER THE MAINTENANCE COST. THERE IS ALSO A UNION VILLAGE NEIGHBORHOOD ASSOCIATION ESTABLISHED TO MANAGE ITEMS SUCH AS ARCHITECTURAL REVIEW, AND PRIVATE PROPERTY

CONSTRUCTION OF COMMUNITY POOL TO BE COMPLETED IN 2026



6219 Centre Park Dr. West Chester, OH 45069 ARCHITECTURE 513.779.7851

UNION VILLAGE COMMUNITY POOL

MESSER

TURTLECREEK TOWNSHIP WARREN COUNTY, OHIO

PROJECT NO: 140217.026 2025/06/13

SHEET NAME:

COVER SHEET

GENERAL NOTES

- 1. THE COUNTIES OF WARREN AND BUTLER, OHIO, AND THE CURRENT EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT CMS), INCLUDING ALL SUPPLEMENTS, SHALL GOVERN ALL MATERIALS AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THIS PLAN. IGNORE REFERENCES TO MEASUREMENT AND PAYMENT IN THE ODOT CMS UNLESS NOTED OTHERWISE. IN THE CASE OF CONFLICTS BETWEEN THE ODOT CMS AND COUNTY REQUIREMENTS, THE COUNTIES WARREN AND BUTLER REQUIREMENTS SHALL PREVAIL.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 48 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES WHO ARE NON-MEMBERS OF THE OHIO UTILITIES PROTECTION SERVICE AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.
- 3. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS.
- 4. THE CONTRACTOR IS TO PERFORM ALL INSPECTIONS AS REQUIRED BY THE OHIO EPA FOR THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND FURNISH OWNERS REPRESENTATIVE WITH WRITTEN REPORTS.
- THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING THE SCOPE OF THE WORK. FAILURE TO VISIT THE SITE SHALL NOT RELIEVE HIM FROM ANY RESPONSIBILITY IN THE PERFORMANCE OF THE CONTRACT.
- 6. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR EXPENSES INCURRED DUE TO SOIL CONDITIONS, GROUNDWATER, AND/OR ROCK EXCAVATION, ALL OF THESE ITEMS SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT
- 7. THE COST OF ALL DEWATERING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- 8. THE DIRECT OR INDIRECT DISCHARGE OR PUMPING OF UNFILTERED SEDIMENT-LADEN WATER INTO THE STORM DRAINAGE SYSTEM OR WATERCOURSE IS ILLEGAL AND PROHIBITED.
- 9. ANY WELL, WELL POINT, PIT, OR OTHER DEVICE INSTALLED FOR THE PURPOSE OF LOWERING THE GROUND WATER TO FACILITATE CONSTRUCTION OF THIS PROJECT SHALL BE PROPERLY ABANDONED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 3745-9-10 OF THE OHIO ADMINISTRATIVE CODE OR IN ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AS DIRECTED BY THE DIRECTOR OF PUBLIC UTILITIES OR HIS REPRESENTATIVE.
- 10. ANY CONTRACTOR INSTALLING ANY WELL, WELL POINT, PIT, OR OTHER DEVICE USED FOR THE PURPOSE OF REMOVING GROUND WATER FROM AN AQUIFER SHALL COMPLETE AND FILE A WELL LOG AND DRILLING REPORT FORM WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), DIVISION OF WATER, WITHIN 30 DAYS OF THE WELL COMPLETION IN ACCORDANCE WITH THE OHIO REVISED CODE SECTION 1521.01 AND 1524.05 IN ADDITION, ANY SUCH FACILITY IS COMPLETED IN ACCORDANCE WITH SECTION 1521.16 OF THE OHIO REVISED CODE. FOR COPIES OF THE NECESSARY WELL LOG, DRILLING REPORT, OR REGISTRATION FORMS, PLEASE CONTACT: DIVISION OF WATER, OHIO DEPARTMENT OF NATURAL RESOURCES, FOUNTAIN SQUARE, COLUMBUS, OHIO 43224, (614)2656717.
- 11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO THE ODNR FOR THE REGISTRY, MAINTENANCE AND ABANDONMENT OF ANY WITHDRAWAL DEVICE USED IN CONSTRUCTION OF THIS PROJECT.
- 12. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT AND/OR FACE OF CURB, UNLESS OTHERWISE NOTED.
- 13. ALL SITE SIGNAGE, STRIPING COLOR AND WIDTH SHALL BE PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 14. ALL EXISTING PAVEMENTS, WALKS, CURBS, ETC. SHALL BE SAWCUT BEFORE REMOVAL. IF, DURING CONSTRUCTION, THE PAVEMENT, WALKWAY, CURB, ETC. IS DAMAGED BEYOND THE ORIGINAL SAWCUT, THE DAMAGED AREA SHALL BE RECUT TO NEAT LINES AS DIRECTED BY THE ENGINEER. PAYMENT FOR SAWCUTTING SHALL BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- 15. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT TO PROVIDE A SMOOTH VERTICAL FULL DEPTH BUTT JOINT BETWEEN THE EXISTING PAVEMENT OR CURB AND THE PROPOSED PAVEMENT. CONTRACTOR SHALL LOCATE SOUND PAVEMENT EDGE AND CUT AND TRIM PAVEMENT TO A NEAT LINE. INCLUDE THE COST OF PAVEMENT REMOVAL AND DISPOSAL IN THE PRICE BID FOR THE PROJECT.
- 16. THE CONTRACTOR SHALL CONTACT THE WARREN COUNTY ENGINEER'S OFFICE PRIOR TO ROADWAY BASE AND SURFACE ASPHALT INSTALLATION.

GRADING NOTES

- 1. CONTRACTOR TO REMOVE TREES AND CLEAR AREAS AS NECESSARY TO PERFORM ALL SITE WORK INCLUDING GRADING AND UTILITY WORK.
- 2. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
- 3. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
- 4. SITE BUILDING PAD EXCAVATION AND CONSTRUCTION TO BE PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. BUILDING PAD PREPARATION SHALL BEGIN BY CLEARING & STRIPPING UNSUITABLE MATERIAL FROM PAD SITE. THEN PLACE & COMPACT BACKFILL MATERIAL AT GEOTECHNICAL ENGINEER'S AND ARCHITECT'S RECOMMENDATIONS. ALL BACKFILL MATERIAL MUST BE ACCEPTABLE TO THE GEOTECHNICAL FNGINEER
- 5. ALL FILL UNDER PAVEMENT SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
- 6. THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR BURY/BORROW PITS AS NEEDED TO BALANCE THE SITE. GEOTECH AND ENGINEER MUST APPROVE AREAS PRIOR TO BURY/BORROW OPERATIONS. AS-BUILT OF BURY/BORROW PIT WILL BE REQUIRED AT COMPLETION OF CONTRACTOR WORK AND MUST BE SUBMITTED TO THE CONSTRUCTION MANAGER.
- 7. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL PRACTICES REQUIRED BY WARREN COUNTY AND THE OHIO EPA.
- 8. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL IN ACCORDANCE WITH SHEET 32 EROSION CONTROL NOTES/STABILIZATION PRACTICES TO BE IN COMPLIANCE
- 9. CONTRACTOR TO LAYOUT BUILDING BASED ON ARCHITECTURAL/FOUNDATION PLANS. SITE PLAN IS FOR CONCEPTUAL PURPOSES ONLY.

UTILITY NOTES

STABILIZATION

- 1. ALL DRAIN TILE AND STORM SEWERS DAMAGED, DISTURBED OR REMOVED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH THE SAME QUALITY PIPE OR BETTER, MAINTAINING THE SAME GRADIENT AS EXISTING. THE DRAIN TILE AND/OR STORM SEWER SHALL BE CONNECTED TO THE CURB SUBDRAIN, STORM SEWER SYSTEM OR OUTLETTED INTO THE ROADWAY DITCH AS APPLICABLE. REPLACED DRAIN TILE/STORM SEWER SHALL BE LAID ON COMPACTED BEDDING EQUAL IN DENSITY TO SURROUNDING STRATUM. REPLACEMENT SHALL BE DOWN AT THE TIME OF THE BACKFILL OPERATION. COST OF THIS WORK TO BE INCLUDED IN THE PRICE BID FOR THE PROJECT.
- 2. ALL EXISTING UTILITIES KNOWN TO EXIST HAVE BEEN SHOWN ON THESE PLANS IN THEIR APPROXIMATE LOCATION. PRIOR TO THE BEGINNING CONSTRUCTION OR EARTH MOVING OPERATIONS, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF THE UTILITIES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ANY UTILITIES THAT MAY EXIST AND ARE NOT
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR PROTECTION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.
- 4. UTILITY POLES WITHIN INFLUENCE OF THE UTILITY OPERATIONS SHALL BE REINFORCED BY THE UTILITY COMPANY PRIOR TO THESE CONSTRUCTION ACTIVITIES. NOTIFICATION OF THE UTILITY COMPANY PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 5. COMPACTED FILLS ARE TO BE MADE TO A MINIMUM OF THREE FEET ABOVE THE CROWN OF ANY PROPOSED SEWER PRIOR TO CUTTING OF TRENCHES FOR PLACEMENT OF SAID SEWERS. ALL FILLS SHALL BE CONTROLLED, COMPACTED, AND INSPECTED BY AN APPROVED TESTING LABORATORY OR AN INSPECTOR FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
- CONTRACTOR TO REPLACE ANY PAVEMENT OR UTILITIES DAMAGED WHICH ARE NOT SPECIFIED TO BE REMOVED ON THESE PLANS.

 7. ALL CATCH BASINS PLACED WITHIN THE PAVEMENT SHALL HAVE HEAVY DUTY FRAMES AND GRATES AND
- CONFORM TO ADA REQUIREMENTS.
- 8. ADJUST ALL EXISTING CASTINGS AND CLEANOUTS WITHIN PROJECT AREA TO GRADE AS REQUIRED.
 9. ALL CATCH BASINS WITH DEPTH GREATER THAN 4.5' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
- 10. ALL STORM AND SANITARY SEWER MANHOLES WITH A DEPTH GREATER THAN 4' SHALL BE PROVIDED WITH STEPS. STEPS SHALL MEET THE REQUIREMENTS OF ODOT ITEM 611.
- 11.DISTANCES SHOWN FOR BOTH SANITARY AND STORM SEWER PIPES ARE MEASURED FROM CENTER OF STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR ACTUAL FIELD CUT LENGTH. COORDINATES FOR STORM AND SANITARY STRUCTURES ARE SHOWN TO THE CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
- 12.IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIP RAP, ROCK CHANNEL PROTECTION, SODDING, POURING BOTTOMS, MUDDING
- 13. ALL PROPOSED STORM SEWERS IN RIGHT-OF-WAY ARE TO MAINTAINED BY THE TOWNSHIP, ALL OTHER STORM SEWERS ARE TO BE PRIVATE AND MAINTAINED BY THE COMMUNITY AUTHORITY. EROSION CONTROL MEASURES MUST PROVIDE PROTECTION UNTIL COMPLETION OF THE PROJECT AND VEGETATIVE
- 14. THE CONTRACTOR IS TO CONSTRUCT CURBS, CATCH BASINS, DOWNSPOUTS, PIPING AND CONNECTIONS ETC.
 AS REQUIRED TO CONVEY THE ROOF AND PAVED SURFACE DRAINAGE TO THE DETENTION BASIN.

- 15.ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAR WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.
- 16. SITE CONTRACTOR SHALL PICK UP ALL UTILITIES, WITH THE EXCEPTION OF DOWNSPOUTS, 5' OUTSIDE BUILDING WALL. COORDINATE WITH CONSTRUCTION MANAGER.
- 17. ALL STORM STRUCTURES ARE ODOT TYPES UNLESS OTHERWISE INDICATED.
- 18. STORM SEWER PIPE LABELED "STM" SHALL BE ONE OF THE FOLLOWING: PVC SDR-35, PVC PROFILE PIPE PER ODOT ITEM 707.42, HIGH DENSITY POLYETHYLENE PER ODOT ITEM 707.33, ALUMINIZED CORRUGATED METAL, ODOT ITEM 707.01, 707.02, OR REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. STORM SEWER PIPE LABELED "RCP" SHALL BE REINFORCED CONCRETE PIPE, ODOT ITEM 706.02 CLASS IV. ALL STORM IS TO BE INSTALLED PER ODOT ITEM 611. ALL STORM PIPE USED MUST HAVE A MANUFACTURER SPECIFIED FRICTION FACTOR OF 0.013 (N=0.013) OR LESS. ALL STORM SEWER THAT IS UNDER STREET PAVEMENT WILL ONLY BE EITHER 706.02 (CONCRETE), 707.65 (SANITITE) FOR 24" DIAMETER OR SMALLER OR 707.69 (TRIPLE WALL) FOR 30" DIAMETER OR LARGER. TYPE 1,3 BACKFILL (SLAG IS PROHIBITED)
- 19. ALL CATCH BASINS IN THE PAVEMENT ARE TO HAVE 4, 4" PERFORATED UNDERDRAINS EXTENDING 10 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED. ALL CATCH BASINS IN THE CURB ARE TO HAVE 2, 4" PERFORATED UNDERDRAINS EXTENDING 10 LF FROM THE CATCH BASIN IN THE UPHILL DIRECTION AND CAPPED.
- 20.FOR EXACT LOCATION OF DOWN SPOUTS & ROOF DRAINS, COORDINATE WITH CONSTRUCTION MANAGER. ALL ROOF DRAINS ARE TO BE 8" UNLESS OTHERWISE NOTED.
- 21.ALL YARD DRAINS SHALL BE ONE OF THE FOLLOWING: NYLOPLAST-ADS DRAIN BASIN, NDS DURACAST FABRICATED PVC CATCH BASIN, AGRI-DRAIN CATCH BASIN, OR APPROVED EQUAL.
- 22.ALL EXISTING INVERTS ALONG THE PROPOSED TOP OF CASTING ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF THE SEWER.
- 23.ANY FIELD TILE CUT IN EXCAVATION WHICH DRAINS IN AN OFFSITE AREA MUST BE TIED INTO THE STORM DRAINAGE SYSTEM.
- 24.THE FLOW IN ALL SEWERS, DRAINS, FIELD TILES AND WATERCOURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND WHENEVER SUCH WATERCOURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF THE WORK, THEY SHALL BE RESTORED BY THE

CONTRACTOR AT HIS OWN EXPENSE TO A CONDITION SATISFACTORY TO THE ENGINEER.

- 25.SANITARY SEWER MATERIALS AND INSTALLATION SHALL BE PER BUTLER COUNTY WATER AND SEWER SPECIFICATIONS, USING: SECTION 3110 FOR PVC, SDR-35 & 26 PIPE; SECTION 3140 FOR ABS OR PVC COMPOSITE PIPE; SECTION 3410 FOR MANHOLES. SANITARY SEWER SHALL BE INSTALLED AT A MINIMUM DEPTH OF FOUR FEET (4') UNLESS OTHERWISE NOTED. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED AT ALL WATERLINE CROSSINGS. SANITARY SERVICE JOINTS SHALL CONFORM TO ASTM D-3212.
- 26. SANITARY SEWER SHALL BE BEDDED AND BACKFILLED PER BUTLER COUNTY WATER AND SEWER SPECIFICATION SECTION 3730 WHEN OUTSIDE OF PUBLIC RIGHT-OF-WAY OR ALLEYS. WHEN SANITARY SEWER IS WITHIN PROPOSED OR FUTURE PUBLIC RIGHT-OF-WAY OR ALLEYS TRENCH BACKFILL SHALL BE PER WARREN COUNTY SPECIFICATION.
- 27.DEVELOPER SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONDUITS AS PER WARREN COUNTY STANDARDS FOR USE BY THE ELECTRIC, TELEPHONE AND CABLE TV SERVICES. THE LOCATION OF THE LINES SHALL BE COORDINATED WITH UTILITY COMPANIES BY THE DEVELOPER.
- 28.ALL WATER CONSTRUCTION MUST BE IN ACCORDANCE WITH THE "DETAILED CONSTRUCTION DRAWINGS" AS ESTABLISHED BY THE BOARD OF WARREN COUNTY COMMISSIONERS BY RESOLUTION NO. 87-1103 AND SUBSEQUENTLY AMENDED. THESE "DRAWINGS" SHALL SUPERSEDE ANY GENERAL NOTE OR DETAIL SHOWN ON THESE PLANS AND SHALL CONTROL ALL ASPECTS OF CONSTRUCTION.
- 29. WATER MAIN MATERIALS, VALVES, FIRE HYDRANTS, FITTINGS AND APPURTENANCES AND INSTALLATION TO BE AS PER WARREN COUNTY SPECIFICATIONS, USING CLASS 52 DUCTILE IRON WITH V-BIO ENHANCED POLYETHYLENE ENCASEMENT AS PER AWWA SPECIFICATION C-151 WITH 4.5' MINIMUM COVER.
- 30.MINIMUM 10' HORIZONTAL, 24" VERTICAL SEPARATION BETWEEN WATER MAIN AND SANITARY AND/OR STORM SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE LOCATED SO THE JOINTS ARE AS FAR FROM THE STORM AND SANITARY SEWERS AS POSSIBLE.
- 31. WARREN COUNTY WATER AND SEWER DEPARTMENT DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE RELOCATION, REPAIR, OR REPLACEMENT OF ANY OTHER UTILITY INSTALLED WITHIN FIVE (5) FEET OF THE CENTER LINE OF ANY WATER MAIN.
- 32.BUTLER COUNTY WATER AND SEWER DEPARTMENT DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE RELOCATION, REPAIR, OR REPLACEMENT OF ANY OTHER UTILITY INSTALLED WITHIN FIVE (5) FEET OF THE CENTER LINE OF ANY SANITARY SEWER MAIN.
- 33. SANITARY LATERALS SHALL BE EXTENDED TO AT LEAST TEN (10) FEET BEYOND THE PROPERTY / RIGHT-OF-WAY LINE OR TO THE EDGE OF THE EASEMENT WHICHEVER IS GREATER.
- 34.ALL BUILDINGS TO BE SERVED BY THE PUBLIC SEWER SYSTEM SHALL BE CONSTRUCTED SO AS TO PROVIDE A MINIMUM OF FOUR FEET OF VERTICAL SEPARATION BETWEEN THE PUBLIC SANITARY SEWER, AT THE POINT OF CONNECTION AND THE LOWEST BUILDING LEVEL SERVED BY GRAVITY SEWER CONNECTION. IN ADDITION, SAID BUILDING LEVEL SHALL BE AT LEAST ONE (1) FOOT ABOVE THE LOWEST POINT OF FREE-OVERFLOW (NON-SEATED MANHOLE COVER) UPSTREAM OF ANY TREATMENT FACILITY OR WASTEWATER PUMPING FACILITY THAT RECEIVES THE DISCHARGE FROM SAID BUILDING. SAID MINIMUM SERVICE LEVELS SHALL BE RECORDED ON THE "RECORD DRAWING" PLANS FOR THE DEVELOPMENT, WHICH WILL BE KEPT ON FILE IN THE OFFICE OF THE BUTLER COUNTY WATER & SEWER DEPARTMENT.
- 35.ALL WATER MAIN VALVES ARE TO HAVE A MINIMUM DEPTH OF 2.5' FROM THE PROPOSED GRADE TO THE TOP OF THE VALVE OPERATING NUT.
- 36.ALL DISTURBED AREAS CREATED DURING CONSTRUCTION ARE TO BE SEEDED AS SOON AS POSSIBLE TO LIMIT EROSION AND STABILIZE SOIL.
- 38.RESTRAINING JOINTS ARE REQUIRED A MINIMUM OF 60' BEFORE AND AFTER ALL BENDS PER WARREN COUNTY WATER AND SEWER SPECIFICATIONS.

37.CONTRACTOR SHALL INCLUDE COST OF COUNTY INSPECTION AND EXTENSION FEES IN UNIT PRICE BID.

- 39.A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE WARREN COUNTY ENGINEER'S OFFICE.
- 40.A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE WARREN COUNTY WATER & SEWER DEPARTMENT.
- 41.A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE BUTLER COUNTY WATER & SEWER DEPARTMENT.42.CLEANOUTS REQUIRED AT END OF SUMP MAIN AND LOCATIONS WHERE THE LENGTH OF THE MAIN EXCEEDS 200 FEET PER WARREN COUNTY STORMWATER MANAGEMENT REGULATIONS.
- 43.ODOT ITEM 304 IS NOT TO BE PLACED UNTIL WCEO HAS REVIEWED AND APPROVED A GEOTECHNICAL EVALUATION OF THE SUBBASE.
- 44.PRIVATE DRIVEWAYS, PARKING LOTS AND OTHER PAVED AREAS, EARTHEN BERMS OR STRUCTURES SHOULD NOT BE CONSTRUCTED OVER PRIVATE SEWER SERVICE LINES WITHIN THE PUBLIC ROAD RIGHT OF WAY OR WITHIN THE EASEMENTS AREAS FOR PUBLIC UTILITIES. SHOULD THIS OCCUR, THE PROPERTY OWNER SHALL BE HELD RESPONSIBLE FOR THE PROTECTION AND REPAIR AND FOR PROVIDING ACCESS TO ANY MANHOLES, CLEANOUTS, ETC. INSTALLED IN CONJUNCTION WITH THESE PRIVATE SERVICE LINES AND FOR ANY DAMAGE OR RESTORATION OF THE PAVED SURFACES OR STRUCTURES THAT MAY RESULT FROM THE FUTURE OPERATION MAINTENANCE REPAIR OR REPLACEMENT OF SAID SERVICE LINES AND APPURTENANCES.
- 45.SANITARY SEWER LATERALS, WHICH SHALL INCLUDE ALL PIPE AND APPURTENANCES FROM THE BUILDING TO THE PUBLIC SEWER MAIN AND THE CONNECTION TO THE PUBLIC SEWER MAIN SHALL BE CONSIDERED PRIVATE AND THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN. THE CONNECTION TO THE SEWER SHALL BE ANY PIPING THAT EXTENDS OUT FROM THE MAIN BRANCH OF THE SANITARY MAIN.
- 46.ANY CHANGES TO THE PLANS SHALL BE APPROVED BY JURISDICTION PRIOR TO CONSTRUCTION.
- 47.ALL TRENCHES UNDER THE PAVEMENT SHALL BE BACKFILLED WITH EITHER COMPACTED NATIVE MATERIAL, COMPACTED GRANULAR MATERIAL, OR CONTROLLED DENSITY FILL. IF SETTLEMENT OCCURS, THE TRENCH SHALL BE EXCAVATED BACK TO THE CONDUITS BEDDING AND CONTROLLED DENSITY FILL USED TO BACKFILL THE TRENCH. THE CONTROLLED DENSITY FILL SHALL BE APPLIED FROM BACK OF CURB TO BACK OF CURB.

COUNTY CONSTRUCTION PROCEDURE AND MATERIALS

- 101 A PRE-CONSTRUCTION MEETING INCLUDING THE SUBDIVIDER'S CONTRACTOR AND THE WARREN COUNTY ENGINEER'S REPRESENTATIVE(S) IS REQUIRED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES ON FUTURE PUBLIC INFRASTRUCTURE AND/OR ANY WORK TO BE PERFORMED WITHIN THE CURRENT ROAD RIGHT-OF-WAY AREAS.
- ALL WORK AND MATERIALS SHALL CONFORM TO THE CURRENT EDITION OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS) AND TO THE STANDARDS AND SPECIFICATIONS OF WARREN COUNTY, OHIO. MOST, IF NOT ALL, OHIO DEPARTMENT OF TRANSPORTATION STANDARD DETAILS ARE ACCEPTABLE MAY BE ACCEPTED AND/OR REQUIRED AT THE DISCRETION OF THE COUNTY ENGINEER.
- 103 A. PUBLIC ROAD RIGHT-OF-WAY AREAS SHALL BE PREPARED IN ACCORDANCE WITH ODOT CMS ITEM 201 CLEARING AND GRUBBING AND APPROVED BY THE COUNTY ENGINEER BEFORE THE CONTRACTOR BEGINS TO CONSTRUCT THEIR ROADWAY EMBANKMENT.
- B. POOR SUBGRADE MATERIAL MAY RESULT IN THE NEED FOR UNDERCUT, GRANULAR BACKFILL, AND UNDERDRAIN OF THE UNDERCUT AREA (IF NEEDED) WITHIN THE SCOPE AND LIMITS SPECIFIED BY THE COUNTY ENGINEER, OR ALTERNATELY, THE USE OF ODOT CMS #206 CHEMICALLY STABILIZED SUBGRADE THE SUBDIVIDER MAY ELECT TO CONSTRUCT EITHER OPTION WHERE BOTH WILL PROVIDE AN EFFECTIVE SOLUTION IN THE OPINION OF THE COUNTY ENGINEER.
- 104 INSPECTIONS AND TESTING
- A. OUTSIDE INDEPENDENT TESTING/INSPECTION: INSPECTIONS REQUIRED OF THE SUBDIVIDER DURING AND AFTER THE INSTALLATION OF IMPROVEMENTS SHALL BE MADE BY AN ODOT PREQUALIFIED INDEPENDENT TESTING LABORATORY TO ENSURE CONFORMITY WITH THE APPROVED PLANS AND SPECIFICATIONS AS REQUIRED BY THESE STANDARDS. THE ITEMS THAT REQUIRE INSPECTION ARE AS FOLLOWS:

- 1. STORM SEWERS AND APPURTENANCES. A VIDEO INSPECTION OF ALL STORM SEWER TO BE MAINTAINED BY A PUBLIC OR QUASI-PUBLIC ENTITY (SUCH AS A STORM WATER MANAGEMENT BOARD), OR STORM SEWER THAT WILL BE PRIVATELY MAINTAINED BY THE COMMUNITY AUTHORITY BUT THAT THE COUNTY ENGINEER HAS DETERMINED TO BE LOCATED SUCH THAT THE PRIVATE SEWER MIGHT ADVERSELY AFFECT THE PUBLIC DRAINAGE SYSTEM IF NOT ADEQUATELY CONSTRUCTED, WILL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO COUNTY ACCEPTANCE OF THE DEVELOPMENT INFRASTRUCTURE FOR PUBLIC MAINTENANCE. THE VIDEO INSPECTION WILL BE PERFORMED NO SOONER THAN 90-DAYS PRIOR TO THE FINAL PUNCH LIST WALK-THRU SCHEDULED WITH THE DEVELOPER'S REQUEST FOR COUNTY ACCEPTANCE OF THE DEVELOPMENT INFRASTRUCTURE FOR PUBLIC MAINTENANCE. ASSESSMENTS OF STORM SEWER, CULVERTS, AND APPURTENANCES ALONG WITH THE ACCOMPANYING VIDEO INSPECTION REPORTS SHALL BE PERFORMED IN ACCORDANCE WITH ODOT CMS 611 SPECIFICATIONS. ALL SEWER MAINS MUST BE CLEAN WITH NO PULLED OR SLIPPED JOINTS, AND NO CRACKED OR DAMAGED PIPE. IF REPAIRS ARE REQUIRED, A FOLLOW-UP VIDEO INSPECTION OF THE REPAIR AREA WILL BE SUBMITTED DOCUMENTING THAT THE STORM SEWER MAIN IS IN COMPLIANCE WITH ODOT CMS 611 SPECIFICATIONS UNLESS SPECIFICALLY WAIVED BY THE COUNTY ENGINEER. ALL INFORMATION MUST BE LEGIBLE, EASILY READ OR VIEWED, AND OF HIGH QUALITY.
- 2. 304 AGGREGATE BASE TEST IN ACCORDANCE WITH ODOT SS 878 OR MORE CURRENT RELATED ODOT CMS
- 3. 206 CHEMICALLY STABILIZED SUBGRADE (WHEN USED) TEST IN ACCORDANCE WITH ODOT SS 878 OR MORE CURRENT RELATED ODOT CMS SPECIFICATION.
- 4. 301 ASPHALT CONCRETE BASE AND TACK COAT DENSITY AND PAVEMENT LOAD AND ROLL TEMPERATURES DURING CONSTRUCTION. DEPTH CHECKS BY MEASUREMENT OF CORES, ONE CORE EVERY 300-LIN. FT. OF ROADWAY, WILL BE REQUIRED UNLESS SPECIFICALLY WAIVED BY THE COUNTY ENGINEER. COUNTY ENGINEER-APPROVED SUBGRADE AND 304 AGGREGATE DEPTH LOGS WILL BE ACCEPTED IN LIEU OF PAVEMENT CORES TO CHECK DEPTH ON CURB/GUTTER STREETS.
- 5. 448 SURFACE THICKNESS DENSITY AND PAVEMENT LOAD AND ROLL TEMPERATURES DURINGCONSTRUCTION. DEPTH CHECKS BY MEASUREMENT OF CORES, ONE CORE EVERY 300-LIN. FT. OF ROADWAY, WILL BE REQUIRED UNLESS SPECIFICALLY WAIVED BY THE COUNTY ENGINEER. COUNTY ENGINEER-APPROVED SUBGRADE AND 304 AGGREGATE DEPTH LOGS WILL BE ACCEPTED IN LIEU OF PAVEMENT CORES TO CHECK DEPTH ON CURB/GUTTER STREETS.
- 6. OTHER TESTING OF ASPHALT AT THE COUNTY ENGINEER'S DISCRETION, ADDITIONAL TESTING MAY BE REQUIRED ON THE PAVEMENT CORES TO VERIFY THAT THE ASPHALT MIX AND COMPACTED DENSITY CONFORMS WITH THE ODOT CMS SPECIFICATIONS
- B. INSPECTIONS DURING THE INSTALLATION OF ROADWAY MATERIALS SHALL BE PERFORMED BY THE COUNTY ENGINEER'S OFFICE. ITEMS THAT REQUIRE INSPECTION BY THE COUNTY ENGINEER'S REPRESENTATIVE ARE AS FOLLOWS:
- 1. STREET SUBGRADE. 24 HOURS PRIOR TO INSTALLATION OF THE CURB, 304 AGGREGATE BASE, AND 301 ASPHALT BASE COURSES. IN SUBDIVISIONS WITH CURB AND GUTTER STREETS, A SUBGRADE DEPTH LOG FROM CURB AT A MAXIMUM OF EVERY 50 LINEAR FEET MAY BE REQUIRED BY THE COUNTY ENGINEER AT THE COUNTY ENGINEER'S DISCRETION.
- 2. REVIEW OF ASPHALT TICKETS AND TEST REPORTS. A COPY OF MATERIAL DELIVERY TICKETS SHALL BE DELIVERED TO THE COUNTY ENGINEER WITHIN ONE WEEK OF CONSTRUCTING THESE ITEMS. COPIES OF THE TESTING RESULTS SPECIFIED IN SECTION 104.A.2, 3, 4, 5 (THESE ITEMS ARE REQUIRED BY THE COUNTY ENGINEER WITHIN ONE WEEK OF CONSTRUCTION) AND THE PAVEMENT CORE RESULTS (REQUIRED WITHIN ONE MONTH OF CONSTRUCTION), WILL BE EMAILED TO THE COUNTY ENGINEER'S DESIGNATED
- 3. NEW ROADWAY SIGNAGE INSTALLATION. SIGNAGE OR OTHER DEVICES THAT ARE INSTALLED IN CONFORMANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS PROVIDED IN THE PLANS FOR PERMANENT INSTALLATION AND DURING CONSTRUCTION AS SPECIFIED IN SECTION 108.
- ALL OUTSIDE INSPECTION COSTS SHALL BE PAID BY THE SUBDIVIDER. INSPECTION PERFORMED BY THE COUNTY ENGINEER'S OFFICE STAFF DURING NORMAL COUNTY ENGINEER'S OFFICE OPERATING HOURS IS PROVIDED AT NO COST TO THE SUBDIVIDER. IF THE COUNTY ENGINEER HAS DETERMINED DURING THE DESIGN, CONSTRUCTION OR WITHIN THE MAINTENANCE PERIOD PHASES, THAT THERE ARE DEFICIENCIES IN THE DESIGN, MATERIALS OR WORKMANSHIP, THE COUNTY COMMISSIONERS RESERVE THE RIGHT TO ADD TO THE REQUIREMENTS OUTLINED IN THESE STANDARDS AS NEEDED TO REMEDY THE DEFICIENCIES NOTED BY THE COUNTY ENGINEER.
- D. RESULTS AND/OR INPUT FROM THE TESTING FIRM OR THE DESIGN CONSULTING ENGINEER PROVIDED FOR THE PURPOSE OF IMPROVING THE QUALITY OF THE PROJECT WILL BE CONSIDERED BY THE COUNTY ENGINEER WITH THE FINAL DECISION TO BE MADE BY THE COUNTY ENGINEER.
- 105 INSPECTION AND TEST REPORTS SHALL BE IN WRITING WITH COPIES PROVIDED TO THE COUNTY ENGINEERS OFFICE WITHIN THE TIMEFRAMES SPECIFIED ABOVE IN SECTION 104.B.2. THE REPORTS SHALL CLEARLY IDENTIFY THE SUBDIVISION NAME, THE LOCATION OF APPLICABLE TEST AREAS, AND STREET NAMES. SAID REPORTS ARE THE BASIS FOR PERFORMANCE BOND REDUCTIONS, AND/OR STREET ACCEPTANCE. THE SUBDIVIDER'S REQUEST FOR A BOND REDUCTION FOR ROADWAY BASE AND PAVEMENT ITEMS CAN ONLY BE PROCESSED UPON THE COUNTY ENGINEER'S ACCEPTANCE AND APPROVAL OF THE INSPECTION AND TEST REPORTS PROVIDED BY THE SUBDIVIDER.

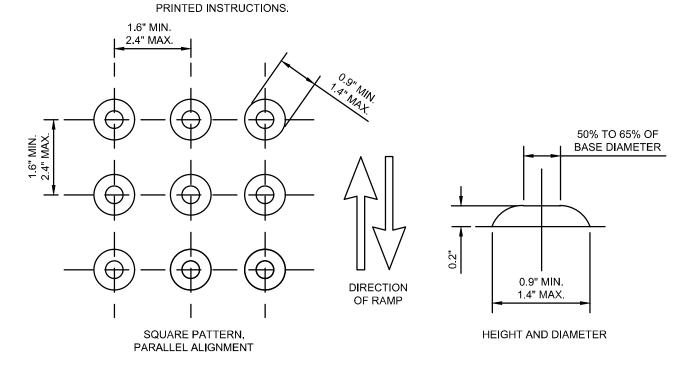
NOTES:

GENERAL

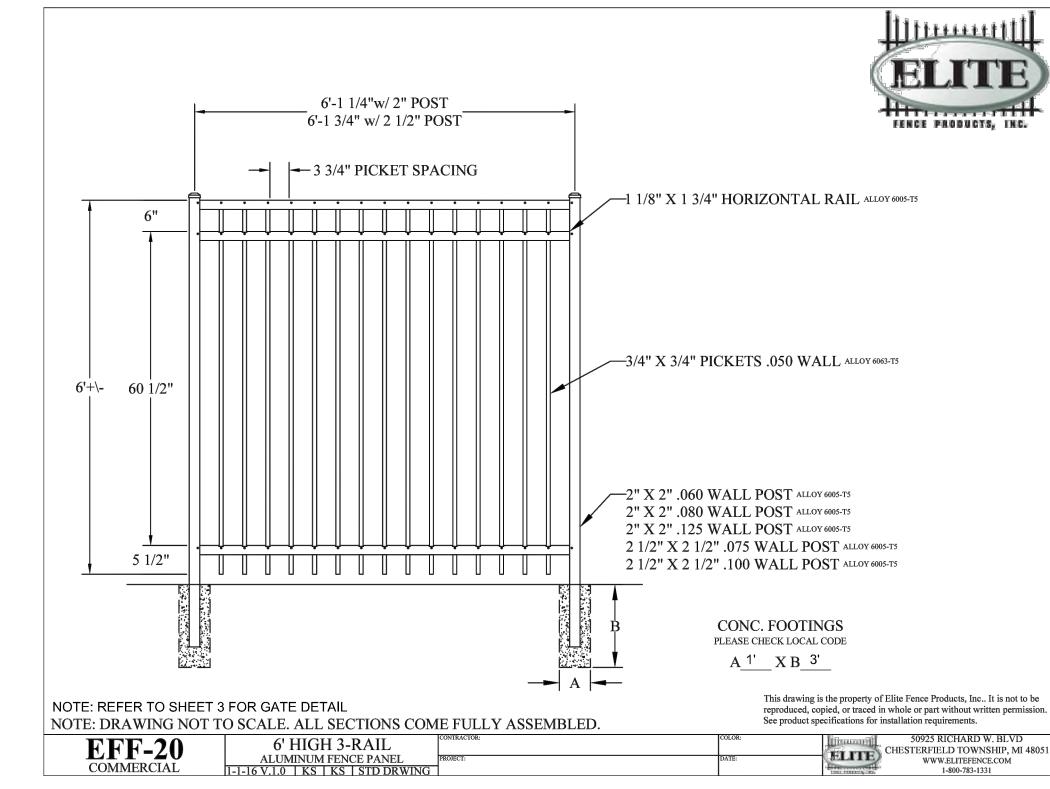
 DETECTABLE WARNINGS ARE A DISTINCTIVE SURFACE PATTERN OF TRUNCATED DOMES WHICH ARE DETECTABLE BY CANE OR UNDERFOOT TO ALERT PEOPLE WITH VISION IMPAIRMENTS OF THEIR APPROACH TO STREETS AND HAZARDOUS DROP-OFFS.

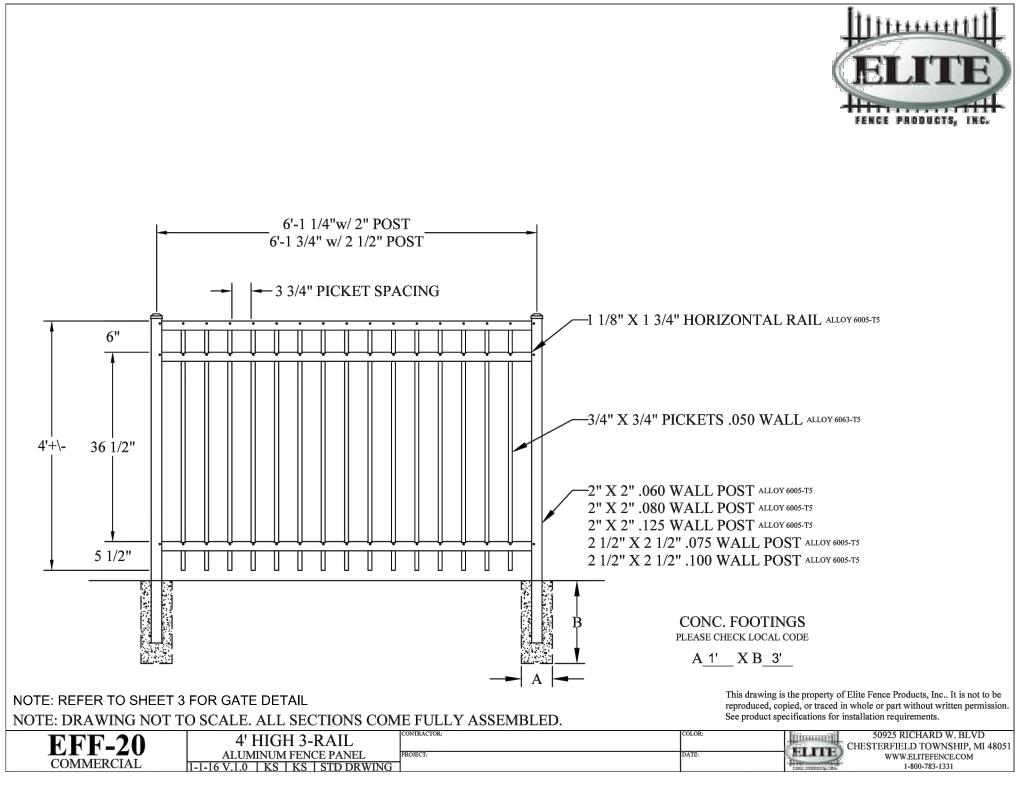
PLACEMENT

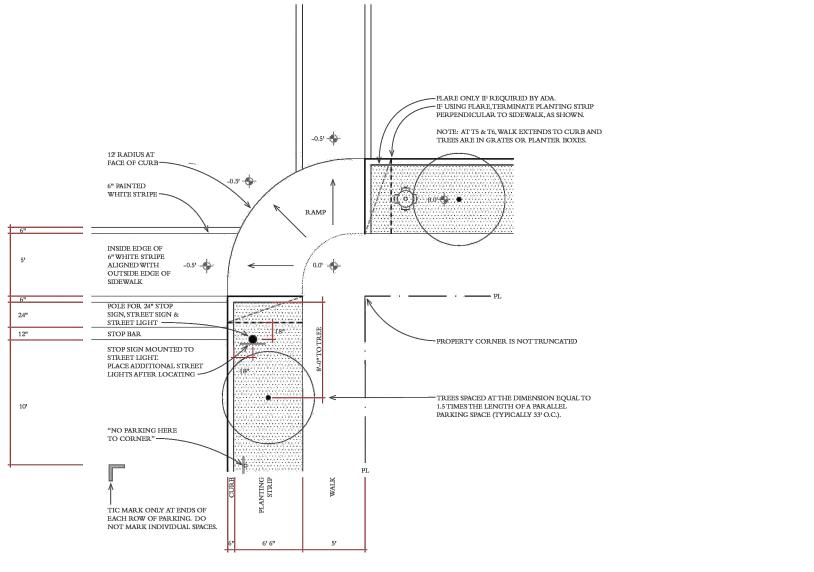
- 2. DETECTABLE WARNINGS ARE TO BE INSTALLED AT ANY LOCATION WHERE PEDESTRIANS MIGHT CROSS PATHS WITH VEHICULAR TRAFFIC LANES, SUCH AS THE BASE OF CURB RAMPS OR AT BLENDED CURBS. A 24" STRIP OF DOMES IS TO BE INSTALLED FOR THE FULL WIDTH OF THE RAMP OR WALK.
- 3. THE DEPTH OF CONCRETE UNDERNEATH DETECTABLE WARNING PRODUCTS SHALL BE A MINIMUM OF 4".
- PRODUCTS & COLORS (TO BE APPROVED BY OWNER)
- 4. COLOR OF THE DETECTABLE WARNINGS SHOULD CONTRAST WITH SURROUNDING CONCRETE WALK AND RAMP. BLACK IS NOT AN ACCEPTABLE COLOR. APPROVED PRODUCTS AND GUIDANCE ON COLOR MAY BE FOUND ON THE ODOT OFFICE OF ROADWAY ENGINEERING SERVICE'S DETECTABLE WARNINGS APPROVED LIST. INSTALL PRODUCTS AS PER MANUFACTURER'S



DETECTABLE WARNINGS DETAIL





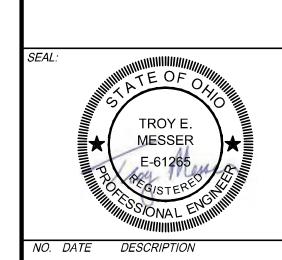


TYPICAL STREETSCAPE INTERSECTION DETAIL

CIVIL ENGINEERING
SURVEYING
LANDSCAPE
ARCHITECTURE

Www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

KLEINGERS



UNION VILLAGE COMMUNITY POOL

TURTLECREEK TOWNSHIP

WARREN COUNTY, OHIO

 PROJECT NO:
 140217.026

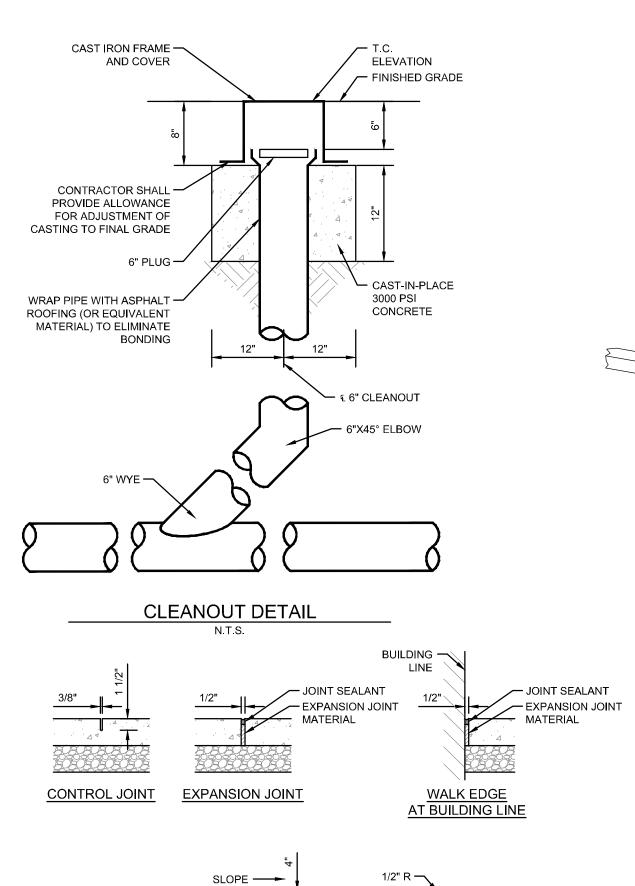
 DATE:
 2025/06/13

 SCALE:

GENERAL NOTES & DETAILS

HEET NO.

SHEET NAME:



SLOPE 1/2" R

5" ODOT
ITEM 304

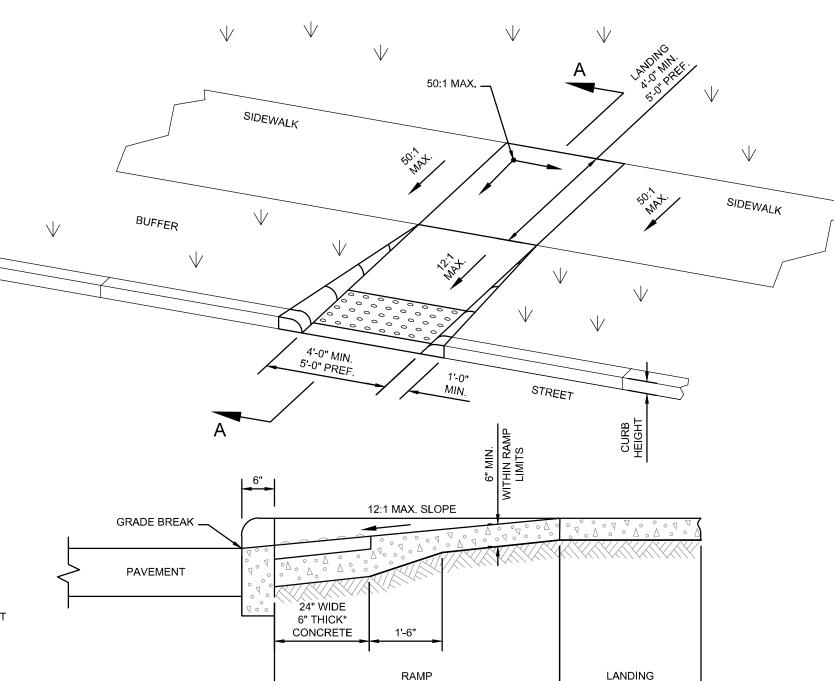
WALK TYPICAL SECTION

WALK EDGE
AT LAWN AREA

NOTES:

- INSTALL EXPANSION JOINTS AT 30' OC MAXIMUM AND WHERE SLAB ABUTS STRUCTURES. WHERE NEW WALK ABUTS ADJOINING WALK, SAWCUT EXISTING WALK TO NEAREST JOINT AND INSTALL EXPANSION JOINT. EXPANSION JOINTS SHALL BE 1/2" WIDE BY DEPTH OF SLAB. SEAL ALL EXPANSION JOINTS.
- INSTALL CONTROL JOINTS AT 6' OC MAXIMUM. CONTROL JOINTS SHALL BE 3/8" WIDE BY 1 1/2" DEEP AND TOOLED, SAWED JOINTS ARE NOT PERMITTED.
- 3. WALK SHALL HAVE A MINIMUM CROSS SLOPE OF 1.00%, MAXIMUM CROSS SLOPE OF 2.00%.
- WATER AND UTILITY BOXES IN THE WALK AREA SHALL BE ADJUSTED FLUSH WITH THE FINAL SURFACE.
- 5. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL DETAIL AT ALL BUILDING
- 6. JOINTING PLANS MUST BE SUBMITTED FOR APPROVAL.

EXTERIOR CONCRETE SLAB WALK DETAIL



SECTION A-A

NOTES:

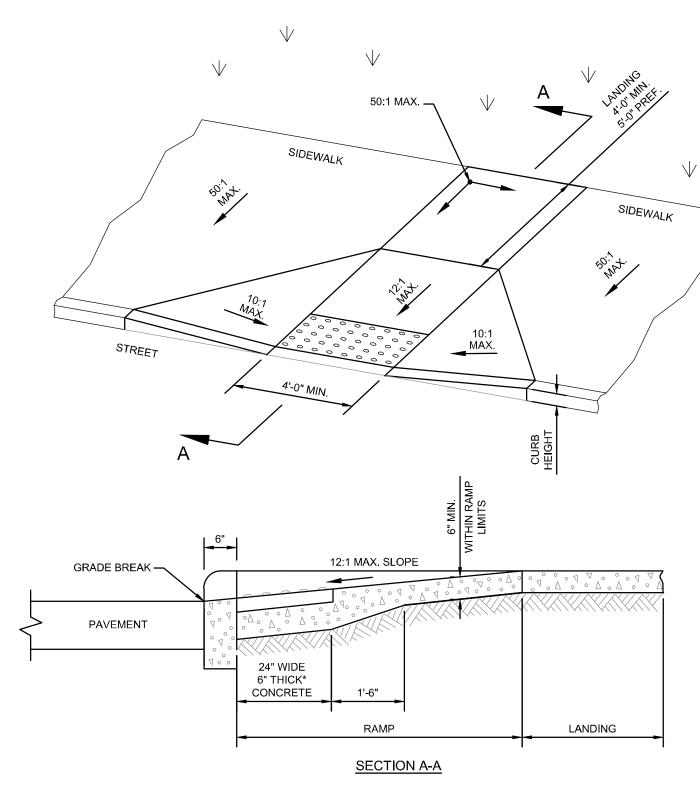
- WHILE RAMPS MAY BE SKEWED TO THE CROSSWALK, THE ENTIRE LOWER LANDING AREA MUST FALL WITHIN THE CROSS WALK THAT THE RAMP SERVES AND CANNOT BE LOCATED IN THE TRAVELED LANE OF OPPOSING TRAFFIC.
- THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, LANDING, OR BLENDED TRANSITIONS SHALL BE 20:1 OR FLATTER.
- 3. THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.
- 4. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER AND SURFACE SLOPES THAT MEET GRADE BREAKS SHALL ALSO BE FLUSH.
- 5. RAMP LANDINGS SHALL BE 4' MIN. X 4' MIN. WITH A 50:1 OR FLATTER CROSS SLOPE AND RUNNING SLOPE.

MANUFACTURER'S WRITTEN INSTRUCTIONS.

- 6. **DETECTABLE WARNINGS:** INSTALL DETECTABLE WARNINGS ON EACH CURB RAMP WITH APPROVED MATERIALS, AS SHOWN IN SEPARATE DETAIL. INSTALL THESE PROPRIETY PRODUCTS AS PER
- 7. DRAINAGE: CONTRACTOR IS TO ENSURE THE BASE OF EACH CONSTRUCTED CURB RAMP ALLOWS FOR PROPER DRAINAGE, WITHOUT EXCEEDING ALLOWABLE CROSS SLOPE OR RAMP SLOPES. VERTICAL CHANGE IN LEVEL EXCEEDING ½" BETWEEN THE 1) PAVEMENT AND GUTTER, AND 2) GUTTER AND RAMP, ARE NOT
- 8. SURFACE TEXTURE: TEXTURE CONCRETE SURFACES BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES TO BE ROUGHER THAN THE ADJACENT WALK.
- 9. JOINTS: PROVIDE EXPANSION JOINTS IN THE CURB RAMP AS EXTENSIONS OF WALK JOINTS AND CONSISTENT WITH ITEM 608.03 REQUIREMENTS FOR A NEW CONCRETE WALK. PROVIDE A ½" ITEM 705.03 EXPANSION JOINT FILLER AROUND THE EDGE OF RAMPS BUILT IN EXISTING CONCRETE WALKS. LINES SHOWN ON THIS DRAWING INDICATE THE RAMP EDGES AND SLOPE CHANGES, AND DO NOT NECESSARILY INDICATE JOINT LINES.

*WHERE POSSIBLE, POUR RAMP AREA INTEGRAL WITH THE CURB, OTHERWISE USE 6" THICK WALK.

CURB RAMP DETAIL - PERPENDICULAR WITH RETURNED CURB



NOTES:

- WHILE RAMPS MAY BE SKEWED TO THE CROSSWALK, THE ENTIRE LOWER LANDING AREA MUST FALL WITHIN THE CROSS WALK THAT THE RAMP SERVES AND CANNOT BE LOCATED IN THE TRAVELED LANE OF OPPOSING TRAFFIC.
- 2. THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, LANDING, OR BLENDED TRANSITIONS SHALL BE 20:1 OR
- THE BOTTOM EDGE OF THE RAMP SHALL CHANGE PLANES PERPENDICULAR TO THE LANDING.
- 4. THE EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER AND SURFACE SLOPES THAT MEET GRADE BREAKS SHALL ALSO BE FLUSH.
- 5. RAMP LANDINGS SHALL BE 4' MIN. X 4' MIN. WITH A 50:1 OR FLATTER CROSS SLOPE AND RUNNING
- 6. DETECTABLE WARNINGS: INSTALL DETECTABLE WARNINGS ON EACH CURB RAMP WITH APPROVED MATERIALS, AS SHOWN IN SEPARATE DETAIL. INSTALL THESE PROPRIETY PRODUCTS AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 7. DRAINAGE: CONTRACTOR IS TO ENSURE THE BASE OF EACH CONSTRUCTED CURB RAMP ALLOWS FOR PROPER DRAINAGE, WITHOUT EXCEEDING ALLOWABLE CROSS SLOPE OR RAMP SLOPES. VERTICAL CHANGE IN LEVEL EXCEEDING %" BETWEEN THE 1) PAVEMENT AND GUTTER, AND 2) GUTTER AND RAMP, ARE NOT ALLOWED.
- 8. SURFACE TEXTURE: TEXTURE CONCRETE SURFACES BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES TO BE ROUGHER THAN THE ADJACENT WALK.
- 9. JOINTS: PROVIDE EXPANSION JOINTS IN THE CURB RAMP AS EXTENSIONS OF WALK JOINTS AND CONSISTENT WITH ITEM 608.03 REQUIREMENTS FOR A NEW CONCRETE WALK. PROVIDE A ½" ITEM 705.03 EXPANSION JOINT FILLER AROUND THE EDGE OF RAMPS BUILT IN EXISTING CONCRETE WALKS. LINES SHOWN ON THIS DRAWING INDICATE THE RAMP EDGES AND SLOPE CHANGES, AND DO NOT NECESSARILY INDICATE JOINT LINES.

*WHERE POSSIBLE, POUR RAMP AREA INTEGRAL WITH THE CURB, OTHERWISE USE 6" THICK WALK.

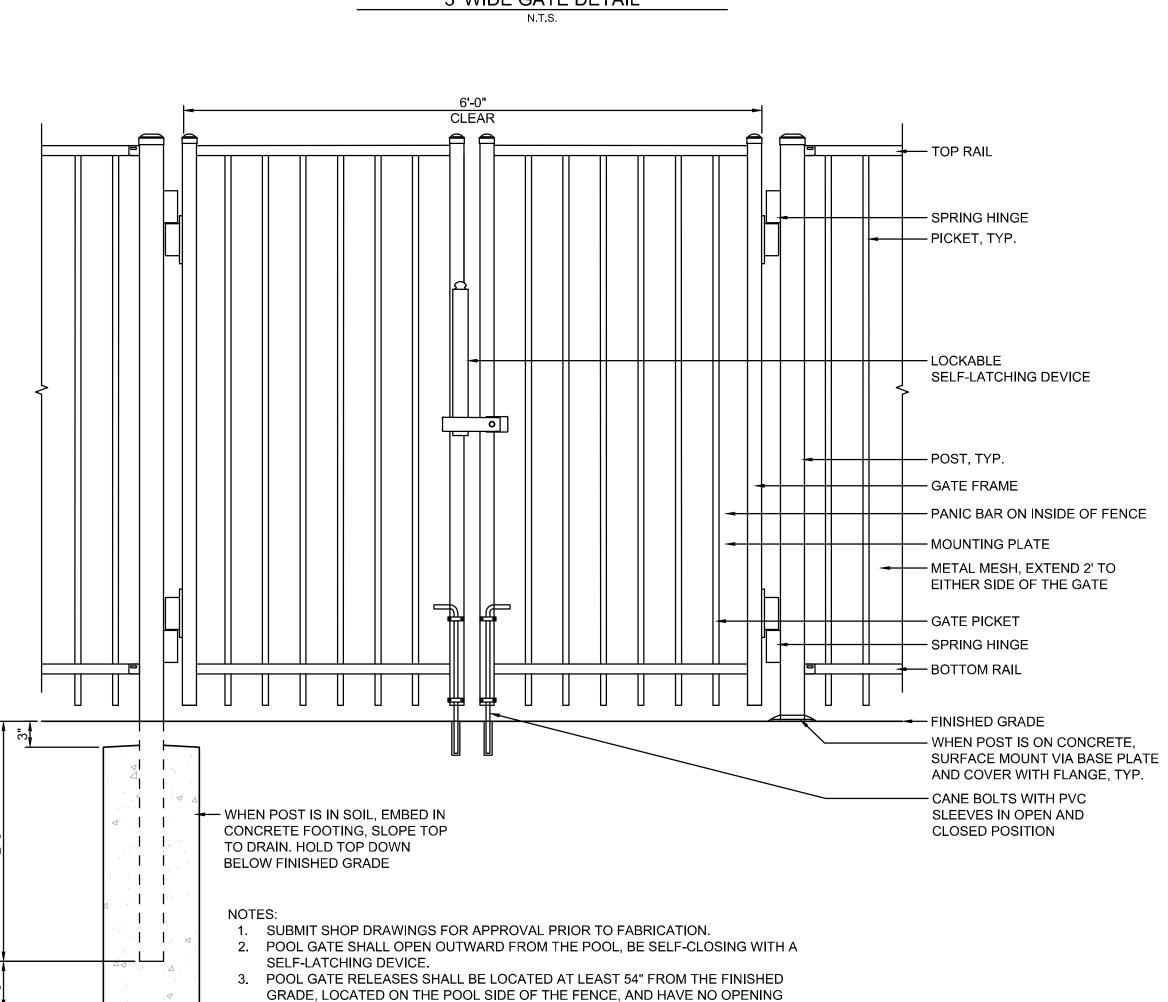
CURB RAMP DETAIL - PERPENDICULAR WITH FLARED SIDES

- LOCKABLE SELF-LATCHING DEVICE ---- POST, TYP. — GATE FRAME — PANIC BAR ON INSIDE OF FENCE — MOUNTING PLATE ← METAL MESH, EXTEND 2' TO EITHER SIDE OF THE GATE — GATE PICKET SPRING HINGE → FINISHED GRADE WHEN POST IS ON CONCRETE, SURFACE MOUNT VIA BASE PLATE AND COVER WITH FLANGE, TYP. ── WHEN POST IS IN SOIL, EMBED IN CONCRETE FOOTING, SLOPE TOP TO DRAIN. HOLD TOP DOWN BELOW FINISHED GRADE 1. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. 2. POOL GATE SHALL OPEN OUTWARD FROM THE POOL, BE SELF-CLOSING WITH A 3. POOL GATE RELEASES SHALL BE LOCATED AT LEAST 54" FROM THE FINISHED GRADE, LOCATED ON THE POOL SIDE OF THE FENCE, AND HAVE NO OPENING GREATER THAN 1/2" WITHIN 18" OF THE RELEASE MECHANISM. 4. 4' HEIGHT INTERIOR GATE DOES NOT REQUIRE SELF LATCHING DEVICE. 3' WIDE GATE DETAIL SPRING HINGE PICKET, TYP. -LOCKABLE SELF-LATCHING DEVICE

3'-0" CLEAR

SPRING HINGE

PICKET, TYP.

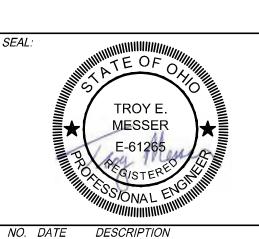


GREATER THAN 1/2" WITHIN 18" OF THE RELEASE MECHANISM.

6' WIDE GATE DETAIL



LANDSCAPE 6219 Centre Park Dr. West Chester, OH 4506 513.779.7851



UNION VILLAGE COMMUNITY POOL

TURTLECREEK TOWNSHIP WARREN COUNTY, OHIO

PROJECT NO: 140217.026

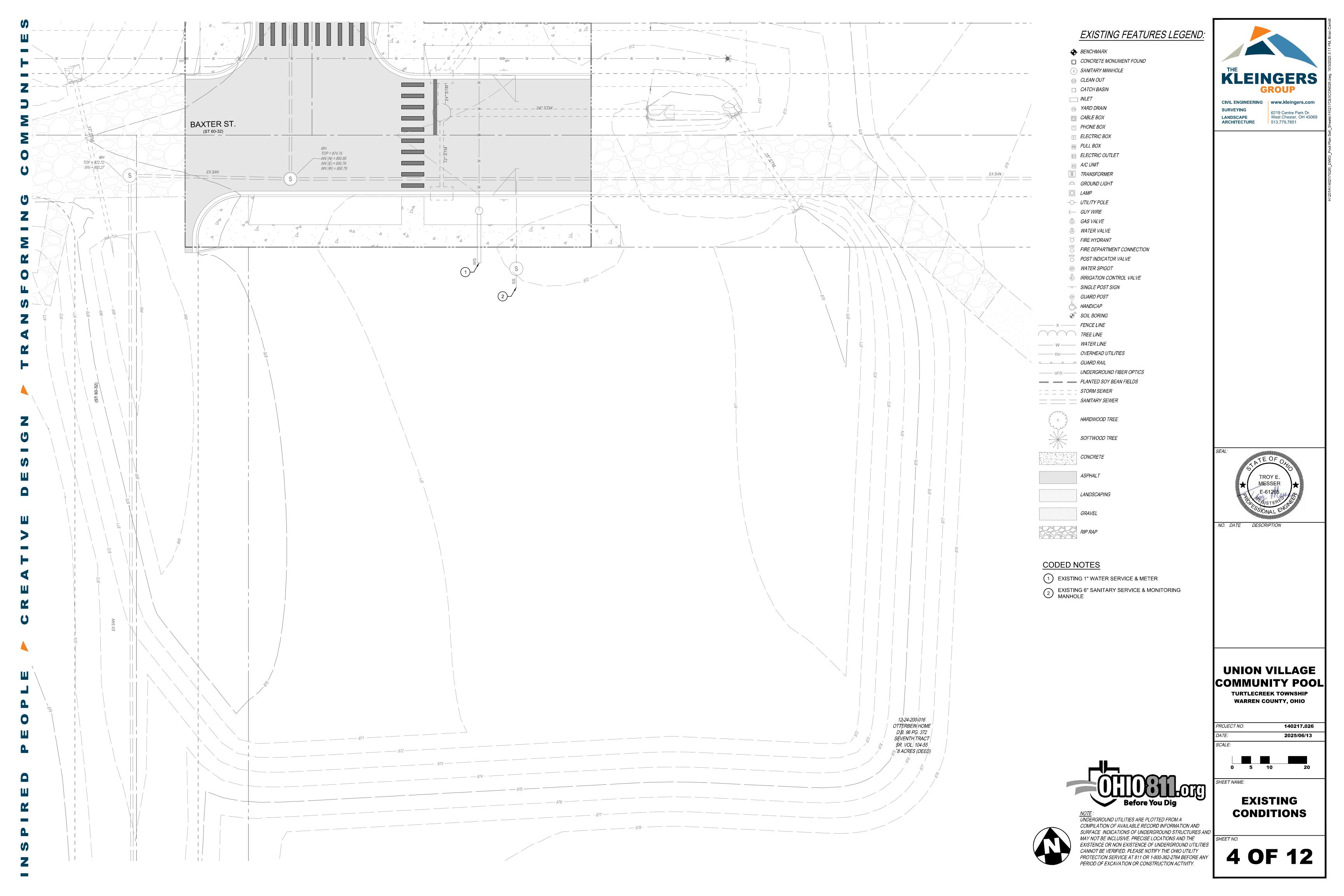
DATE: 2025/06/13

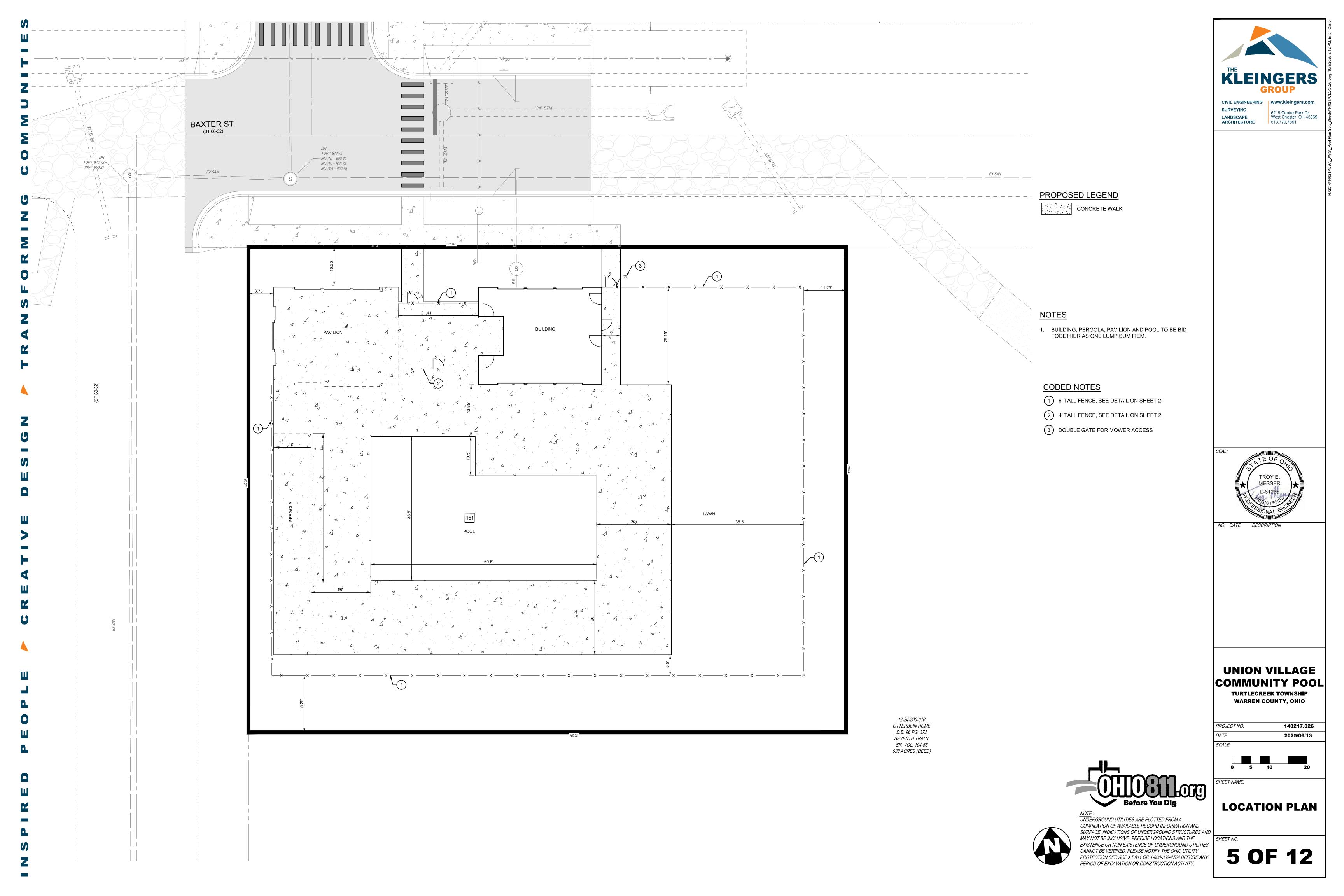
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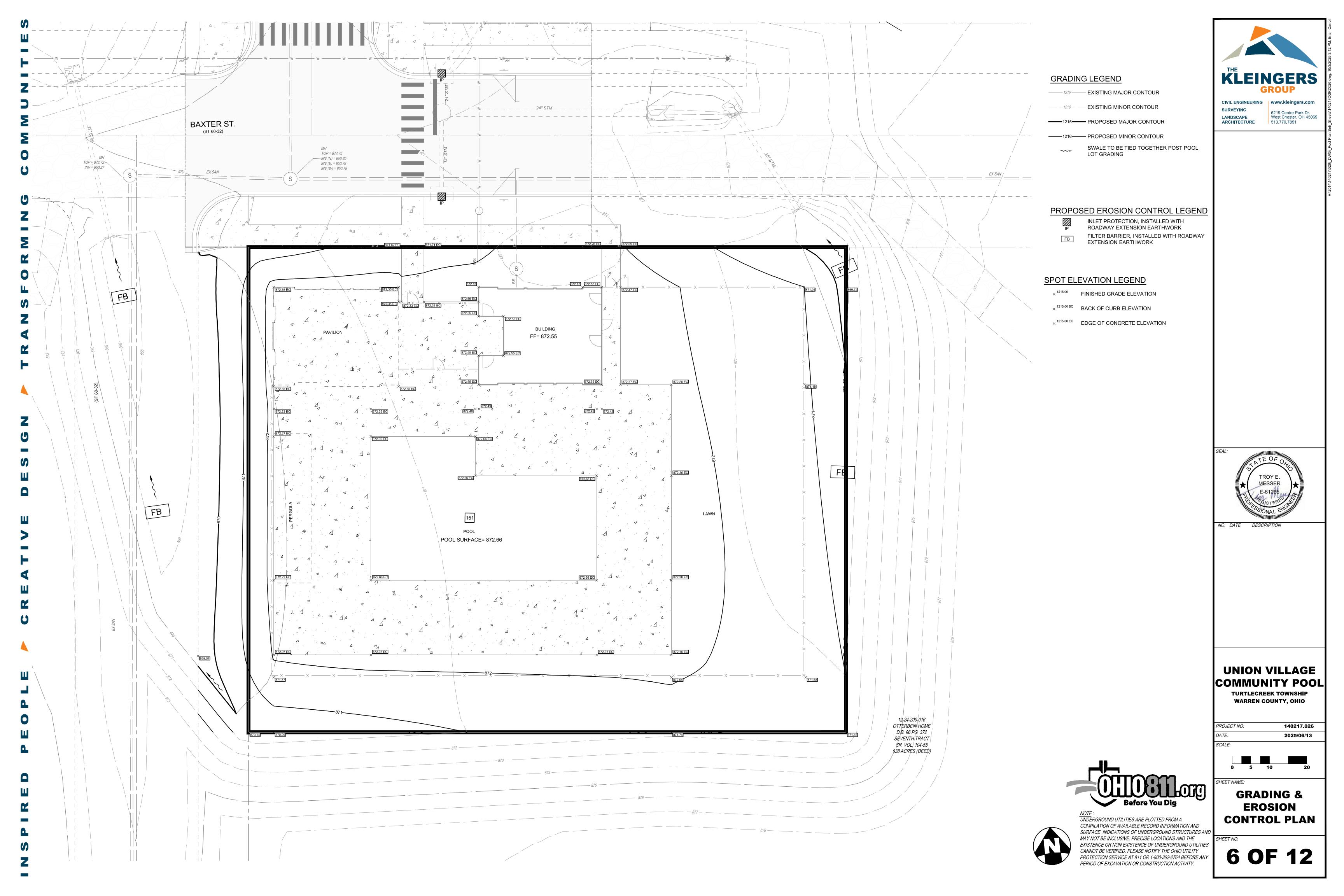
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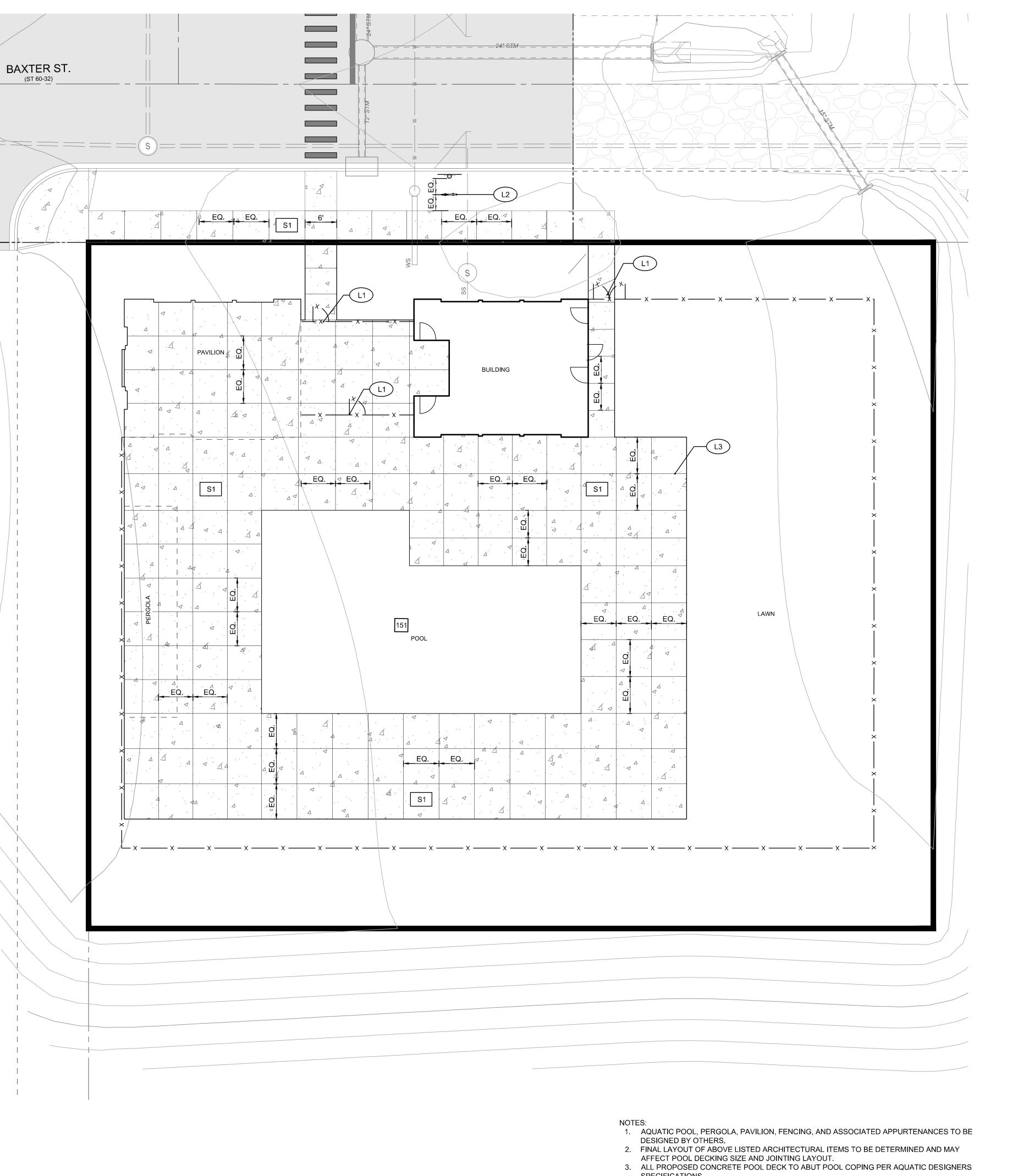
MISCELLANEOUS DETAILS

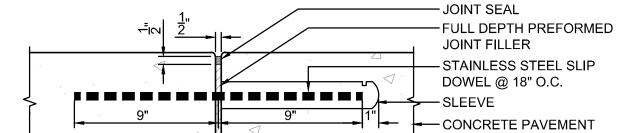
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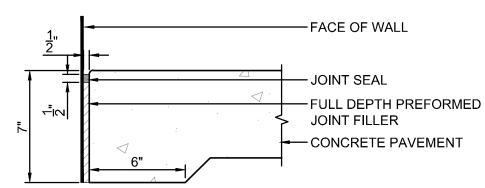




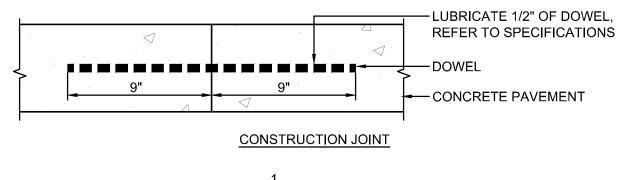


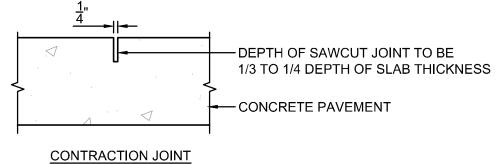


ISOLATION JOINT

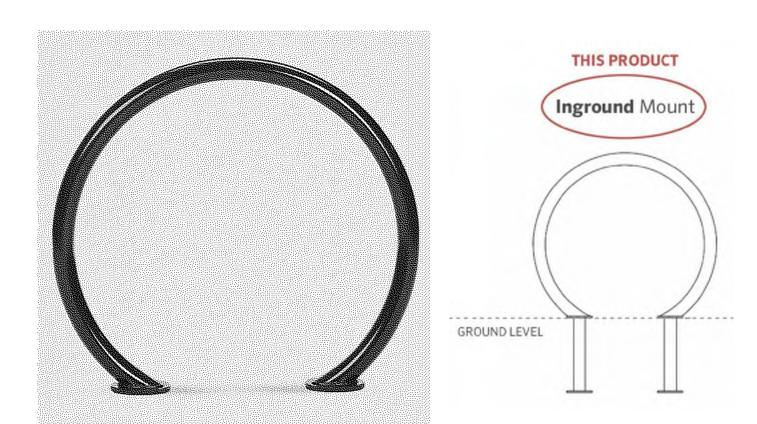


ISOLATION JOINT AT WALLS





1 CONCRETE JOINTS



NOTES:

- MANUFACTURER: ANOVA
 ITEM #: CIRCLEBRING
- 3. FINISH: POWDER COATED BLACK
- 4. MOUNTING : INGROUND MOUNT5. SUBMIT SHOP DRAWINGS FOR APPROVAL.
- 6. INSTALL PER MANUFACTURER'S RECOMMENDATION.

BIKE RACK
N.T.S.

<u>END</u>

■ ■ ■ RIGHT OF WAY

SURFACE ITEMS



LANDSCAPE ITEMS

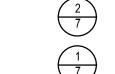
4. CONTRACTOR TO SUBMIT JOINTING LAYOUT WITH APPROVED POOL, PERGOLA, PAVILION, AND

FENCING ONCE THE DESIGN IS FINALIZED.

L1 X — FENCE AND GATES, SEE CIVIL DRAWINGS



CONCRETE JOINT, TYP.





Before You Dig

NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A
COMPILATION OF AVAILABLE RECORD INFORMATION AND
SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND
MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE
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PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY
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SURVEYING 6219 Centre Park Dr.
West Chester, OH 45069
ARCHITECTURE 513.779.7851

MICHAEL

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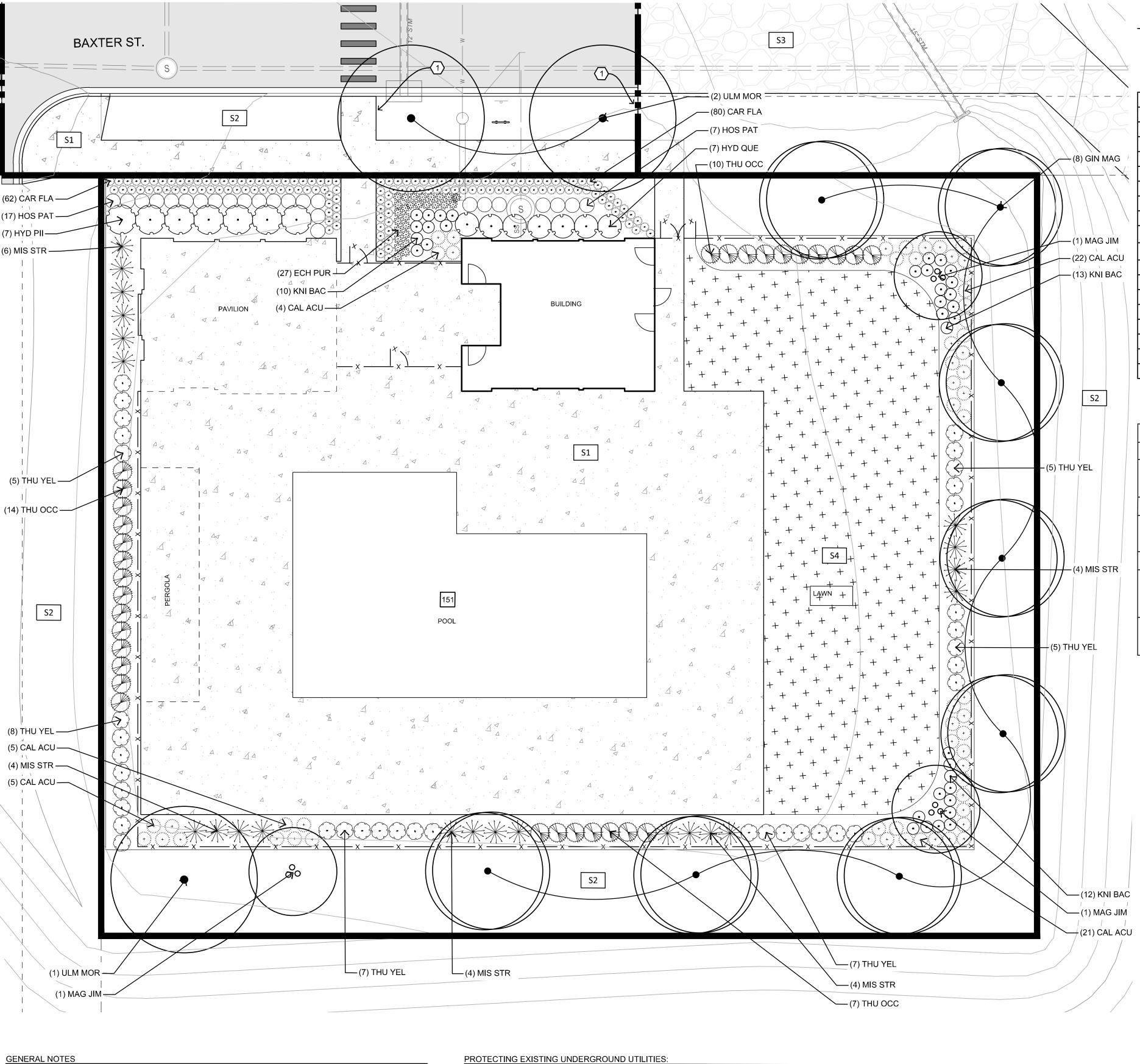
UNION VILLAGE COMMUNITY POOL

> TURTLECREEK TOWNSHIP WARREN COUNTY, OHIO

0 5 10 20

'AME:

HARDSCAPE PLAN



FOR PLANTING DETAILS AND NOTES, SEE SHEET 9.

- 2. EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
- ALL CONCRETE FORMS SHALL BE FIELD STAKED AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO CONCRETE INSTALLATION.
- 5. ALL HORIZONTAL AND VERTICAL LAYOUT SHALL BE REVIEWED BY THE OWNER'S REPRESENTATIVE TO
- ENSURE GENERAL CONFORMANCE PRIOR TO CONSTRUCTION. PROVIDE AN ISOLATION JOINT WHERE CONCRETE PAVING ABUTS BUILDINGS, COLUMNS, AND
- STRUCTURES. VERIFY COLOR OF SEALANT WITH OWNER'S REPRESENTATIVE. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME
- FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS. 8. CONTRACTOR SHALL BE RESPONSIBLE TO CONSULT WITH SITE SUPERINTENDENT, APPROPRIATE AGENCIES, AND PLANS FOR LOCATION OF ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES.
- CONTRACTOR TO REPORT TO ENGINEER ANY ADDITIONAL UTILITY LINES FOUND DURING CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING, MARKING, OR OTHERWISE DESIGNATING THE LOCATIONS OF THE UNDERGROUND UTILITIES IN THE CONSTRUCTION AREAS IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH OF WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF PLANNED CONSTRUCTION. EXTREME CARE SHALL BE

EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.

TAKEN IN THE VICINITY OF THE EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ISOLATE, BRACE, SUPPORT, SHEET, ETC. AND PROTECT THE EXISTING UTILITY FROM MOVING EITHER HORIZONTALLY OR VERTICALLY. IF SUCH MOVEMENT DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, THEY SHALL REPAIR THE UTILITY AT HIS EXPENSE. THE CONTRACTOR MAY ELECT TO REMOVE AND RECONSTRUCT PORTIONS OF THE EXISTING

UTILITY AT THEIR OWN EXPENSE IF THEY SO DESIRES. SHOULD AN UNLOCATED OR AN EXTREME VARIANCE IN LOCATION OF A UTILITY BE ENCOUNTERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY FOR DIRECTIONS.

4. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE ENGINEER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICING HAS BEEN PROVIDED. COOPERATION WITH THE ENGINEER IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION IS ESSENTIAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THEIR WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING UTILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, THEY SHALL NOTIFY THE ENGINEER IMMEDIATELY AND REPLACE THE DAMAGED PORTION IMMEDIATELY, AND AT THEIR EXPENSE.

CONSTRUCTION NOTES:

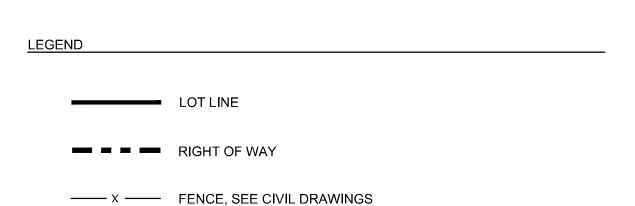
TREE LAWN TO BE MULCHED TO EXTENTS SHOWN.

PLANTING SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS			
DECIDUO	IDUOUS TREES:							
GIN MAG	GINKGO BILOBA 'MAGYAR'	MAGYAR GINKGO	2" CAL. MIN.	B&B	SPACE PER PLAN			
MAG JIM	MAGNOLIA V. 'JIM WILSON'	MOONGLOW SWEETBAY MAGNOLIA	5' HT. MIN.	B&B	MULTSTEM			
ULM MOR	ULMUS X 'MORTON' ACCOLADE	ACCOLADE ELM	2" CAL. MIN.	B&B	SPACE PER PLAN			
EVERGREEN TREES:								
THU OCC	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	6' HT. MIN.	B&B	SPACE 3' O.C.			
THU YEL	THUJA OCCIDENTALIS 'YELLOW RIBBON'	SKYROCKET JUNIPER	4' HT. MIN.	B&B	SPACE 3' O.C.			
DECIDUO	ECIDUOUS SHRUBS:							
HYD PII	HYDRANGEA QUERCIFOLIA 'PIIHQ-I'	JETSTREAM OAKLEAF HYDRANGEA	36" HT. MIN.	CONT.	SPACE 5' O.C.			
HYD QUE	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	24" HT. MIN.	CONT.	SPACE 4' O.C.			
PERENNIAL PLANTS:								
CAL ACU	CALAMAGROSTIS × ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	24" HT. MIN.	CONT.	SPACE 2.5' O.C.			
CAR FLA	CAREX FLACCA 'BLUE ZINGER'	BLUE ZINGER BLUE SEDGE	6" HT. MIN.	CONT.	SPACE 1.5' O.C.			
ECH PUR	ECHINACEA PURPUREA 'PAS702917'	POWWOW CONEFLOWER	12" HT. MIN.	CONT.	SPACE1.5' O.C.			
HOS PAT	HOSTA 'PATRIOT'	PATRIOT HOSTA	12" HT. MIN	CONT.	SPACE 3' O.C.			
KNI BAC	KNIPHOFIA X PYROMANIA 'BACKDRAFT'	BACKDRAFT RED HOT POKER	12" HT. MIN.	CONT.	SPACE 2' O.C.			
MIS STR	MISCANTHUS SINENSIS 'STRICTUS'	STRICTUS MAIDEN GRASS	24" HT. MIN.	CONT.	SPACE 4' O.C.			
TURFGRA	TURFGRASS SEED & SOD: SEE SPECIFICATIONS							

WARREN COUNTY LANDSCAPE ZONING REQUIREMENTS

	REQUIRED	PROPOSED				
SEC 3.102 ACCESSO	RY USES, BUILDINGS AND STRUCTURE STANDARDS					
SWIMMING POOL REQUIREMENTS [3.102.11]	SWIMMING POOLS SHALL BE SURROUNDED BY A WALL OR FENCE NOT LESS THAN SIX (6) FEET IN HEIGHT FOR COMMUNITY POOLS, WITH ACCESS GATES THAT ARE LOCKABLE, SELF-CLOSING, AND SELF-LATCHING.	SEE ARCHITEC DRAWINGS.				
CHAPTER 3 PARKING	, LOADING, AND CIRCULATION STANDARDS					
BICYCLE PARKING [SEC 3.305]	BICYCLE PARKING SHALL BE PROVIDED AT COMMUNITY CLUBHOUSES/POOL COMPLEXES IN SINGLE-FAMILY AND MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS.	BICYCLE PARKING PROVIDED.				
CHAPTER 4 LANDSCAPING AND SCREENING REQUIREMENTS						
BUFFERING AND SCREENING REQUIREMENTS [SEC 3.405]	TREES ARE REQUIRED AT A RATE OF ONE (1) TREE PER FORTY (40) FEET OF FRONTAGE WITH A MINIMUM OF ONE (1) TREE PER PARCEL.	STREET TREES PROVIDED.				
MINIMUM REQUIREMENTS NOTES [4]	AT THE TIME OF PLANTING DECIDUOUS TREES SHALL BE A MINIMUM OF ONE AND THREE FOURTHS INCH (1 ¾") DIAMETER AND EVERGREENS SHALL BE A MINIMUM HEIGHT OF FIVE (5) FEET.	PROVIDED.				



SURFACE ITEMS

S1 STANDARD CONCRETE TYP, SEE CIVIL DRAWINGS	
S2 TURFGRASS SEED, TYP.	$\frac{1}{9}$
S3 TEMPORARY GRAVEL, SEE CIVIL DRAWINGS	
S4	

PLANT MATERIAL

\bigcirc	DECIDUOUS TREE, TYP.	<u>6</u> 9
$\bigcirc \bigcirc \bigcirc$	ORNAMENTAL TREE, TYP.	$\frac{6}{9}$
	EVERGREEN TREE, TYP.	5
	SHRUBS, PERENNIALS & ORNAMENTAL GRASSES, TYP.	$\left(\begin{array}{c} 2-4 \\ 9 \end{array}\right)$



NO. DATE DESCRIPTION

KLEINGERS

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ARCHITECTURE 513.779.7851

LANDSCAPE

6219 Centre Park Dr. West Chester, OH 45069

140217.026
2025/06/13

LANDSCAPE PLAN SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND

8 OF 12

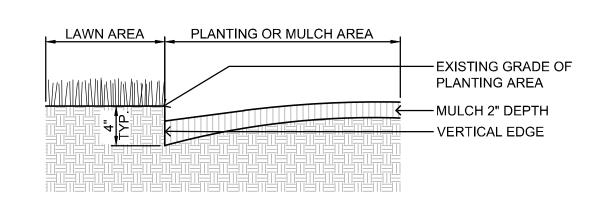


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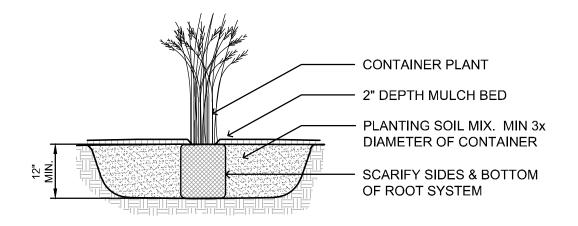
MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE

EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY

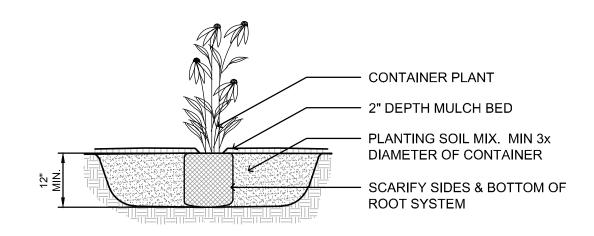
PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



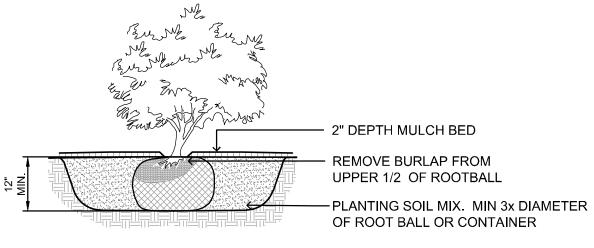
PLANTING BED / TREE PIT EDGING DETAIL



ORNAMENTAL GRASS PLANTING



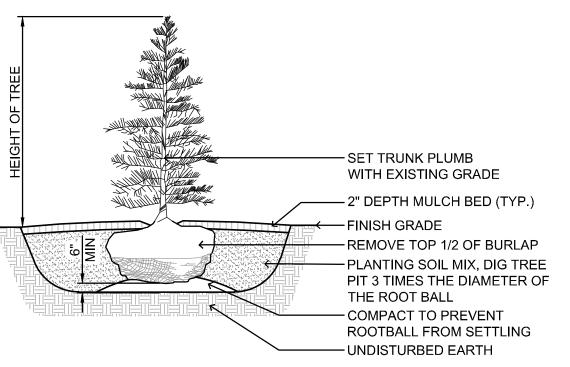
3 PERENNIAL PLANTING N.T.S.



4 SHRUB PLANTING N.T.S.

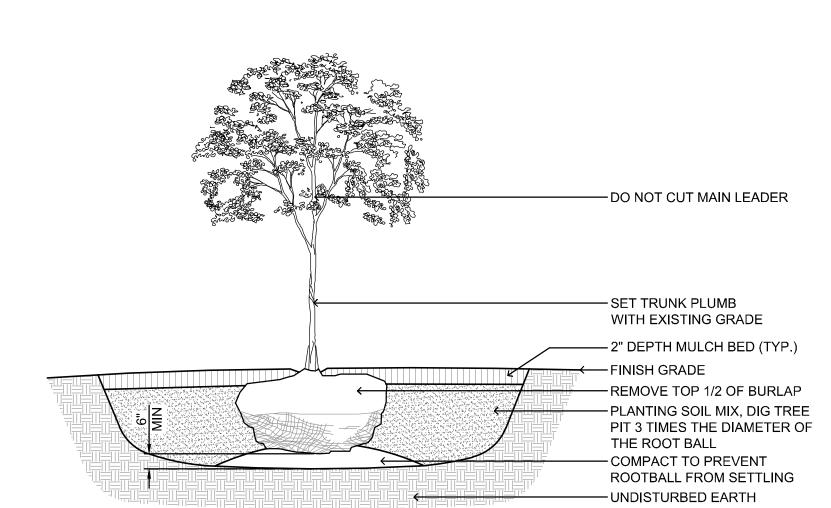
PLANTING NOTES

- 1. EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. 2. CONTRACTOR SHALL VERIFY ALL PLANTING CONDITIONS FOR OBSTRUCTIONS, EXISTING TREE CANOPY COVERAGE, AND OVERHEAD ELECTRICAL POWER LINES PRIOR TO PLANTING. IF ADVERSE PLANTING
- CONDITIONS ARE OBSERVED, CONTACT THE OWNERS REPRESENTATIVE IMMEDIATELY. 3. ALL SHRUB MASSES TO BE INCORPORATED BY A CONTINUOUS MULCH BED TO LIMITS SHOWN AND AS SPECIFIED. MULCH BEDS TO HAVE A NEAT, EDGED APPEARANCE.
- 4. SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
- 5. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FINE GRADED AND SEEDED.
- 6. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
- 7. THE CONTRACTOR SHALL ENSURE THAT ALL NEWLY PLANTED TREES ARE PERFECTLY ALIGNED AND SET PLUMB WITH PROPER RELATIONSHIP TO THE SURROUNDING GRADE. CONFIRM FINISHED GRADE PRIOR
- 8. ALL PLANT MATERIAL SHALL BE OF THE SIZE AND TYPE SPECIFIED. IF SUBSTITUTIONS ARE APPROVED BY THE OWNER'S REPRESENTATIVE, THE SIZE AND GRADING STANDARDS SHALL CONFORM TO THOSE OF
- 9. PRIOR TO ORDERING PLANT MATERIAL, THE CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLAN, LABELS, AND PLANT SCHEDULE.



- TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE.
- REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNER'S REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING
- NECESSARY. PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY. DO NOT STAKE AND GUY TREES UNLESS NEEDED FOR STABILITY BASED ON SITE CONDITIONS OR A DIRECTED BY OWNER'S REPRESENTATIVE.

EVERGREEN TREE PLANTING



- TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE.
- REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS. THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE
- LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNER'S REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING NECESSARY PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY.
- DO NOT STAKE AND GUY TREES UNLESS NEEDED FOR STABILITY BASED ON SITE CONDITIONS OR A DIRECTED BY OWNER'S REPRESENTATIVE.

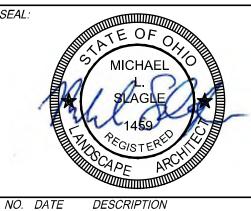
DECIDUOUS TREE PLANTING



<u>NOTE</u> : UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE AN PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



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UNION VILLAGE COMMUNITY POOL

TURTLECREEK TOWNSHIP

WARREN COUNTY, OHIO

PROJECT NO:	140217.026
DATE:	2025/06/13
SCALE:	

SHEET NAME:

LANDSCAPE DETAILS

LEGEND

PROPERTY LINE

SURFACE ITEMS

PLANTING AREAS TO BE DRIP IRRIGATED

PLANTING AREAS TO BE SPRAY IRRIGATED

SLEEVE

- 1. CONTRACTOR TO PROVIDE A DESIGN / BUILD DRAWING SUBMITTAL FOR REVIEW. THE DESIGN SHOULD INCLUDE THE FOLLOWING:
- a. RAIN BIRD EQUIPMENT. b. LAWN AREAS, LANDSCAPE BEDS, AND ANNUAL BEDS ALL TO BE ON
- SEPARATE ZONES. c. 12" POP UP HEADS IN SHRUB OR ANNUAL AREAS, 4" POP-UPS IN LAWN AREAS. DRIP IRRIGATION MAY BE USED IF INDICATORS ARE INCLUDED.
- d. HEAD TO HEAD COVERAGE. e. SET WATERING TIMES IN COORDINATION WITH THE LANDSCAPE
- CONTRACTOR. WATERING WINDOW BETWEEN 2:00 AND 6:00 AM.
- f. RAIN GUAGE FOR AUTOMATIC SHUT OFF.
- g. QUICK COUPLER VALVES. ONE ON EACH SIDE OF THE BUILDING ANDIN AREAS THAT MAY REQUIRE SUPPLEMENTAL MANUAL WATERING OR PAVED AREAS THAT REQUIRE WASH DOWNS.
- h. BOOSTER PUMP AS REQUIRED FOR ADEQUATE PRESSURE. 2. THIS IRRIGATION ZONE PLAN IS DIAGRAMMATIC AND ONLY SHOWS AREAS TO BE IRRIGATED. CONTRACTOR TO DESIGN SYSTEM TO ENSURE FULL IRRIGATION COVERAGE ON AREAS SHOWN TO BE IRRIGATED.
- 3. IRRIGATION CONTRACTOR TO COORDINATE WITH MEP THE SIZE OF THE TAP AND THE LOCATION OF THE POINT OF CONNECTION PRIOR TO CONSTRUCTION. SEE MEP DRAWINGS.
- 4. REFER TO MEP DRAWINGS FOR BACKFLOW PREVENTER.
- 5. THE IRRIGATION SYSTEM SHALL BE INSTALLED USING ACCEPTED AND QUALITY INSTALLATION STANDARDS AS USED IN THE INDUSTRY.
- 6. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO BE FAMILIAR WITH ALL GRADE DIFFERENCES, LOCATIONS OF WALLS, STRUCTURES, AND UTILITIES AND MAKE THE NECESSARY ADJUSTMENTS TO ACCOMMODATE THE IRRIGATION SYSTEM. ANY OBSTRUCTIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY
- 7. MAINLINE PIPING SHALL BE BURIED A MINIMUM OF 12" OF COVER AND A MAXIMUM OF 18" OF COVER. LATERAL LINE PIPING A MINIMUM OF 12" COVER. ALL BACKFILL SURROUNDING THE PIPE SHALL BE SCREENED AND CLEANED OF MATERIAL NO LARGER THAN 1" IN SIZE IN ALL DIMENSIONS.
- 8. IRRIGATION CONTRACTOR SHALL PROVIDE FIRST WINTERIZATION AND SPRING TURN ON IN BID.
- 9. FOR PLANTING PLANS AND DETAILS, REFER TO LANDSCAPE PLAN.
- 10. IRRIGATION CONTRACTOR TO COORDINATE ALL SLEEVES NECESSARY TO BE CONSTRUCTED PRIOR TO PARKING LOT, SIDEWALK, AND WALL CONSTRUCTION.
- 11. THE GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE POWER TO THE IRRIGATION CONTROLLER, SET METER, ALL SLEEVES, TAP, BACKFLOW PREVENTION DEVICE AND TO GAIN ANY AND ALL PERMITTING. IRRIGATION CONTRACTOR TO COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR.
- 12. WATER FROM IRRIGATION SHALL NOT ENCROACH ON PAVEMENTS.
- 13. PROVIDE ADDITIONAL EQUIPMENT AS NEEDED FOR WINTERIZATION.



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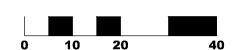


UNION VILLAGE COMMUNITY POOL

TURTLECREEK TOWNSHIP

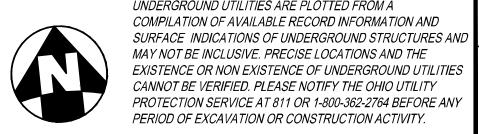
WARREN COUNTY, OHIO

PROJECT NO: 140217.026 2025/06/13



IRRIGATION ZONES PLAN





GENERAL: THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK BY IMPORTING, EXPORTING, OR AMENDING ONSITE TOPSOIL AS NECESSARY TO ACHIEVE DESIGN GRADES AND SPECIFICATIONS.

SOIL-TESTING LABORATORY QUALIFICATIONS:

AN INDEPENDENT LABORATORY OR UNIVERSITY LABORATORY, RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE, WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED AND THAT SPECIALIZES IN TYPES OF TESTS TO BE PERFORMED.

FOR EACH UNAMENDED SOIL TYPE, FURNISH SOIL ANALYSIS AND A WRITTEN REPORT BY A QUALIFIED SOIL-TESTING LABORATORY STATING PERCENTAGES OF ORGANIC MATTER; GRADATION OF SAND. SILT. AND CLAY CONTENT; CATION EXCHANGE CAPACITY; DELETERIOUS MATERIAL; PH; AND MINERAL AND PLANT-NUTRIENT CONTENT OF THE SOIL. TESTING METHODS AND WRITTEN RECOMMENDATIONS SHALL COMPLY WITH USDA'S HANDBOOK NO. 60. THE SOIL-TESTING LABORATORY SHALL OVERSEE SOIL SAMPLING, WITH DEPTH, LOCATION, AND NUMBER OF SAMPLES TO BE TAKEN PER INSTRUCTIONS FROM ARCHITECT. A MINIMUM OF THREE REPRESENTATIVE SAMPLES SHALL BE TAKEN FROM VARIED LOCATIONS FOR EACH SOIL TO BE USED OR AMENDED FOR PLANTING PURPOSES. REPORT SUITABILITY OF TESTED SOIL FOR PLANT AND TURF GROWTH SPECIFIC TO THIS PROJECT. BASED ON THE TEST RESULTS, STATE RECOMMENDATIONS FOR SOIL TREATMENTS AND SOIL AMENDMENTS TO BE INCORPORATED. STATE RECOMMENDATIONS IN WEIGHT PER 1000 SQ. FT. OR VOLUME PER CU. YD. FOR NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE SATISFACTORY PLANTING SOIL SUITABLE FOR HEALTHY, VIABLE PLANTS. REPORT PRESENCE OF PROBLEM SALTS, MINERALS, OR HEAVY METALS, INCLUDING ALUMINUM, ARSENIC, BARIUM, CADMIUM, CHROMIUM, COBALT, LEAD, LITHIUM, AND VANADIUM. IF SUCH PROBLEM MATERIALS ARE PRESENT, PROVIDE ADDITIONAL RECOMMENDATIONS FOR CORRECTIVE ACTION

PLANTING SOIL:

TOPSOIL STOCKPILED FROM ON-SITE STRIPPING SHALL BE UTILIZED FOR REUSE. AMEND ALL TOPSOIL ON-SITE BY MIXING WITH SAND AND COMPOST TO MANUFACTURE SPECIFIED SOIL MIX. IN THE EVENT THAT THERE IS AN INSUFFICIENT AMOUNT OF ON-SITE TOPSOIL TO COMPLETE THE PROJECT, ADDITIONAL TOPSOIL FROM OFF-SITE SOURCES SHALL BE PROVIDED FOR MIXING WITH SAND AND COMPOST TO MANUFACTURE THE SPECIFIED SOIL MIX. ANY AMENDMENTS USED TO MANUFACTURE A SOIL TO BE IMPORTED SHALL MEET THE SPECIFICATIONS DEFINED BELOW.

THE ON-SITE SOIL OR ANY IMPORTED TOPSOIL SHALL BE AMENDED WITH THE SPECIFIED SAND OR COMPOST TO PRODUCE A SOIL MEETING THE FOLLOWING CRITERION, AS DETERMINED BY ASTM F1632 OR

- 1. SAND: (0.05 TO 2.0 MM) 65% 75% WITH AT LEAST 50% OF THE TOTAL SAND FALLING INTO THE MEDIUM AND COARSE SAND FRACTIONS AND NO MORE THAN 25% OF THE TOTAL SAND IN THE FIN AND VERY FINE SAND FRACTIONS.
- SILT: (0.002 TO 0.05 MM) 15% 25%
- CLAY: (<0.002 MM) 5% 15%
- GRAVEL: (>2.0 MM) <15% MAXIMUM SIZE SHALL BE THREE EIGHTS (3/8") INCHES LARGEST DIAMETER

THE AMENDED SOIL SHALL HAVE AN ORGANIC MATTER CONTENT OF 5 TO 6% (BY WEIGHT) AS DETERMINED BY ASTM F1647. FOR BIDDING PURPOSES, THE AMOUNT OF COMPOST REQUIRED TO INCREASE THE ORGANIC MATTER CONTENT TO MEET THE SPECIFICATIONS CAN RANGE FROM 30 TO 50% BY VOLUME, DEPENDING ON THE QUALITY OF THE COMPOST.

RATIO OF THE PARTICLE SIZE FOR 80% PASSING (D80) TO THE PARTICLE SIZE FOR 30% PASSING (D30) SHALL BE 5.5 OR LESS (D80/D30 <8).

THE AMENDED SOIL SHALL HAVE A MINIMUM PERCOLATION RATE OF 0.50-INCH PER HOUR WITH THE SOIL COMPACTED TO 88% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D698).

THE PLANTING SOIL MEETING THIS SPECIFICATION SHALL SERVE AS THE BASELINE FOR SUBSEQUENT QUALITY CONTROL TESTING. SAMPLES SHALL BE TAKEN EVERY 1000 YARDS FOR CONFORMITY TO THE SPECIFICATIONS. QUALITY CONTROL TESTING SHALL INCLUDE ORGANIC MATTER CONTENT AND PARTICLE SIZE ANALYSIS.

THE SOIL.

SAND SHALL BE BLENDED INTO THE TOPSOIL IN THE PROPER AMOUNT TO ACHIEVE THE PARTICLE SIZE DISTRIBUTION DESCRIBED IN THESE SPECIFICATIONS. SAND FOR USE AS A SOIL AMENDMENT SHALL BE WASHED NATURAL OR CLASSIFIED SAND MEETING THE FOLLOWING PARTICLE SIZE DISTRIBUTION AS DETERMINED BY ASTM C-136 OR F1632. IN ADDITION, THE SAND SHALL HAVE A COEFFICIENT OF UNIFORMITY (D60/D10) OF LESS THAN 4.0.

SIEVE	SIEVE SIZE	% PASSING
NO. 4	4.75 MM	100%
NO. 8	2.38 MM	90 - 100%
NO. 16	1.19 MM	80 - 100%
NO. 30	0.60 MM	25 - 60%
NO. 50	0.30 MM	0 - 25%
NO. 100	0.15 MM	0 - 5%
NO. 270	0.075 MM	0 - 3%

PLANTING SOIL MAY BE ALTERED, UPON APPROVAL OF THE ENGINEER, BY ADDING APPROVED CONDITIONERS. CONDITIONERS SHALL CONFORM TO ODOT ITEM 653 AS DETERMINED BY THE ENGINEER.

MIXING PLANTING SOIL: SOIL ADDITIVES SHALL BE THOROUGHLY INCORPORATED INTO PLANTING SOIL BY HARROWING OR OTHER METHODS STANDARD TO THE INDUSTRY. CORRECT DEFICIENCIES IN SOIL AS DIRECTED BY HORTICULTURAL SOIL TEST RESULTS. THOROUGHLY INCORPORATE AMENDMENTS INTO PLANTING MIXTURE TO ENSURE EVEN DISTRIBUTION.

PREPARATION OF THE SUBGRADE IN LANDSCAPE AREAS:

PRIOR TO THE PLACEMENT OF PLANTING SOIL AND THE ESTABLISHMENT OF THE FINISHED GRADE, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO INSPECT THE SUBGRADE FOR SUITABILITY FOR PLANTING. IF SUBSURFACE BEDROCK, SHALE, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED IN THE SUBGRADE, THE ENGINEER MAY SELECT ALTERNATE LOCATIONS FOR PLANT PLACEMENTS. WHERE LOCATIONS CANNOT BE CHANGED, THE UNSUITABLE MATERIAL OR OBSTRUCTION SHALL BE REMOVED TO A DEPTH, NO LESS, THAN 6" BELOW BOTTOM OF THE ROOT BALL WHEN THE PLANT IS PROPERLY SET AT THE REQUIRED GRADE. THE ADDITIONAL EXCAVATION SHALL BE FILLED WITH A SUITABLE CLEAN SOIL MATERIAL FREE OF ROCK AND CONSTRUCTION DEBRIS AND SUITABLE FOR THE PLANTING SUBGRADE AS DETERMINED BY THE ENGINEER.

PLANTING SOIL PLACEMENT: PLACE PLANTING SOIL IN TWO LIFTS. PLACE THE FIRST LIFT TO A DEPTH OF 2 INCHES AND HARROW OR TILL THE LOAM INTO THE UNDERLYING SUBSOIL TO A DEPTH OF 2 INCHES, CREATING A BLENDED INTERFACE OF LOAM AND SUBSOIL APPROXIMATELY 4 INCHES DEEP. THE CONTRACTOR SHALL INSTALL PLANTING SOIL IN SUCCESSIVE HORIZONTAL LIFTS NO THICKER THAN 6 INCHES IN TURF AREAS AND 12 INCHES IN PLANT BED AREAS TO THE DESIRE COMPACTION AS DESCRIBED HEREIN. THE CONTRACTOR SHALL INSTALL THE SOIL AT A HIGHER LEVEL TO ANTICIPATE ANY REDUCTION OF PLANTING SOIL VOLUME DUE TO COMPACTION, SETTLING, EROSION, DECOMPOSITION, AND OTHER SIMILAR PROCESSES DURING THE WARRANTY PERIOD.

PLANTING SOIL DEPTHS:

- PLANTING SOIL DEPTH FOR TREE PITS SHALL BE 30 INCHES BY THREE TIMES THE DIAMETER OF THE ROOT BALL MINIMUM.
- PLANTING SOIL DEPTH IN ALL PLANTING BEDS CONTAINING SHRUBS, PERENNIALS, ORNAMENTAL GRASSES AND GROUNDCOVER SHALL BE 12 INCHES MINIMUM.
- 3. PLANTING SOIL DEPTH IN ALL TURF GRASS AREAS SHALL BE 6 INCHES MINIMUM.

PREPARATION OF FINISHED GRADE:

THE PREPARATION OF PLANTING AREAS MAY BEGIN PRIOR TO THE SPECIFIED PLANTING SEASON PROVIDED THE FINISHED GRADE HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER, AND PROVIDED THAT IN THE JUDGEMENT OF THE ENGINEER, THE GENERAL CONSTRUCTION WORK IS SUFFICIENTLY ADVANCED.

TURF AND GRASSES SPECIFICATION

- 1. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF PLANTING SOIL. PESTICIDE: A SUBSTANCE OR MIXTURE INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING A PEST. PESTICIDES INCLUDE INSECTICIDES, MITICIDES, HERBICIDES, FUNGICIDES, RODENTICIDES, AND MOLLUSCICIDES. THEY ALSO INCLUDES SUBSTANCES OR
- MIXTURES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT, OR DESICCANT. 3. PESTS: LIVING ORGANISMS THAT OCCUR WHERE THEY ARE NOT DESIRED OR THAT CAUSE DAMAGE TO PLANTS, ANIMALS, OR PEOPLE. PESTS INCLUDE INSECTS, MITES, GRUBS, MOLLUSKS (SNAILS AND SLUGS), RODENTS (GOPHERS, MOLES, AND MICE), UNWANTED PLANTS (WEEDS),
- 4. PLANTING SOIL: EXISTING, ON-SITE SOIL; IMPORTED SOIL; OR MANUFACTURED SOIL THAT HAS BEEN MODIFIED WITH SOIL AMENDMENTS AND PERHAPS FERTILIZERS TO PRODUCE A SOIL
- MIXTURE BEST FOR PLANT GROWTH. SEE "PLANTING SOIL" SPECIFICATION. 5. SUBGRADE: THE SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS

COMPLETE, OR THE TOP SURFACE OF A FILL OR BACKFILL BEFORE PLANTING SOIL IS PLACED.

PREINSTALLATION MEETINGS: PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

- QUALIFICATION DATA: FOR LANDSCAPE INSTALLER.
- 2. CERTIFICATION OF GRASS SEED: FROM SEED VENDOR FOR EACH GRASS-SEED MONOSTAND OR MIXTURE, STATING THE BOTANICAL AND COMMON NAME, PERCENTAGE BY WEIGHT OF EACH SPECIES AND VARIETY, AND PERCENTAGE OF PURITY, GERMINATION, AND WEED SEED. INCLUDE
- THE YEAR OF PRODUCTION AND DATE OF PACKAGING. 3. CERTIFICATION OF EACH SEED MIXTURE FOR TURFGRASS SOD. INCLUDE IDENTIFICATION OF SOURCE AND NAME AND TELEPHONE NUMBER OF SUPPLIER.
- 4. PRODUCT CERTIFICATES: FOR FERTILIZERS, FROM MANUFACTURER.
- 5. PESTICIDES AND HERBICIDES: PRODUCT LABEL AND MANUFACTURER'S APPLICATION INSTRUCTIONS SPECIFIC TO PROJECT.
- 6. MAINTENANCE DATA: RECOMMENDED PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF TURF DURING A CALENDAR YEAR. SUBMIT BEFORE EXPIRATION OF REQUIRED MAINTENANCE PERIODS.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS RESULTED IN SUCCESSFUL TURF ESTABLISHMENT. 1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER

- THE PROFESSIONAL LANDCARE NETWORK OR THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- 2. EXPERIENCE: FIVE YEARS' EXPERIENCE IN TURF INSTALLATION.
- 3. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME
- SUPERVISOR ON PROJECT SITE WHEN WORK IS IN PROGRESS. 4. PERSONNEL CERTIFICATIONS: INSTALLER'S FIELD SUPERVISOR SHALL HAVE CERTIFICATION IN
- ALL OF THE FOLLOWING CATEGORIES FROM THE PROFESSIONAL LANDCARE NETWORK: a. LANDSCAPE INDUSTRY CERTIFIED TECHNICIAN - EXTERIOR.
- b. LANDSCAPE INDUSTRY CERTIFIED LAWNCARE MANAGER.
- c. LANDSCAPE INDUSTRY CERTIFIED LAWNCARE TECHNICIAN.

5. PESTICIDE APPLICATOR: STATE LICENSED, COMMERCIAL

DELIVERY, STORAGE, AND HANDLING

SEED AND OTHER PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF COMPLIANCE WITH STATE AND FEDERAL LAWS, AS APPLICABLE.

SOD: HARVEST, DELIVER, STORE, AND HANDLE SOD ACCORDING TO REQUIREMENTS IN "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" AND "SPECIFICATIONS FOR TURFGRASS SOD TRANSPLANTING AND INSTALLATION" SECTIONS IN TPI'S "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." DELIVER SOD WITHIN 24 HOURS OF HARVESTING AND IN TIME FOR PLANTING PROMPTLY. PROTECT SOD FROM BREAKAGE AND DRYING.

- 1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
- THE FINAL SOIL MIX SHALL BE SUBMITTED TO TESTING AGENCY TO DETERMINE THE FERTILITY STATUS OF 2. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS; DISCHARGE OF SOIL-BEARING WATER RUNOFF; AND AIRBORNE DUST REACHING
 - ADJACENT PROPERTIES. WATER CONVEYANCE SYSTEMS, OR WALKWAYS. 3. ACCOMPANY EACH DELIVERY OF BULK MATERIALS WITH APPROPRIATE CERTIFICATES.

FIELD CONDITIONS

- PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH INITIAL MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE
- FROM DATE OF SUBSTANTIAL COMPLETION. SPRING PLANTING: MARCH 15 TO JUNE 1.
- 2. FALL PLANTING: AUGUST 15 TO OCTOBER 15.

WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.

SEED MIX: SEED OF GRASS SPECIES AS FOLLOWS, WITH NOT LESS THAN 85 PERCENT GERMINATION, NOT LESS THAN 98 PERCENT PURE SEED, AND COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES. THE MIXTURE SHALL BE AS FOLLOWS OR AN APPROVED EQUAL: (MIXTURE SHALL RATE IN NTEP'S TOP TEN. CONTRACTOR TO PROVIDE INFORMATION ON GRASS SEED STATING IT MEETS NTEP'S TOP TEN LIST)

- 1. 80-90 PERCENT TURF-TYPE TALL FESCUE, MINIMUM 3 VARIETIES (15 PERCENT MINIMUM FOR ANY VARIETY).
- 2. 5-10 PERCENT PERENNIAL RYEGRASS.
- 3. 5-10 PERCENT KENTUCKY BLUEGRASS.

TURFGRASS SOD

TURFGRASS SOD: CERTIFIED, COMPLYING WITH "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" IN TPI'S "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." FURNISH VIABLE SOD OF UNIFORM DENSITY, COLOR, AND TEXTURE THAT IS STRONGLY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED.

TURFGRASS SPECIES: SEED OF GRASS SPECIES AS FOLLOWS, WITH NOT LESS THAN 85 PERCENT GERMINATION, NOT LESS THAN 98 PERCENT PURE SEED, AND COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES. THE MIXTURE SHALL BE AS FOLLOWS OR AN APPROVED EQUAL: (MIXTURE SHALL RATE IN NTEP'S TOP TEN. CONTRACTOR TO PROVIDE INFORMATION ON GRASS SEED STATING IT MEETS NTEP'S TOP TEN LIST)

- 1. 80-90 PERCENT TURF-TYPE TALL FESCUE, MINIMUM 3 VARIETIES (15 PERCENT MINIMUM FOR ANY VARIETY).
- 2. 10-20 PERCENT KENTUCKY BLUEGRASS.

FERTILIZERS

- 1. COMMERCIAL FERTILIZER: COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF QUICK RELEASE NITROGEN SOURCE, PHOSPHATE, AND POTASH. APPLY NITROGEN. PHOSPHATE AND POTASH IN THE AMOUNTS RECOMMENDED IN THE SOIL REPORTS FROM A QUALIFIED TESTING AGENCY.
- 2. SLOW-RELEASE FERTILIZER: GRANULAR FERTILIZER CONSISTING OF A MINIMUM OF 50 PERCENT WATER-INSOLUBLE NITROGEN OR COATED NITROGEN SOURCE, PHOSPHATE, AND POTASH, APPLY NITROGEN, PHOSPHATE AND POTASH IN THE AMOUNTS RECOMMENDED IN THE SOIL REPORTS FROM A QUALIFIED TESTING AGENCY.

MULCHES

1. STRAW MULCH: PROVIDE AIR-DRY, CLEAN, MILDEW- AND SEED-FREE, SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY.

PESTICIDES

- GENERAL: PESTICIDE, REGISTERED AND APPROVED BY THE EPA, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND OF TYPE RECOMMENDED BY MANUFACTURER FOR EACH SPECIFIC PROBLEM AND AS REQUIRED FOR PROJECT CONDITIONS AND APPLICATION. DO NOT USE
- RESTRICTED PESTICIDES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. 1. PRE-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING
- THE GERMINATION OR GROWTH OF WEEDS WITHIN PLANTED AREAS AT THE SOIL LEVEL DIRECTLY BELOW THE MULCH LAYER.
- 2. POST-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING WEED GROWTH THAT HAS ALREADY GERMINATED.

EROSION-CONTROL MATERIALS

- 1. EROSION-CONTROL BLANKETS: BIODEGRADABLE WOOD EXCELSIOR, STRAW, OR COCONUT-FIBER MAT ENCLOSED IN A PHOTODEGRADABLE PLASTIC MESH. INCLUDE MANUFACTURER'S RECOMMENDED STEEL WIRE STAPLES, 6 INCHES LONG
- 2. EROSION-CONTROL FIBER MESH: BIODEGRADABLE BURLAP OR SPUN-COIR MESH, A MINIMUM OF 0.92 LB/SQ. YD., WITH 50 TO 65 PERCENT OPEN AREA. INCLUDE MANUFACTURER'S RECOMMENDED STEEL WIRE STAPLES, 6 INCHES LONG.

EXAMINATION

EXAMINE AREAS TO BE PLANTED FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE OF THE WORK.

- 1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
- 2. SUSPEND PLANTING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.
- 3. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE OR WHICH IS DUSTY. 4. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 5. IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.

- 1. PROTECT STRUCTURES; UTILITIES; SIDEWALKS; PAVEMENTS; AND OTHER FACILITIES, TREES,
- SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS. 2. PROTECT ADJACENT AND ADJOINING AREAS FROM HYDROSEEDING AND HYDROMULCHING OVERSPRAY.
- 3. PROTECT GRADE STAKES SET BY OTHERS UNTIL DIRECTED TO REMOVE THEM.
- 4. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

TURF AREA PREPARATION

GENERAL: PREPARE PLANTING AREA FOR SOIL PLACEMENT AND MIX PLANTING SOIL PER "PLANTING SOIL" SPECIFICATION.

- 1. PLACING PLANTING SOIL: PLACE AND MIX PLANTING SOIL PER "PLANTING SOIL" SPECIFICATION. a. REDUCE ELEVATION OF PLANTING SOIL TO ALLOW FOR SOIL THICKNESS OF SOD.
- 2. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE FUTURE. MOISTEN PREPARED AREA BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL. BEFORE PLANTING, OBTAIN FIELD ENGINEER'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.
- 3. BEFORE PLANTING, OBTAIN ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

PREPARATION FOR EROSION-CONTROL MATERIALS

- PREPARE AREA AS SPECIFIED ABOVE.
- 2. FOR EROSION-CONTROL BLANKET OR MESH, INSTALL FROM TOP OF SLOPE, WORKING DOWNWARD, AND AS RECOMMENDED BY MATERIAL MANUFACTURER FOR SITE CONDITIONS. FASTEN AS RECOMMENDED BY MATERIAL MANUFACTURER.
- 3. MOISTEN PREPARED AREA BEFORE PLANTING IF SURFACE IS DRY, WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

- 1. SOW SEED WITH SPREADER OR SEEDING MACHINE. DO NOT BROADCAST OR DROP SEED WHEN WIND VELOCITY EXCEEDS 5 MPH.
- a. EVENLY DISTRIBUTE SEED BY SOWING EQUAL QUANTITIES IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.
- b. DO NOT USE WET SEED OR SEED THAT IS MOLDY OR OTHERWISE DAMAGED.
- c. DO NOT SEED AGAINST EXISTING TREES. LIMIT EXTENT OF SEED TO OUTSIDE EDGE OF PLANTING SAUCER.

2. SOW SEED AT A TOTAL RATE OF 6 TO 8 LB/1000 SQ. FT...

- 3. RAKE SEED LIGHTLY INTO TOP 1/8 INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH FINE SPRAY. 4. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 1:4 WITH EROSION-CONTROL BLANKETS AND 1:6 WITH EROSION-CONTROL FIBER MESH INSTALLED AND STAPLED ACCORDING TO
- MANUFACTURER'S WRITTEN INSTRUCTIONS. 5. PROTECT SEEDED AREAS WITH SLOPES NOT EXCEEDING 1:6 BY SPREADING STRAW MULCH. SPREAD UNIFORMLY AT A MINIMUM RATE OF 2 TONS/ACRE TO FORM A CONTINUOUS BLANKET 1-1/2 INCHES IN LOOSE THICKNESS OVER SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT.
- a. ANCHOR STRAW MULCH BY CRIMPING INTO SOIL WITH SUITABLE MECHANICAL EQUIPMENT.
- 6. OVERSEED TURF AREA EIGHT (8) WEEKS AFTER INITIAL SEEDING OPERATION AT A RATE OF 5 LBS/1000 SQ. FT., IF INITIAL SEEDING HAS NOT PROVIDED A MINIMUM OF 90% COVERAGE OVER ANY 10 SQ. FT., OR IF BARE AREAS GREATER THE 5 BY 5 INCHES ARE PRESENT.

SODDING

- 1. LAY SOD WITHIN 24 HOURS OF HARVESTING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS
- FROZEN OR MUDDY 2. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD; DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS OR PADS TO OFFSET JOINTS IN ADJACENT COURSES. AVOID DAMAGE TO SOIL OR SOD DURING INSTALLATION. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH SOIL, ELIMINATE AIR POCKETS, AND FORM A SMOOTH SURFACE. WORK SIFTED SOIL OR FINE SAND INTO MINOR CRACKS BETWEEN PIECES OF SOD; REMOVE EXCESS TO AVOID SMOTHERING SOD AND ADJACENT GRASS.
- a. LAY SOD ACROSS SLOPES EXCEEDING 1:3. b. ANCHOR SOD ON SLOPES EXCEEDING 1:6 WITH WOOD PEGS[OR STEEL STAPLES] SPACED AS RECOMMENDED BY SOD MANUFACTURER BUT NOT LESS THAN TWO ANCHORS PER SOD STRIP
- 3. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 1-1/2 INCHES BELOW SOD.

BURY IN SOIL.

- TURF RENOVATION
- 1. RENOVATE EXISTING TURF WHERE INDICATED. 2. RENOVATE TURF DAMAGED BY CONTRACTOR'S OPERATIONS, SUCH AS STORAGE OF MATERIALS OR EQUIPMENT AND MOVEMENT OF VEHICLES.
- a. REESTABLISH TURF WHERE SETTLEMENT OR WASHOUTS OCCUR OR WHERE MINOR REGRADING IS REQUIRED. b. INSTALL NEW PLANTING SOIL AS REQUIRED.

3. REMOVE SOD AND VEGETATION FROM DISEASED OR UNSATISFACTORY TURF AREAS; DO NOT

4. REMOVE TOPSOIL CONTAINING FOREIGN MATERIALS, SUCH AS OIL DRIPPINGS, FUEL SPILLS,

STONES, GRAVEL, AND OTHER CONSTRUCTION MATERIALS RESULTING FROM CONTRACTOR'S OPERATIONS, AND REPLACE WITH NEW PLANTING SOIL. 5. MOW, DETHATCH, CORE AERATE, AND RAKE EXISTING TURF.

- 6. REMOVE WEEDS BEFORE SEEDING. WHERE WEEDS ARE EXTENSIVE, APPLY SELECTIVE HERBICIDES AS REQUIRED. DO NOT USE PRE-EMERGENCE HERBICIDES.
- 7. REMOVE WASTE AND FOREIGN MATERIALS, INCLUDING WEEDS, SOIL CORES, GRASS,
- VEGETATION, AND TURF, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 8. TILL STRIPPED, BARE, AND COMPACTED AREAS THOROUGHLY TO A SOIL DEPTH OF 6 INCHES.
- 9. APPLY INITIAL FERTILIZER REQUIRED FOR ESTABLISHING NEW TURF AND MIX THOROUGHLY INTO TOP 4 INCHES OF EXISTING SOIL. INSTALL NEW PLANTING SOIL TO FILL LOW SPOTS AND MEET
- a. INITIAL FERTILIZER: COMMERCIAL FERTILIZER APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

10. APPLY SOD AND SEED AND PROTECT WITH STRAW MULCH AS REQUIRED FOR NEW TURF. 11. WATER NEWLY PLANTED AREAS AND KEEP MOIST UNTIL NEW TURF IS ESTABLISHED.

TURF MAINTENANCE

GENERAL: MAINTAIN AND ESTABLISH TURF BY WATERING, FERTILIZING, WEEDING, MOWING TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL INSTALLATION.

1. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUBSIDENCE.

2. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD

NEW MULCH AND ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT. 3. APPLY TREATMENTS AS REQUIRED TO KEEP TURF AND SOIL FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO

WATERING: INSTALL AND MAINTAIN TEMPORARY PIPING, HOSES, AND TURF-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND TO KEEP TURF UNIFORMLY MOIST TO A DEPTH OF 4

- 1. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
- 2. WATER TURF WITH FINE SPRAY AT A MINIMUM RATE OF 1 INCH PER WEEK UNLESS RAINFALL PRECIPITATION IS ADEQUATE.

MOW TURF AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIED HEIGHT WITHOUT CUTTING MORE THAN ONE-THIRD OF GRASS HEIGHT. REMOVE NO MORE THAN ONE-THIRD OF GRASS-LEAF GROWTH IN INITIAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT:

1. MOW TURF TO A HEIGHT OF 2 TO 3 INCHES.

MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.

TURF POST-FERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY. 1. USE FERTILIZER THAT PROVIDES ACTUAL NITROGEN OF 1 LB/1000 SQ. FT. TO TURF AREA.

2. SECOND APPLICATION FERTILIZER: APPLY SIX (6) WEEKS AFTER SEEDING OPERATIONS PROVIDE A HIGH NITROGEN SLOW RELEASE FERTILIZER WITH AN ANALYSIS OF 30-3-10 OR SIMILAR. APPLY AT A RATE TO PROVIDE ACTUAL NITROGEN OF 1 LB/1000 SQ. FT. TO TURF AREA.

SATISFACTORY TURF

- TURF INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA AS DETERMINED BY ARCHITECT: 1. SATISFACTORY SEEDED TURF: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT
- EXCEEDING 5 BY 5 INCHES. 2. SATISFACTORY SODDED TURF: AT END OF MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED EVEN-COLORED, VIABLE TURF HAS BEEN ESTABLISHED, FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.

USE SPECIFIED MATERIALS TO REESTABLISH TURF THAT DOES NOT COMPLY WITH REQUIREMENTS, AND CONTINUE MAINTENANCE UNTIL TURF IS SATISFACTORY.

PESTICIDE APPLICATION

- 1. APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS ACCORDING TO REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS
- 2. POST-EMERGENT HERBICIDES (SELECTIVE AND NONSELECTIVE): APPLY ONLY AS NECESSARY TO TREAT ALREADY-GERMINATED WEEDS AND ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.

- **CLEANUP AND PROTECTION** 1. PROMPTLY REMOVE SOIL AND DEBRIS CREATED BY TURF WORK FROM PAVED AREAS. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS,
- OR OTHER PAVED AREAS. 2. REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY
- NEWLY PLANTED AREAS FROM TRAFFIC. MAINTAIN FENCING AND BARRICADES THROUGHOUT INITIAL MAINTENANCE PERIOD AND REMOVE AFTER PLANTINGS ARE ESTABLISHED. 4. REMOVE NONDEGRADABLE EROSION-CONTROL MEASURES AFTER GRASS ESTABLISHMENT

3. ERECT TEMPORARY FENCING OR BARRICADES AND WARNING SIGNS AS REQUIRED TO PROTECT

PERIOD.

MAINTENANCE SERVICE TURF MAINTENANCE SERVICE: PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN "TURF MAINTENANCE" ARTICLE. BEGIN

MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE

a. WHEN INITIAL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF PLANTING SEASON, OR IF TURF IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING

TURF IS ESTABLISHED, BUT FOR NOT LESS THAN THE FOLLOWING PERIODS:

1. SEEDED TURF: 90 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.

2. SODDED TURF: 90 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.

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KLEINGERS

MICHAEL

NO. DATE DESCRIPTION

UNION VILLAGE COMMUNITY POOL

TURTLECREEK TOWNSHIP

WARREN COUNTY, OHIO

PROJECT NO: 140217.026 2025/06/13

SHEET NAME:

LANDSCAPE **SPECIFICATIONS**

DEFINITIONS

- BACKFILL: THE EARTH USED TO REPLACE OR THE ACT OF REPLACING EARTH IN AN EXCAVATION.
- 2. BALLED AND BURLAPPED STOCK: PLANTS DUG WITH FIRM, NATURAL BALLS OF EARTH IN WHICH THEY WERE GROWN, WITH A BALL SIZE NOT LESS THAN DIAMETER AND DEPTH RECOMMENDED BY ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED; WRAPPED WITH BURLAP, TIED, RIGIDLY SUPPORTED, AND DRUM LACED WITH TWINE WITH THE ROOT FLARE VISIBLE AT THE SURFACE OF THE BALL AS RECOMMENDED BY ANSI Z60.1.
- 3. CONTAINER-GROWN STOCK: HEALTHY, VIGOROUS, WELL-ROOTED PLANTS GROWN IN A CONTAINER, WITH A WELL-ESTABLISHED ROOT SYSTEM REACHING SIDES OF CONTAINER AND MAINTAINING A FIRM BALL WHEN REMOVED FROM CONTAINER. CONTAINER SHALL BE RIGID ENOUGH TO HOLD BALL SHAPE AND PROTECT ROOT MASS DURING SHIPPING AND BE SIZED ACCORDING TO ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED.
- 4. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF PLANTING SOIL.
- 5. PESTICIDE: A SUBSTANCE OR MIXTURE INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING A PEST. PESTICIDES INCLUDE INSECTICIDES, MITICIDES, HERBICIDES, FUNGICIDES, RODENTICIDES, AND MOLLUSCICIDES. THEY ALSO INCLUDE SUBSTANCES OR MIXTURES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT, OR DESICCANT, SOME SOURCES CLASSIFY HERBICIDES SEPARATELY FROM PESTICIDES.
- 6. PESTS: LIVING ORGANISMS THAT OCCUR WHERE THEY ARE NOT DESIRED OR THAT CAUSE DAMAGE TO PLANTS, ANIMALS, OR PEOPLE. PESTS INCLUDE INSECTS, MITES, GRUBS, MOLLUSKS (SNAILS AND SLUGS), RODENTS (GOPHERS, MOLES, AND MICE), UNWANTED PLANTS (WEEDS), FUNGI, BACTERIA, AND VIRUSES.
- 7. PLANTING AREA: AREAS TO BE PLANTED.
- 8. PLANTING SOIL: EXISTING, ON-SITE SOIL; IMPORTED SOIL; OR MANUFACTURED SOIL THAT HAS BEEN MODIFIED WITH SOIL AMENDMENTS AND PERHAPS FERTILIZERS TO PRODUCE A SOIL MIXTURE BEST FOR PLANT GROWTH.
- 9. PLANT; PLANTS; PLANT MATERIAL: THESE TERMS REFER TO VEGETATION IN GENERAL, INCLUDING TREES, SHRUBS, VINES, GROUND COVERS, ORNAMENTAL GRASSES, BULBS, CORMS, TUBERS, OR HERBACEOUS VEGETATION.
- 10.ROOT FLARE: ALSO CALLED "TRUNK FLARE." THE AREA AT THE BASE OF THE PLANT'S STEM OR TRUNK WHERE THE STEM OR TRUNK BROADENS TO FORM ROOTS; THE AREA OF TRANSITION BETWEEN THE ROOT SYSTEM AND THE STEM OR TRUNK.
- 11.STEM GIRDLING ROOTS: ROOTS THAT ENCIRCLE THE STEMS (TRUNKS) OF TREES BELOW THE SOIL
- 12.SUBGRADE: THE SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS COMPLETE, OR THE TOP SURFACE OF A FILL OR BACKFILL BEFORE PLANTING SOIL IS PLACED.

COORDINATION

- COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS, AND OTHER PLANTS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS OTHERWISE INDICATED.
- 1. WHEN PLANTING TREES, SHRUBS, AND OTHER PLANTS AFTER PLANTING TURF AREAS, PROTECT TURF AREAS, AND PROMPTLY REPAIR DAMAGE CAUSED BY PLANTING OPERATIONS.

PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

ACTION SUBMITTALS

PRODUCT DATA: FOR EACH TYPE OF PRODUCT.

- 1. PLANT PHOTOGRAPHS: INCLUDE COLOR PHOTOGRAPHS IN DIGITAL FORMAT OF EACH REQUIRED SPECIES AND SIZE OF PLANT MATERIAL AS IT WILL BE FURNISHED TO PROJECT. TAKE PHOTOGRAPHS FROM AN ANGLE DEPICTING TRUE SIZE AND CONDITION OF THE TYPICAL PLANT TO BE FURNISHED. INCLUDE A SCALE ROD OR OTHER MEASURING DEVICE IN EACH PHOTOGRAPH. FOR SPECIES WHERE MORE THAN 20 PLANTS ARE REQUIRED, INCLUDE A MINIMUM OF THREE PHOTOGRAPHS SHOWING THE AVERAGE PLANT, THE BEST QUALITY PLANT, AND THE WORST QUALITY PLANT TO BE FURNISHED. IDENTIFY EACH PHOTOGRAPH WITH THE FULL SCIENTIFIC NAME OF THE PLANT, PLANT SIZE, AND NAME OF THE GROWING NURSERY.
- 2. SAMPLES FOR VERIFICATION: FOR EACH OF THE FOLLOWING:
- a. ORGANIC MULCH: 1-QUART VOLUME OF EACH ORGANIC MULCH REQUIRED; IN SEALED PLASTIC BAGS LABELED WITH COMPOSITION OF MATERIALS BY PERCENTAGE OF WEIGHT AND SOURCE OF MULCH. EACH SAMPLE SHALL BE TYPICAL OF THE LOT OF MATERIAL TO BE FURNISHED; PROVIDE AN ACCURATE REPRESENTATION OF COLOR, TEXTURE, AND ORGANIC MAKEUP.
- b. SLOW-RELEASE, TREE-WATERING DEVICE: ONE UNIT OF EACH SIZE REQUIRED.

INFORMATIONAL SUBMITTALS

- 1. QUALIFICATION DATA: FOR LANDSCAPE INSTALLER. INCLUDE LIST OF SIMILAR PROJECTS COMPLETED BY INSTALLER DEMONSTRATING INSTALLER'S CAPABILITIES AND EXPERIENCE. INCLUDE PROJECT NAMES, ADDRESSES, AND YEAR COMPLETED, AND INCLUDE NAMES AND ADDRESSES OF OWNERS' CONTACT PERSONS.
- 2. PRODUCT CERTIFICATES: FOR EACH TYPE OF MANUFACTURED PRODUCT, FROM MANUFACTURER. AND COMPLYING WITH THE FOLLOWING:
- a. MANUFACTURER'S CERTIFIED ANALYSIS OF STANDARD PRODUCTS.
- b. ANALYSIS OF OTHER MATERIALS BY A RECOGNIZED LABORATORY MADE ACCORDING TO METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, WHERE APPLICABLE.
- 2. PESTICIDES AND HERBICIDES: PRODUCT LABEL AND MANUFACTURER'S APPLICATION
- INSTRUCTIONS SPECIFIC TO PROJECT. 3. SAMPLE WARRANTY: FOR SPECIAL WARRANTY.

CLOSEOUT SUBMITTALS

1. MAINTENANCE DATA: RECOMMENDED PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF PLANTS DURING A CALENDAR YEAR. SUBMIT BEFORE EXPIRATION OF REQUIRED MAINTENANCE PERIODS.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS RESULTED IN

- SUCCESSFUL ESTABLISHMENT OF PLANTS. 1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER THE PROFESSIONAL LANDCARE NETWORK OR THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- 2. EXPERIENCE: FIVE YEARS' EXPERIENCE IN LANDSCAPE INSTALLATION IN ADDITION TO REQUIREMENTS IN SECTION 014000 "QUALITY REQUIREMENTS."
- 3. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME SUPERVISOR ON PROJECT SITE WHEN WORK IS IN PROGRESS.
- 4. PERSONNEL CERTIFICATIONS: INSTALLER'S FIELD SUPERVISOR SHALL HAVE CERTIFICATION IN ALL
- OF THE FOLLOWING CATEGORIES FROM THE PROFESSIONAL LANDCARE NETWORK: a. LANDSCAPE INDUSTRY CERTIFIED TECHNICIAN - EXTERIOR.
- b. LANDSCAPE INDUSTRY CERTIFIED HORTICULTURAL TECHNICIAN.

5. PESTICIDE APPLICATOR: STATE LICENSED, COMMERCIAL.

PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS IN ANSI Z60.1.

MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1. DO NOT PRUNE TO OBTAIN REQUIRED SIZES. 1. TREES AND SHRUBS: MEASURE WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE HEIGHT MEASUREMENTS FROM OR NEAR THE TOP OF THE ROOT FLARE FOR FIELD-GROWN STOCK AND CONTAINER-GROWN STOCK. MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD; DO NOT MEASURE BRANCHES OR ROOTS TIP TO TIP. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE THE ROOT FLARE FOR TREES UP TO 4-INCH CALIPER SIZE, AND 12 INCHES ABOVE THE ROOT FLARE FOR LARGER SIZES.

2. OTHER PLANTS: MEASURE WITH STEMS, PETIOLES, AND FOLIAGE IN THEIR NORMAL POSITION.

PLANT MATERIAL OBSERVATION: ARCHITECT MAY OBSERVE PLANT MATERIAL EITHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS. SPECIES, VARIETY, CULTIVAR, SIZE, AND QUALITY, ARCHITECT MAY ALSO OBSERVE TREES AND SHRUBS FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, PESTS, DISEASE SYMPTOMS, INJURIES, AND LATENT DEFECTS AND MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.

1. NOTIFY ARCHITECT OF SOURCES OF PLANTING MATERIALS SEVEN DAYS IN ADVANCE OF DELIVERY TO SITE.

PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF COMPLIANCE WITH STATE AND FEDERAL LAWS IF APPLICABLE.

BULK MATERIALS:

- 1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
- 2. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS; DISCHARGE OF SOIL-BEARING WATER RUNOFF; AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER CONVEYANCE SYSTEMS, OR WALKWAYS.
- 3. ACCOMPANY EACH DELIVERY OF BULK MATERIALS WITH APPROPRIATE CERTIFICATES.

DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.

HANDLE PLANTING STOCK BY ROOT BALL.

WRAP TREES AND SHRUBS WITH BURLAP FABRIC OVER TRUNKS, BRANCHES, STEMS, TWIGS, AND FOLIAGE TO PROTECT FROM WIND AND OTHER DAMAGE DURING DIGGING, HANDLING, AND TRANSPORTATION.

DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED, AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.

- 1. SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL
- DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE TIME OF PLANTING.
- 3. WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY WET CONDITION.

FIELD CONDITIONS

FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.

PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.

- 1. SPRING PLANTING: MARCH 15 TO JUNE 1.
- 2. FALL PLANTING: SEPTEMBER 1 TO NOVEMBER 1

WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS

SPECIAL WARRANTY: INSTALLER AGREES TO REPAIR OR REPLACE PLANTINGS AND ACCESSORIES THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED WARRANTY PERIOD.

- 1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: a. DEATH AND UNSATISFACTORY GROWTH. EXCEPT FOR DEFECTS RESULTING FROM ABUSE. LACK OF ADEQUATE MAINTENANCE, OR NEGLECT BY OWNER.
- b. STRUCTURAL FAILURES INCLUDING PLANTINGS FALLING OR BLOWING OVER.
- c. FAULTY PERFORMANCE OF TREE STABILIZATION. d. DETERIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL
- 2. WARRANTY PERIODS: FROM DATE OF SUBSTANTIAL COMPLETION.
- a. TREES, SHRUBS, VINES, AND ORNAMENTAL GRASSES: 12 MONTHS.
- b. GROUND COVERS, BIENNIALS, PERENNIALS, AND OTHER PLANTS: 12 MONTHS. c. ANNUALS: THREE MONTHS.
- 3. INCLUDE THE FOLLOWING REMEDIAL ACTIONS AS A MINIMUM:
- a. IMMEDIATELY REMOVE DEAD PLANTS AND REPLACE UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON.
- b. REPLACE PLANTS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.
- c. A LIMIT OF ONE REPLACEMENT OF EACH PLANT IS REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS.
- d. PROVIDE EXTENDED WARRANTY FOR PERIOD EQUAL TO ORIGINAL WARRANTY PERIOD, FOR REPLACED PLANT MATERIAL.

PLANT MATERIAL GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT LIST, PLANT SCHEDULE, OR PLANT LEGEND INDICATED ON DRAWINGS AND COMPLYING WITH ANSI Z60.1; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.

- 1. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN 3/4 INCH IN DIAMETER; OR WITH STEM GIRDLING ROOTS ARE UNACCEPTABLE.
- 2. COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A NURSERY UNLESS OTHERWISE INDICATED.

PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.

ROOT-BALL DEPTH: FURNISH TREES AND SHRUBS WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL, WHICH BEGINS AT ROOT FLARE ACCORDING TO ANSI Z60.1. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.

LABELING: LABEL EACH PLANT OF EACH VARIETY, SIZE, AND CALIPER WITH A SECURELY ATTACHED. WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF COMMON NAME AND FULL SCIENTIFIC NAME. INCLUDING GENUS AND SPECIES. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE FOR THE PLANT.

IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS INDICATED ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.

FERTILIZERS: REFER TO PLANTING SOIL SPECIFICATION.

MULCHES

ORGANIC MULCH: FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF ONE OF THE FOLLOWING: 1. TYPE: DOUBLE-SHREDDED HARDWOOD.

- 2. SIZE RANGE: 3 INCHES MAXIMUM, 1/2 INCH MINIMUM.
- COLOR: NATURAL.

PESTICIDES GENERAL: PESTICIDE REGISTERED AND APPROVED BY THE EPA. ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND OF TYPE RECOMMENDED BY MANUFACTURER FOR EACH SPECIFIC PROBLEM AND AS REQUIRED FOR PROJECT CONDITIONS AND APPLICATION. DO NOT USE RESTRICTED PESTICIDES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION.

PRE-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING THE GERMINATION OR GROWTH OF WEEDS WITHIN PLANTED AREAS AT THE SOIL LEVEL DIRECTLY BELOW THE MULCH LAYER.

POST-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING WEED GROWTH THAT HAS ALREADY GERMINATED.

MISCELLANEOUS PRODUCTS

BURLAP: NON-SYNTHETIC, BIODEGRADABLE.

EXAMINATION

EXAMINE AREAS TO RECEIVE PLANTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH

- REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE OF THE WORK. 1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
- 2. VERIFY THAT PLANTS AND VEHICLES LOADED WITH PLANTS CAN TRAVEL TO PLANTING LOCATIONS WITH ADEQUATE OVERHEAD CLEARANCE.
- 3. SUSPEND PLANTING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.
- 4. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE OR WHICH IS DUSTY.

IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.

PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.

INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

PLANTING AREA ESTABLISHMENT

GENERAL: PREPARE PLANTING AREA FOR SOIL PLACEMENT AND MIX PLANTING SOIL ACCORDING TO PLANTING SOIL SPECIFICATIONS.

PLACING PLANTING SOIL: PLACE AND MIX PLANTING SOIL ACCORDING TO PLANTING SOIL SPECIFICATION

BEFORE PLANTING, OBTAIN ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

EXCAVATION FOR TREES AND SHRUBS PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS.

- 1. EXCAVATE PLANTING PITS WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. EXCAVATIONS WITH VERTICAL SIDES ARE UNACCEPTABLE. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
- 2. EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR BALLED AND BURLAPPED AND CONTAINER-GROWN STOCK.
- 3. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL.
- 4. IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO THE CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING. 5. MAINTAIN ANGLES OF REPOSE OF ADJACENT MATERIALS TO ENSURE STABILITY. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR
- EXISTING IMPROVEMENTS. 6. MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.
- 7. KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY INSTALLER'S PERSONNEL.

BACKFILL SOIL: SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY NOT BE USED AS BACKFILL SOIL UNLESS OTHERWISE INDICATED.

OBSTRUCTIONS: NOTIFY ARCHITECT IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS. 1. HARDPAN LAYER: DRILL 6-INCH-DIAMETER HOLES, 24 INCHES APART, INTO FREE-DRAINING STRATA

DRAINAGE: NOTIFY ARCHITECT IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.

OR TO A DEPTH OF 10 FEET, WHICHEVER IS LESS, AND BACKFILL WITH FREE-DRAINING MATERIAL.

TREE, SHRUB, AND VINE PLANTING

INSPECTION: AT TIME OF PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL ACCORDING TO ANSI Z60.1. IF ROOT FLARE IS NOT VISIBLE. REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOP-MOST ROOT EMERGES FROM THE TRUNK. AFTER SOIL REMOVAL TO EXPOSE THE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE REQUIREMENTS

ROOTS: REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.

BALLED AND BURLAPPED STOCK: SET EACH PLANT PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.

- 1. BACKFILL: PLANTING SOIL PER PLANTING SOILS SPECIFICATION.
- 2. AFTER PLACING SOME BACKFILL AROUND ROOT BALL TO STABILIZE PLANT, CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM TOPS OF ROOT BALLS AND FROM SIDES, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING
- 3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS
- 4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.

CONTAINER-GROWN STOCK: SET EACH PLANT PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.

- 1. BACKFILL: PLANTING SOIL PER PLANTING SOILS SPECIFICATION.
- 2. CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT. 3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS
- ABSORBED. 4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL

SLOPES: WHEN PLANTING ON SLOPES, SET THE PLANT SO THE ROOT FLARE ON THE UPHILL SIDE IS FLUSH WITH THE SURROUNDING SOIL ON THE SLOPE; THE EDGE OF THE ROOT BALL ON THE DOWNHILL SIDE WILL BE ABOVE THE SURROUNDING SOIL. APPLY ENOUGH SOIL TO COVER THE DOWNHILL SIDE OF THE ROOT BALL.

MECHANIZED TREE-SPADE PLANTING

1. TREES MAY BE PLANTED WITH AN APPROVED MECHANIZED TREE SPADE AT THE DESIGNATED LOCATIONS. DO NOT USE TREE SPADE TO MOVE TREES LARGER THAN THE MAXIMUM SIZE ALLOWED FOR A SIMILAR FIELD-GROWN, BALLED-AND-BURLAPPED ROOT-BALL DIAMETER ACCORDING TO ANSI Z60.1, OR LARGER THAN MANUFACTURER'S MAXIMUM SIZE RECOMMENDATION FOR THE TREE SPADE BEING USED, WHICHEVER IS SMALLER.

- 2. USE THE SAME TREE SPADE TO EXCAVATE THE PLANTING HOLE AS WILL BE USED TO EXTRACT AND TRANSPORT THE TREE.
- 3. WHEN EXTRACTING THE TREE, CENTER THE TRUNK WITHIN THE TREE SPADE AND MOVE TREE
- WITH A SOLID BALL OF EARTH.
- 4. CUT EXPOSED ROOTS CLEANLY DURING TRANSPLANTING OPERATIONS. 5. PLANT TREES FOLLOWING PROCEDURES IN "TREE, SHRUB, AND VINE PLANTING" ARTICLE.

6. WHERE POSSIBLE, ORIENT THE TREE IN THE SAME DIRECTION AS IN ITS ORIGINAL LOCATION.

- TREE, SHRUB, AND VINE PRUNING
- REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE.

GROUND COVER AND PLANT PLANTING

2. DO NOT APPLY PRUNING PAINT TO WOUNDS.

- 1. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES AS INDICATED ON DRAWINGS IN EVEN ROWS WITH TRIANGULAR SPACING.
- 2. USE PLANTING SOIL PER PLANTING SOIL SPECIFICATION FOR BACKFILL. 3. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.
- 4. FOR ROOTED CUTTING PLANTS SUPPLIED IN FLATS, PLANT EACH IN A MANNER THAT MINIMALLY DISTURBS THE ROOT SYSTEM BUT TO A DEPTH NOT LESS THAN TWO NODES.
- 5. WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTATION AROUND PLANTS TO HOLD WATER.

6. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER PLANT CROWNS WITH WET

7. PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION IF PLANTS SHOW EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.

PLANTING AREA MULCHING

MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS INDICATED. 1. TREES IN TURF AREAS: APPLY [ORGANIC] [AGGREGATE] MULCH RING OF 2-INCH AVERAGE THICKNESS, WITH 18-INCH RADIUS AROUND TRUNKS OR STEMS. DO NOT PLACE MULCH WITHIN 3

INCHES OF TRUNKS OR STEMS. 2. ORGANIC MULCH IN PLANTING AREAS: APPLY 2-INCH AVERAGE THICKNESS OF ORGANIC MULCH OVER WHOLE SURFACE OF PLANTING AREA, AND FINISH LEVEL WITH ADJACENT FINISH GRADES. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.

EDGING INSTALLATION

SHOVEL-CUT EDGING: SEPARATE MULCHED AREAS FROM TURF AREAS, CURBS, AND PAVING WITH A 45-DEGREE, 4- TO 6-INCH-DEEP, SHOVEL-CUT EDGE.

INSTALLING SLOW-RELEASE WATERING DEVICE

PROVIDE ONE DEVICE FOR EACH TREE.

2. PLACE DEVICE ON TOP OF THE MULCH AT BASE OF TREE STEM AND FILL WITH WATER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

PLANT MAINTENANCE

- 1. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, ADJUSTING AND REPAIRING TREE-STABILIZATION DEVICES, RESETTING TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS.
- 2. FILL IN, AS NECESSARY, SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
- 3. APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS, AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHEN POSSIBLE TO MINIMIZE USE OF PESTICIDES AND REDUCE HAZARDS. TREATMENTS INCLUDE PHYSICAL CONTROLS SUCH AS HOSING OFF FOLIAGE, MECHANICAL CONTROLS SUCH AS TRAPS, AND BIOLOGICAL CONTROL AGENTS.

PESTICIDE APPLICATION

- 1. APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS ACCORDING TO AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS PERFORMED.
- 2. PRE-EMERGENT HERBICIDES (SELECTIVE AND NONSELECTIVE): APPLY TO TREE, SHRUB, AND GROUND-COVER AREAS ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS. DO NOT APPLY TO SEEDED AREAS.
- 3. POST-EMERGENT HERBICIDES (SELECTIVE AND NONSELECTIVE): APPLY ONLY AS NECESSARY TO TREAT ALREADY-GERMINATED WEEDS AND ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.

REPAIR AND REPLACEMENT GENERAL: REPAIR OR REPLACE EXISTING OR NEW TREES AND OTHER PLANTS THAT ARE DAMAGED

BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY ARCHITECT. 1. SUBMIT DETAILS OF PROPOSED PRUNING AND REPAIRS.

FULL-GROWTH STATUS, AS DETERMINED BY ARCHITECT.

2. PERFORM REPAIRS OF DAMAGED TRUNKS, BRANCHES, AND ROOTS WITHIN 24 HOURS, IF 3. REPLACE TREES AND OTHER PLANTS THAT CANNOT BE REPAIRED AND RESTORED TO

REMOVE AND REPLACE TREES THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION BEFORE THE END OF THE CORRECTIONS PERIOD OR ARE DAMAGED DURING

CONSTRUCTION OPERATIONS THAT ARCHITECT DETERMINES ARE INCAPABLE OF RESTORING TO NORMAL GROWTH PATTERN.

1. PROVIDE NEW PLANTS OF SAME SIZE AND SPECIES AS THOSE BEING REPLACED.

- CLEANING AND PROTECTION 1. DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING
- SOIL ONTO ROADS, WALKS, OR OTHER PAVED AREAS. 2. REMOVE SURPLUS SOIL AND WASTE MATERIAL INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY 3. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER
- CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS. 4. AFTER INSTALLATION AND BEFORE PROJECT COMPLETION, REMOVE NURSERY TAGS, NURSERY STAKES, TIE TAPE, LABELS, WIRE, BURLAP, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING

5. AT TIME OF SUBSTANTIAL COMPLETION, VERIFY THAT TREE-WATERING DEVICES ARE IN GOOD WORKING ORDER AND LEAVE THEM IN PLACE. REPLACE IMPROPERLY FUNCTIONING DEVICES.

AREAS, AND PROJECT SITE.

MAINTENANCE SERVICE MAINTENANCE SERVICE FOR PLANTS: PROVIDE MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN "PLANT MAINTENANCE" ARTICLE. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTS ARE INSTALLED AND CONTINUE UNTIL PLANTINGS ARE ACCEPTABLY HEALTHY AND WELL ESTABLISHED, BUT FOR NOT LESS THAN MAINTENANCE PERIOD

1. MAINTENANCE PERIOD: 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION.

KLEINGERS

CIVIL ENGINEERING | www.kleingers.com 6219 Centre Park Dr LANDSCAPE West Chester, OH 45069 513.779.7851 ARCHITECTURE

MICHAEL

NO. DATE DESCRIPTION

UNION VILLAGE

COMMUNITY POOL

TURTLECREEK TOWNSHIP

WARREN COUNTY, OHIO

PROJECT NO: 140217.026 2025/06/13

SHEET NAME:

SCALE:

LANDSCAPE **SPECIFICATIONS**

DELIVERY, STORAGE, AND HANDLING