OWNER/DEVELOPER:
CASEY'S GENERAL STORES, INC.
ONE SE CONVENIENCE BLVD.
ANKENY, IA 50021
PHONE: (515) 381-5722
CONTACT: ERIK NIKKEL

ENGINEER:
CESO, INC.
7777 BONHOMME AVE.
CLAYTON, MO 63105
PHONE: (618) 604-7157
CONTACT: PAUL HANSON
EMAIL: HANSON@CESOINC.COM
EOR: ZACH FRESHNER, P.E.

GOVERNING AGENCIES AND UTILITY COMPANIES:

SEWER:
CITY OF FRANKLIN
PHONE: (937) 746-5001
CONTACT: NICK MILLER
EMAIL: NMILLER@FRANKLINOHIO.ORG

GAS SERVICE:
DUKE ENERGY
PHONE: (877) 700-3853

WATER:
CITY OF FRANKLIN
PHONE: (937) 746-5001
CONTACT: NICK MILLER
EMAIL: NMILLER@FRANKLINOHIO.ORG

COMMUNICATIONS:
CINCINNATI BELL
PHONE: (513) 566-5254

STORMWATER:
CITY OF FRANKLIN
PHONE: (937) 746-5001
CONTACT: STEVE INMAN
EMAIL: SINMAN@FRANKLINOHIO.ORG

ELECTRIC:
DUKE ENERGY
PHONE: (877) 700-3853

ZONING:
CITY OF FRANKLIN
PHONE: (937) 746-9921 X 1401
CONTACT: ERIC DAMIAN
EMAIL: EDAMIAN@FRANKLINOHIO.ORG

PROPERTY DATA:

PARCEL OWNER:	WILBUR S. LAKE II, TRUSTEE LAKE FAMILY PRESERVATION TRUST
PARCEL ID:	0426452005O, 0426452006O, 0426452007O
ADDRESS:	1288 EAST 2ND STREET FRANKLIN, OH 45005
PROPOSED PROPERTY AREA:	1.59 ACRES
EXISTING PROPERTY AREA:	0.52, 0.52, 0.52
ZONING:	C-1 GENERAL COMMERCIAL DISTRICT
PROPOSED USE:	CONVENIENCE STORE AND FUEL STATION

	REQUIRED	PROPOSED
BUILDING SETBACKS		
FRONTAGE ALONG E 2ND ST:	35'	152.5'
FRONTAGE ALONG EASTLAWN DR:	35'	95.4'
SIDE:	0'	100.8'
REAR:	30'	30'
PARKING AREA SETBACKS		
FRONT:	20'	126.8'
SIDE:	10'	73.1'
REAR:	10'	82.8'
SIGN SETBACKS:	10'	10'
MAXIMUM BUILDING HEIGHT:	25'	21.3'
PARKING:		
TOTAL PARKING SPACES:	11	20
ADA PARKING SPACES:	1	1

FLOODPLAIN DESIGNATION: PARCEL IS LOCATED WITHIN ZONE X OF FLOOD MAP 39165C0009E EFFECTIVE 12/17/2010, WHICH IS NOT LOCATED IN A FLOOD ZONE OR FLOODWAY PER WARREN COUNTY, OHIO AND INCORPORATED AREAS FEDERAL EMERGENCY MANAGEMENT AGENCY MAP FOR FRANKLIN.

LEGEND

EXISTING FEATURES LEGEND
APPLIES TO ALL CIVIL SHEETS

- R/W — RIGHT OF WAY LINE
- PARCEL LINE
- SUBJECT PROPERTY BOUNDARY LINE
- EASEMENT LINE
- CURB
- EDGE OF PAVEMENT
- EDGE OF WALK
- PAVEMENT MARKINGS
- STM — STORM SEWER
- SAN — SANITARY SEWER
- W — WATER LINE
- G — GAS LINE
- OHE — OVHD ELECTRIC LINE
- UGE — UGND ELECTRIC LINE
- UGT — UGND TELECOMM LINE
- 102 — MAJOR CONTOUR
- 102 — MINOR CONTOUR

- BENCHMARK
- SET 5/8" x 30" IRON REBAR WITH YELLOW CAP STAMPED "CESO"
- SANITARY MANHOLE
- TELEPHONE BOX
- CLEANOUT
- GUY WIRE ANCHOR
- CATCH BASIN
- CURB INLET
- LIGHT POLE
- POWER POLE
- ELECTRIC METER
- GAS METER
- SIGN
- ELECTRIC BOX
- TRAFFIC BOX
- WATER VALVE
- FIRE HYDRANT
- SIGNAL POLE

CITY OF FRANKLIN, WARREN COUNTY, OHIO
SITE IMPROVEMENTS
FOR
CASEY'S #5156
1288 EAST 2ND STREET
FRANKLIN, OH 45005

Sheet List Table	
Sheet Number	Sheet Title
C-001	COVER SHEET
C-002	GENERAL NOTES
C-003	ALTA
C-100	DEMOLITION PLAN
C-101	SITE PLAN
C-101A	ALTERNATIVE PAVEMENT PLAN
C-102	CIRCULATION PLAN
C-201	GRADING PLAN
C-202	UNDERGROUND DETENTION DETAILS
C-203	UNDERGROUND DETENTION DETAILS
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C-401	SWPPP
C-402	SWPPP DETAILS
C-403	SWPPP DETAILS
C-404	SWPPP DETAILS
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C-601	CONSTRUCTION DETAILS
C-602	CONSTRUCTION DETAILS
C-603	CONSTRUCTION DETAILS
C-604	CONSTRUCTION DETAILS
C-605	CONSTRUCTION DETAILS
C-700	LANDSCAPE PLAN
C-701	PLANTING DETAILS AND NOTES

VICINITY MAP
NO SCALE

BENCHMARK
Vertical Datum: NAVD88
derived from GPS Observations

BM "50": Bench tie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive.
Elevation = 809.15' (NAVD 88)

BM "51": Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts.
Elevation = 807.72' (NAVD 88)

BM "52": Bench tie set on south side of a power pole located on the south side of S.R. 73. It is the second pile west of the intersection of S.R. 73 and East Lawn Drive.
Elevation = 810.44' (NAVD 88)

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

OHIO811.org Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
7777 Bonhomme Ave., Suite 1853
Clayton, MO 63105
Phone: 618.604.7157 Fax: 888.208.4826

CASEY'S #5156
FRANKLIN, OH
1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
COVER SHEET

C-001

C:\DC\ACCDocs\CESO\Caseys Franklin OH\Project Files_CESO\03-CIVIL\PLAN_PLOT\766139_COVER SHEET.dwg - 8/22/2025 - Janice Torres Pirela

GENERAL NOTES

DEMOLITION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. THE DEMOLITION, REMOVAL, AND DISPOSAL IS TO BE APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL FACILITIES SUCH AS: STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, WELLS, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL AS SPECIFIED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER. IF UNDOCUMENTED FACILITIES ARE FOUND ON SITE, CONTRACTOR SHALL CONTACT THE OWNER AND UTILITY COMPANY PRIOR TO REMOVAL. ALL FACILITIES SHALL BE PLUGGED, ABANDONED, OR REMOVED PER STATE AND LOCAL REQUIREMENTS.
2. FEDERAL, STATE AND LOCAL CODE REQUIREMENTS SHALL GOVERN THE DISPOSAL OF DEBRIS INCLUDING ANY POTENTIALLY HAZARDOUS AND TOXIC MATERIALS. ALL MATERIALS AND STRUCTURES DESIGNATED AS "TO BE REMOVED" SHALL BE DISPOSED OF OFF SITE AND AT THE COST OF THE CONTRACTOR.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING JOB SITE SAFETY PER OSHA REQUIREMENTS AT ALL TIMES.
4. PRIOR TO DEMOLITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL THE STATE 811 AND NOTIFY ALL UTILITY COMPANIES TO SCHEDULE UTILITY SERVICE REMOVAL AND/OR ABANDONMENT. ALL UTILITIES SHALL BE REMOVED/RELOCATED PER THE SPECIFICATIONS OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THIS WORK
5. CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO INHABITED BUILDINGS ON SITE AND ADJACENT PROPERTIES AT ALL TIMES. INTERRUPTIONS SHALL BE APPROVED BY THE OWNERS OF THE BUILDINGS/PROPERTIES.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES. IF THE LOCATION OR ELEVATION OF THE EXISTING UTILITIES ARE FOUND TO BE DIFFERENT FROM THE PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
7. CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES TO REMAIN INSIDE AND OUTSIDE CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGES AND NOTIFY THE CITY/COUNTY PRIOR TO CONSTRUCTION START. ANY EXISTING SITE FEATURE TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, CURB, ETC. SHALL BE REPAIRED TO A CONDITION THAT IS EQUAL TO, OR BETTER THAN, THE EXISTING CONDITIONS. PRIOR TO BEING DAMAGED, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
8. CONTINUOUS ACCESS SHALL BE MAINTAINED TO THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND LOCAL REGULATIONS.
10. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC. TO WARN AND KEEP UNAUTHORIZED PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
11. PRIOR TO DEMOLITION, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE GOVERNING AGENCIES GUIDELINES AND STANDARDS. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
12. SAWCUT LINE PROVIDED IS FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF THE SAWCUT THAT WILL BE REQUIRED AS WELL AS PAVEMENT REPAIRS TO INSTALL UTILITY TRENCHING. IF ANY DAMAGE OCCURS ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THAT WHICH IS NECESSARY TO COMPLETE THE INTENT OF THE PROPOSED IMPROVEMENTS. SAWCUT EXISTING PAVEMENT TO FULL DEPTH, USING CARE TO CUT NEAT, STRAIGHT LINES. CUT AT EXISTING JOINTS WHERE POSSIBLE.
13. THE CONTRACTOR SHALL MAINTAIN A WELL-DRAINED SITE, FREE OF STANDING WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STUDY THE PLANS AND VISIT THE SITE TO DETERMINE THE ITEMS THAT MUST BE REMOVED TO COMPLY WITH THE SITE DEVELOPMENT PLANS. NO EXTRA FEE WILL BE PAID FOR THE REMOVAL OF ANY ITEM NOT LISTED THAT IS VISIBLE UPON A SITE VISIT. THE DEMOLITION PLAN IS INTENDED TO PRESENT THE SCOPE OF THE DEMOLITION, AND DOES NOT GUARANTEE THAT ALL ITEMS ARE ADDRESSED.
15. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
16. THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
17. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

SITE NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL MATERIAL NOTED ON DRAWINGS WILL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO COORDINATE ACCESS POINTS AND ELEVATIONS. REFER TO ARCHITECTURAL PLANS. FOR EXACT LOCATIONS AND DIMENSIONS OF DOORS, ENTRY RAMP, AND CANOPY.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
5. THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
6. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
7. ACCESSIBILITY STANDARDS SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES. ADA PARKING STALLS SHALL MEET ADA GRADE GUIDELINES. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AT ACCESS POINTS, ACCESSIBLE ROUTES, AND EXISTING PARKING TO REMAIN TO DETERMINE COMPLIANCE WITH STANDARDS.
8. ALL DISTURBED AREAS ARE TO RECEIVE 6" OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
9. ALL DIMENSIONS AND RADII ARE TO THE EDGE OF PAVEMENT OR FACE OF BUILDING, AS APPLICABLE, UNLESS OTHERWISE NOTED.
10. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
11. PROVIDE SIGNAGE AND STRIPING AS SHOWN. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE GOVERNING MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). PAVEMENT MARKINGS ON ASPHALT SHALL BE WHITE. PAVEMENT MARKINGS ON CONCRETE SHALL BE YELLOW.
12. REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING SIGNAGE.
13. REFER TO MECHANICAL PLANS FOR EQUIPMENT LAYOUT.
14. REFER TO ELECTRICAL PLANS FOR ELECTRICAL WORK.
15. REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SITE WORK PREPARATION/RECOMMENDATIONS AND PAVEMENT SECTIONS.
16. REFER TO ORIGINAL SURVEY PROVIDED BY CESO, INC. DATED MARCH 24TH, 2025.
17. ALL LIGHT POLES TO BE LOCATED 3' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON PLANS.
18. THE CONTRACTOR SHALL FOLLOW ALL LOCAL REQUIREMENTS AND REGULATIONS FOR FILLING AND DISPOSING OF TANK BALLAST WATER.

GRADING NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. THE TOPOGRAPHIC SURVEY WAS PERFORMED BY A REGISTERED LAND SURVEYOR. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
4. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
5. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS ARE SHOWN AT 1 FOOT INTERVALS.
6. ALL SPOT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
7. ALL ADA ACCESSIBLE PARKING SPACED AND LOADING AREAS SHALL BE GRADED WITH A 2.0% MAXIMUM SLOPE IN ALL DIRECTIONS. ALL ADA ACCESSIBLE ROUTES SHALL BE GRADED WITH A 2.0% MAXIMUM CROSS SLOPE AND 5.0% MAXIMUM RUNNING SLOPE.
8. MAINTAIN EXISTING DRAINAGE PATTERN THROUGHOUT THE SITE, EXCEPT WITHIN THE LIMITS OF DISTURBANCE (LOD).
9. COORDINATE GRADES AT BUILDING ENTRIES WITH ARCHITECTURAL PLANS.
10. EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED TO REMOVE ALL SILT AND DEBRIS AFTER CONSTRUCTION IS COMPLETE.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO A CONDITION EQUAL TO OR BETTER THAN IT'S CONDITION PRIOR TO DAMAGE.
12. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND WITHIN PAVED AREAS.
13. ALL TOPSOIL MUST BE REMOVED BEFORE FILL MATERIAL IS PLACED.
14. ALL WET, OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, REMOVAL & DRYING & RECOMPACTION, OR SOIL TREATMENT (LIME/CEMENT) UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER.
15. ALL UNSURFACED AREAS, DISTURBED BY GRADING, OPERATION SHALL RECEIVE 6" OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER AND SEED WITH LOW MAINTENANCE GRASS SEED MIX. CONTRACTOR SHALL SEED DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL EXPOSED SURFACE AREAS SHALL BE STABILIZED PER THE SWPPP AND LANDSCAPE REQUIREMENTS AS PART OF THIS PLAN SET.
16. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS SOIL TIGHT.
17. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
18. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

MATERIAL	TYPE	PIPE SPEC	JOINT SPEC	INSTALLATION	ACCEPTABLE AREAS OF USE
REINFORCED CONCRETE PIPE (RCP)	CLASS III, IV, V	ASTM C-76	ASTM C443	ASTM C1479	WITHIN R/W, COVER VARIES WITH PIPE CLASS
HIGH DENSITY POLY-ETHYLENE (HDPE)	SMOOTH-WALLED CORRUGATED ADS-N12 OR EQUAL	AASHTO M294 (TYPE S)	ASTM F477	ASTM D2321	ON SITE, 12" TO 60" DIA.
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321	ON SITE, 4" TO 10"

19. ALL STORM SEWER STRUCTURE GRATES AND FRAMES WITHIN PAVEMENT SHALL BE HEAVY DUTY.
20. ALL STORM DRAINAGE SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL COUNTY AND ODOT STANDARDS.
21. ALL DOWNSPOUT DRAIN LINES OR ROOF LEADERS SHALL HAVE A 1.0% MINIMUM SLOPE, UNLESS OTHERWISE NOTED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE STORM SEWER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT AND ROOF LEADER LOCATIONS. PROVIDE POSITIVE DRAINAGE AND PAVEMENT REPAIR AS NEEDED.
22. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
23. THE STORM SEWER GRADE WILL BE SUCH THAT A MINIMUM COVER IS MAINTAINED TO WITHSTAND AASHTO HS-25 LOADING ON THE PIPE. PROVIDE MINIMUM 2.0 FEET OF COVER FOR ALL STORM SEWERS UNLESS OTHERWISE NOTED.
24. WHEN A SANITARY SEWER MAIN LIES ABOVE A STORM SEWER, OR WITHIN 18 INCHES BELOW, THE SANITARY SEWER WILL HAVE AN IMPERVIOUS ENCASEMENT OR BE CONSTRUCTED OF STRUCTURAL SEWER PIPE FOR A MINIMUM OF 10 FEET ON EACH SIDE OF WHERE THE STORM SEWER CROSSES.
25. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY SHALL BE REPAIRED AND/OR TIED INTO A STORM SEWER SYSTEM AS NEEDED TO MAINTAIN POSITIVE DRAINAGE.

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
2. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
3. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF O.S.H.A. DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR O.S.H.A.
4. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
5. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
6. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
7. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
8. WATER AND SANITARY UTILITIES SHALL HAVE TEN (10') FEET OF HORIZONTAL CLEARANCE WHEN PARALLEL OR 18" VERTICAL CLEARANCE WHEN CROSSING. ALL CLEARANCE DISTANCES SHALL BE MEASURE FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER LINE JOINTS.
9. IF A WATER LINE PASSES UNDER THE SANITARY SEWER LINE, THE SEWER LINE SHOULD BE CONSTRUCTED OF A WATERTIGHT MATERIAL APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION AND SHALL EXTEND TEN (10') FEET ON BOTH SIDES OF THE CROSSING, AS MEASURED PERPENDICULAR TO THE WATER LINES. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
12. UTILITY TRENCHES WITHIN PAVED AREAS TO BE BACKFILLED PER UTILITY TRENCH DETAIL PROVIDED WITHIN THE CONSTRUCTION DETAILS SHEET.
13. ALL WATER LINE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF FRANKLIN CONSTRUCTION STANDARDS AND STATE REGULATIONS.
14. INSTALL ALL WATER LINES WITH A MINIMUM COVER OF [4'-0"].
15. ON-SITE WATER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
HIGH-DENSITY POLY-ETHYLENE (HPDE TUBING)	SDR 9 P.C. = 250 PSI	ASTM D2239 AWWA C901 ASTM F714	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, < 3" DIA.
COPPER 1"-3"	TYPE "K"	ASTM B88	AWWA C800	AWWA C800	DOMESTIC WATERLINES 1"-3"
PE 4710 POLY-ETHYLENE PLASTIC (IPS)	SDR 11 P.C. = 200 PSI	ASTM D3035 AWWA C901	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, 2" TO 3" DIA.
P.V.C. POLY VINYL CHLORIDE 4"- 8" C900	C900	AWWA C901 (RATED DR 14)	ASTM F-477 ASTM D3139	AWWA C900 C651	ON SITE, 4"-8" WATER LINES & FIRE LINES INSTALL W/ TRACER & TAPE #12 COPPER
DUCTILE IRON PIPE 4"-12"	CLASS 52 P.C. = 350PSI	AWWA C104, C110, C151, C500	AWWA C111	AWWA C600, C651	6" FIRE HYDRANT LEADS
PE 4710 POLY-ETHYLENE PLASTIC (DIPS)	SDR 9 P.C. = 250 PSI	ASTM D2239 ASTM F714 AWWA C906	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, 4" DIA. AND LARGER

16. ON-SITE SANITARY SEWER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., LESS THAN 8.5' OF COVER
POLY VINYL CHLORIDE (PVC)	SDR 26	ASTM 3034	ASTM D3212	ASTM 2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., GREATER THAN OR EQUAL TO 8.5' OF COVER

17. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
18. CLEAN OUTS AND CURB BOXES WITHIN THE PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.

QUANTITIES SUMMARY

ITEM	QUANTITY	UNIT	ITEM	QUANTITY	UNIT
6" CONCRETE PAVEMENT	28,339	SQ. FT.	EARTHWORK CUT & HAUL	0	CU. YD.
7" CONCRETE PAVEMENT	1,356	SQ. FT.	EARTHWORK CUT & RESPREAD	1,449	CU. YD.
8" CONCRETE PAVEMENT	3,234	SQ. FT.	EARTHWORK IMPORT & PLACE	6,432	CU. YD.
CONCRETE CURB, ON-SITE/APPROACHES	926	LIN. FT.	6' TALL CHAIN LINK FENCE	463	LIN. FT.
SIDEWALK, NOT ADJACENT TO STORE	1,530	SQ. FT.	SOD AREA	10,148	SQ. FT.
APPROACH ASPHALT PAVEMENT	3,178	SQ. FT.	SEED AREA	1,405	SQ. FT.
DETENTION SYSTEM	15,394	CU. FT.	CONCRETE PAVEMENT DEMOLITION, ON-SITE	7,485	SQ. FT.
SEWER SERVICE - SDR 35 (DIRECT BURY)	333	LIN. FT.	BUILDING DEMOLITION - SHED	197	SQ. FT.
WATER SERVICE - TYPE K SOFT COPPER (DIRECT BURY)	203	LIN. FT.	BUILDING DEMOLITION - ONE STORY HOME	5,035	SQ. FT.
STORM PIPING - 6" PVC	406	LIN. FT.	BUILDING DEMOLITION - TWO-STORY HOME	1,855	SQ. FT.
STORM PIPING - 12" PVC	22	LIN. FT.			
STORM PIPING - 15" PVC	389	LIN. FT.			
STORM PIPING - 18" PVC	54	LIN. FT.			
SANITARY SEWER CLEANOUT	3	EACH			
STORM SEWER CLEANOUT	6	EACH			
GREASE TRAP	1	EACH			
STORM STRUCTURES	8	EACH			

*CONTRACTOR TO PROVIDE A COMPLETE QUANTITIES TABLE PER THE CONSTRUCTION DOCUMENTS, QUANTITIES PROVIDED AS PART OF THIS SUMMARY ARE FOR REFERENCE PURPOSES ONLY AND ARE NOT A BASIS FOR CHANGE ORDER IF ADDITIONAL QUANTITY IS INSTALLED AS PART OF THE ORIGINAL BID DOCUMENTS.

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Casey's

CASEY'S #5156
FRANKLIN, OH
1288 EAST 2ND STREET
FRANKLIN, OH 45005

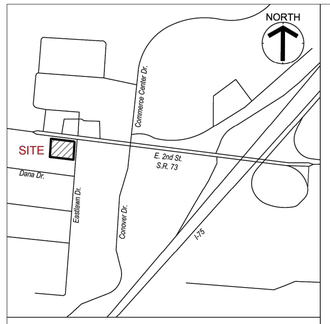
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
GENERAL NOTES

C-002



VICINITY MAP - NOT TO SCALE

SANITARY STRUCTURE CHART

30172
SANITARY MANHOLE
RIM 806.24
INV 8" CLAY (W) = 795.79
INV 8" CLAY (E) = 795.79
INV 8" PVC (S) = 795.99

30162
SANITARY MANHOLE
RIM 808.58
INV 8" CLAY (W) = 796.38
INV 8" CLAY (E) = 796.38

STORM STRUCTURE CHART

30150
STORM MANHOLE
RIM 805.07
INV 12" RCP (S) = 799.67
INV 12" RCP (W) = 799.87

30047
STORM MANHOLE
RIM 807.65
INV 12" RCP (S) = 802.60
INV 12" RCP (W) = 802.60

30046
CURB INLET
GRATE 806.95
INV 12" RCP (N) = 802.95

24009
STORM MANHOLE
RIM 808.73
INV 18" RCP (NW) = 805.06
INV 18" RCP (SE) = 805.00

50388
CURB INLET
GRATE 809.31
INV 18" RCP (W) = 805.36
INV 18" RCP (SE) = 806.00

50394
CURB INLET
GRATE 809.67
INV 15" RCP (W) = 807.57
INV 18" RCP (E) = 807.57

24005
CATCH BASIN
GRATE 810.94
INV 12" CPP (NW) = 807.84
INV 12" CPP (W) = 808.14
INV 15" RCP (E) = 807.79

24004
CATCH BASIN
GRATE 811.67
INV 24" CPP (W) = 807.87
INV 24" CPP (N) = 807.82
INV 12" RCP (SE) = 807.82

Line Table		
Line #	Direction	Length
L1	N89° 59' 43"E	58.56
L2	S89° 59' 06"E	41.70
L3	S72° 56' 13"E	102.02
L4	S81° 23' 30"E	80.86
L5	S44° 35' 17"E	25.04

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

BM "50": Benchtie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 809.15' (NAVD 88)

BM "51": Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts.

Elevation = 807.72' (NAVD 88)

BM "52": Bench tie set on south side of a power pole located on the south side of S.R. 73. It is the second pile west of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 810.44' (NAVD 88)

EXHIBIT "A" LEGAL DESCRIPTION

(See surveyor notes for Title Commitment information.)

The Land referred to herein below is situated in the County of WARREN, State of OHIO, and is described as follows:

Parcel 1:

Situate in the in the City of Franklin, County of Warren, State of Ohio and Being Lot Numbered Eight (8), Franklin Heights Subdivision, as recorded in Plat Book "3", Page(s) 165 of the Plat Records of Warren County, Ohio.

Parcel 2:

Situated in the City of Franklin, in the County of Warren, in the State of Ohio and being more particularly bounded and described as follows:

Being Lot Numbered Nine (9) as the same is known and designated on the Recorded Plat of Franklin Heights Subdivision, which plat is recorded in Plat Book 3, Page 165, of the Plat Records of Warren County, Ohio.

Parcel 3:

Situated in the City of Franklin, in the County of Warren, in the State of Ohio and more particularly bounded and described as follows: Being Lot Number Ten (10) as the same is known and designated on the Record Plat of the Franklin Heights Subdivision, which Plat is recorded in Plat Book 3, Page 165, of the Plat Records of Warren County, Ohio.

SCHEDULE B - SECTION II

(See surveyor notes for Title Commitment information.)

Items 1-12 are not survey related.

13. Covenants, Conditions, Restrictions, Easements, Setback Lines and any Amendments thereto as disclosed on the plat of subdivision recorded September 25, 1953 in Plat Book 3, Page 165.
SETBACK LINES RECORDED IN THIS PLAT ARE SHOWN HEREON

Termination recorded September 7, 1961 in Deed Book 315, Page 587 of Warren County Records.
SURVEYED PROPERTY IS PART OF THE LAND DESCRIBED IN THIS DOCUMENT

Termination recorded November 20, 1980 in Official Records Book 76, Page 707 of Warren County Records.
SURVEYED PROPERTY IS PART OF THE LAND DESCRIBED IN THIS DOCUMENT

Termination of One (1) Restriction and Covenant Running with the Land known as "Franklin Heights Subdivision", Section #26, T.2, R.5, Franklin Township, Warren County, Ohio recorded May 18, 2023 as Document No. 2023-009743.
SURVEYED PROPERTY IS PART OF THE LAND DESCRIBED IN THIS DOCUMENT

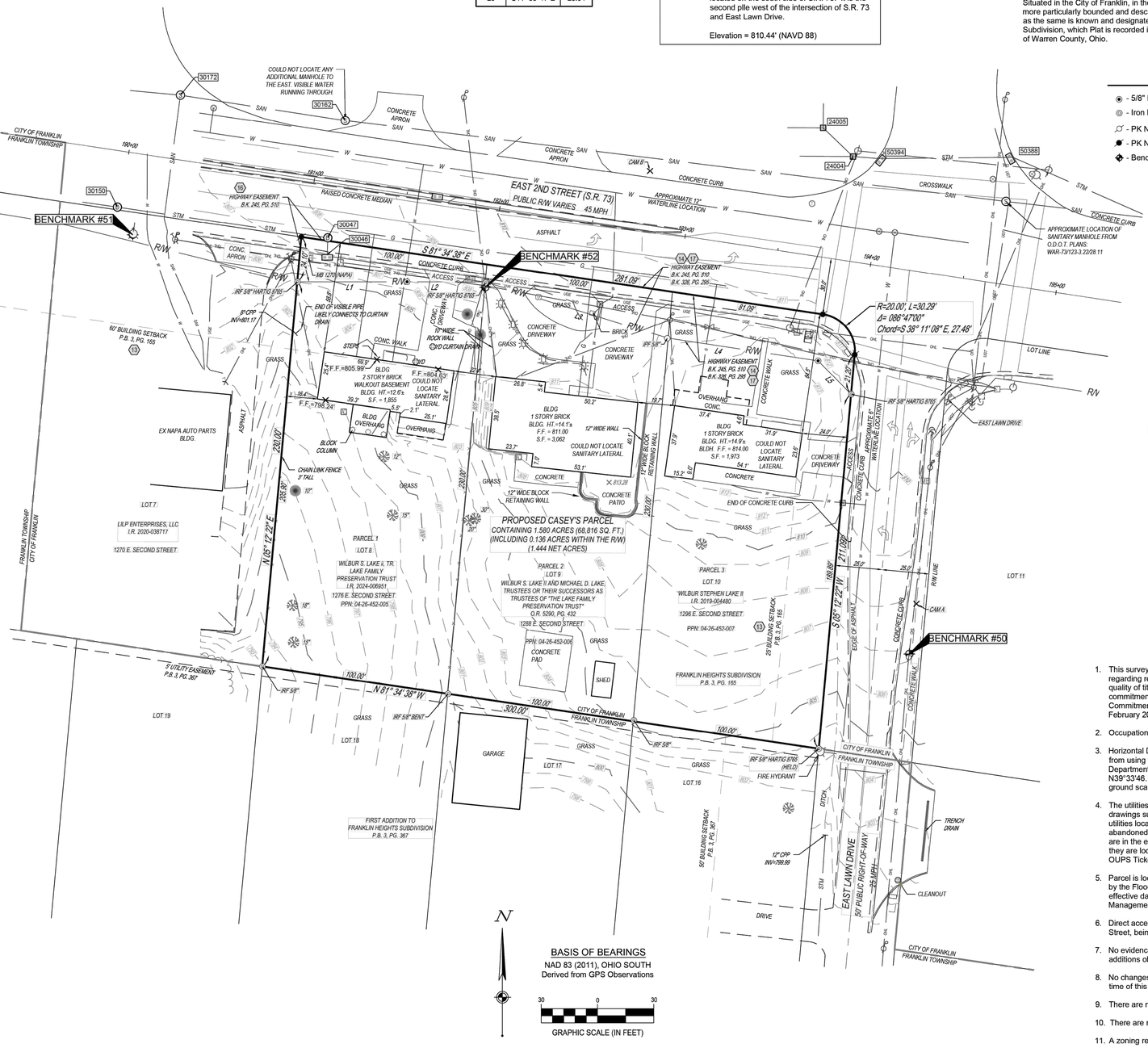
14. Subject to the items as contained in Warranty Deed from The E. and O. Realty Corporation to Tine Roberts and Gertrude Roberts, husband and wife, filed for record September 12, 1955 and recorded in Deed Book 245, Page 510 of Warren County Records. (Affecting Parcel 2 and Parcel 3)
EASEMENTS ARE ON THE SURVEYED PROPERTY AS SHOWN HEREON

15. Subject to the items as contained in Ohio Warranty Deed from Tine Roberts and Gertrude Roberts, husband and wife to Lewis N. Cash and Helen M. Cash, husband and wife, filed for record December 28, 1957 and recorded in Deed Book 272, Page 537 of Warren County Records. (Affecting Parcel 1)
PARCEL 1 OF THE SURVEYED PROPERTY IS THE SAME LAND AS DESCRIBED IN THIS DOCUMENT

16. Easement for Highway Purposes from Lewis N. Cash and Helen M. Cash (Married) to State of Ohio recorded July 5, 1962 in Deed Book 326, Page 266 of Warren County Records. (Affecting Parcel 1)
EASEMENTS ARE ON THE SURVEYED PROPERTY AS SHOWN HEREON

17. Easement for Highway Purposes from Tine Roberts - Married to State of Ohio recorded July 5, 1962 in Deed Book 326, Page 295 of Warren County Records. (Affecting Parcel 2 and Parcel 3)
EASEMENTS ARE ON THE SURVEYED PROPERTY AS SHOWN HEREON

18. Annexation to the City of Franklin recorded July 11, 1990 in Official Records Book 576, Page 699 of Warren County Records.
THE SURVEYED PROPERTY IS PART OF THE LAND DESCRIBED IN THIS DOCUMENT



BASIS OF BEARINGS

NAD 83 (2011), OHIO SOUTH
Derived from GPS Observations

GRAPHIC SCALE (IN FEET)
30 0 30

SURVEY MONUMENT LEGEND

- ◉ - 5/8" Iron Pin Set w/cap CESO, Inc
- ◎ - Iron Pin Found as Described
- ⌭ - PK Nail/Mag Nail Found
- ⌭ - PK Nail/Mag Nail Set
- ✥ - Benchmark Set

Rec. (R) - Deed

TOPOGRAPHIC LEGEND

- Power / Telephone Pole
- Light Pole
- Power Pole
- Electric Box (Access)
- Air Conditioner
- Gas Valve
- Cleanout
- Sanitary Manhole
- Storm Manhole
- Curb Inlet
- Yard Drain
- Structure Number
- Deciduous Tree
- Pine Tree
- Signal Pole
- Guy Wire
- Power/Telephone Pole
- Fire Hydrant
- Water Valve
- Water Meter
- Cable Box
- Telephone Box
- Traffic Control Box
- Yard Light
- Telephone Manhole
- Mailbox
- Rock
- Sign
- G — Gas Line
- W — Water Line
- UGE — Underground Electric
- UGT — Underground Communications
- OHL — Overhead Utility Line
- STM — Storm Sewer
- SAN — Sanitary Sewer
- Handrail
- X — Fence Line
- Edge of Water
- Tree Line

SURVEYOR NOTES:

1. This survey does not constitute a title search by the surveyor. All information regarding record easements, and other documents that might affect the quality of title to the parcel shown hereon we obtained through a certified title commitment conducted by First American Title Insurance Company, Commitment Number NCS-1252498-COL and bearing an effective date of February 20, 2025 at 7:30 a.m.
2. Occupation in general matched the survey.
3. Horizontal Datum - U.S. State Plane, NAD83 Ohio South (3402) established from using the Ohio Real Time Network (RTN) provided by the Ohio Department of Transportation. Coordinates taken to ground at latitude N39°33'46.16916", longitude W84°16'39.26849", project height 694.920', ground scale factor 1.0000924925912.
4. The utilities shown are located from field survey information and/or existing drawings supplied by client. The surveyor makes no guarantee that the utilities located comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the utilities located are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. OUPS Ticket #A306703514, B306701456, B306701470, & B306701480
5. Parcel is located within Zone "X" (Area of Minimal Flood Hazard) as indicated by the Flood Insurance Rate Map (FIRM) Map Number 39165C0009E, effective date: December 17, 2010 published by the Federal Emergency Management Agency.
6. Direct access to the subject parcel is available via State Route 73 and Lawn Street, being a public rights-of-way.
7. No evidence of recent earth movement, building construction, or building additions observed on the surveyed property at the time of the fieldwork.
8. No changes to street right-of-way lines were provided to the surveyor at the time of this survey.
9. There are no marked parking spaces on the surveyed property.
10. There are no churches or schools within 500' of property.
11. A zoning report was not provided to the surveyor at the time of the survey.

SURVEYOR'S CERTIFICATION:

TO: (i) Casey's Retail Company, an Iowa corporation
(ii) Casey's General Stores, Inc.
(iii) First American Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(A), 6(B), 7(A), 7(B)(1), 7(C), 8, 9, 11(A), 11(B), 13, 14, 16, and 17 of Table A thereof. The fieldwork was completed on March 5, 2025.

Date of Plat or Map: March 24, 2025

Sean T. Brooks, Ohio PS No. 8828 Date
brooks@cesoinc.com
3601 Rigby Road Suite 300
Miamisburg, Ohio 45342
(937) 435-8584

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Casey's

CASEY'S #5156
FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

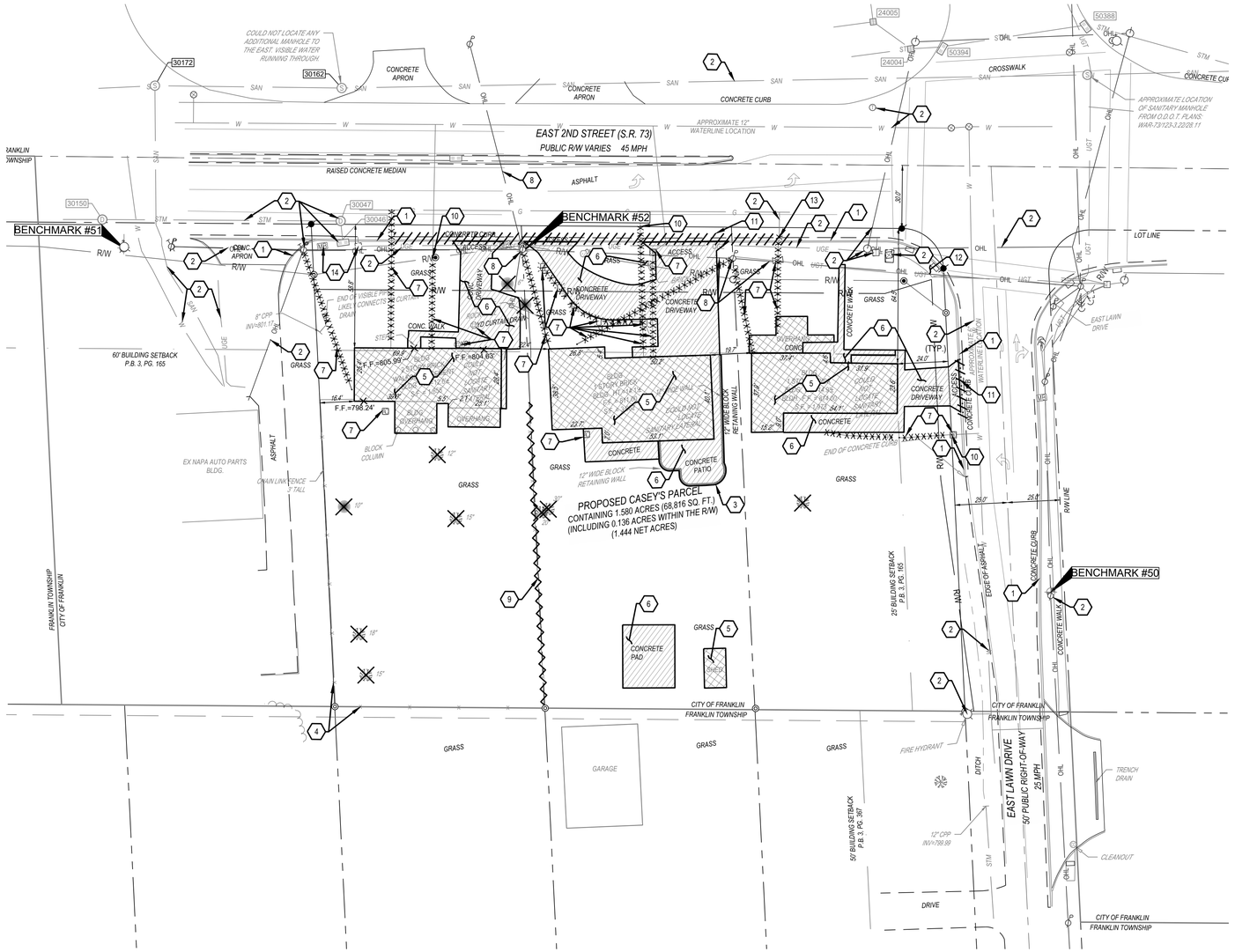
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	1" = 30'
Drawn By:	DAS
Checked By:	CTT
Date:	03/24/2025
Issue:	

Drawing Title:
ALTA / NSPS LAND TITLE SURVEY

C-003



DEMOLITION LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- REMOVE EXISTING BUILDING
- REMOVE EXISTING CONCRETE PAVEMENT (OR AS NOTED ON THE PLANS)
- UTILITY LINE TO BE REMOVED / RELOCATED
- REMOVE EXISTING CURB & GUTTER
- REMOVE EXISTING FENCE
- REMOVE AND DISPOSE OF EXISTING TREE
- SAVE — PROTECT EXISTING TREE TO REMAIN

CONTRACTOR NOTE:

1. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES.

CODED NOTES:

1. PROTECT EXISTING CURB TO REMAIN.
2. PROTECT EXISTING UTILITY LINE/STRUCTURE TO REMAIN. CONTRACTOR TO PROTECT IN PLACE.
3. REMOVE RETAINING WALL.
4. EXISTING SITE FENCE TO REMAIN.
5. REMOVE AND LEGALLY DISPOSE OF EXISTING BUILDING AND ALL FEATURES WITHIN 5' OF EXTERIOR WALL, INCLUDING BUT NOT LIMITED TO FLOOR SURFACES, FOUNDATIONS, CONTENTS, EQUIPMENT, SUBSURFACE PIPING, AND ASSOCIATED MATERIALS.
6. REMOVE EXISTING CONCRETE.
7. REMOVE EXISTING UTILITY LINE/STRUCTURE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY.
8. EXISTING UTILITY POLE AND OVERHEAD ELECTRIC LINE TO BE RELOCATED BY UTILITY COMPANY. REFER TO UTILITY PLAN, SHEET C-301, FOR NEW LOCATION OF UTILITY POLE. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANY.
9. REMOVE EXISTING FENCE.
10. CONTRACTOR TO TERMINATE UTILITY SERVICE LINE AT PROPERTY LINE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND ABIDE BY CITY OF FRANKLIN REGULATIONS.
11. SAWCUT CURB TO FULL DEPTH.
12. PROTECT EXISTING SIDEWALK TO REMAIN.
13. PROTECT EXISTING GAS SERVICE TAP TO REMAIN.
14. PROTECT EXISTING SITE STRUCTURE TO REMAIN.
15. POWER POLE/OVERHEAD UTILITY LINE TO BE RELOCATED.

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

BM "50":	Bench tie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive. Elevation = 809.15' (NAVD 88)
BM "51":	Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts. Elevation = 807.72' (NAVD 88)
BM "52":	Bench tie set on south side of a power pole located on the south side of S.R. 73. It is the second plle west of the intersection of S.R. 73 and East Lawn Drive. Elevation = 810.44' (NAVD 88)

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

N

30 0 30 60

GRAPHIC SCALE (IN FEET)
1 in. = 30 ft.

OHIO811.org Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

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Casey's

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FRANKLIN, OH

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FRANKLIN, OH 45005

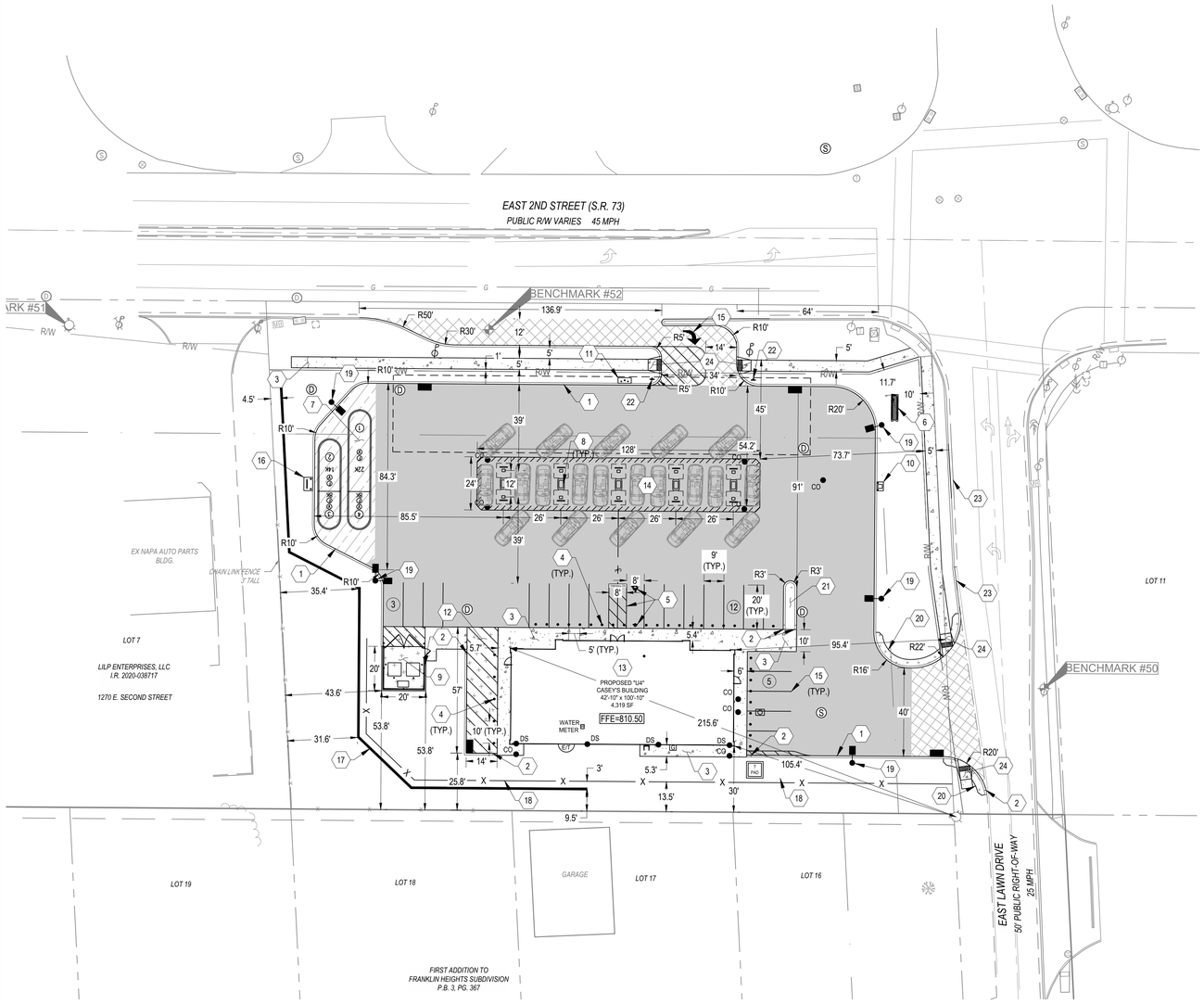
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
DEMOLITION PLAN

C-100



CODED NOTES:

1. PROPOSED INTEGRAL CURB. SEE DETAIL 2 ON SHEET C-601.
2. CURB TAPER. SEE DETAIL 9 ON SHEET C-601.
3. PROPOSED SIDEWALK. SEE DETAIL 1 ON SHEET C-601.
4. CASEY'S TYPICAL BOLLARD. SEE DETAIL 1 ON SHEET C-601.
5. CONTRACTOR TO CONSTRUCT ADA PARKING SPACE PER DETAILS 4 & 5 ON SHEET C-601 AND ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS.
6. CASEY'S MONUMENT SIGN, PER SIGNAGE PLAN.
7. PROPOSED FUEL TANK AREA CONCRETE PAD. SEE DETAIL 2 & 10 ON SHEET C-601.
8. PROPOSED GAS TAPERED FUEL ISLAND. SEE DETAIL 5 ON SHEET C-602.
9. PROPOSED 20' X 20' DUMPSTER PAD WITH 6' WOOD FENCE ENCLOSURE. SEE DETAIL ON SHEET C-603.
10. AIR COMPRESSOR BOX. SEE DETAIL 7 ON SHEET C-601.
11. EMERGENCY SHUTOFF FOR GASOLINE DISPENSERS. ALL DISPENSERS FALL WITHIN A 100-FOOT RADIUS OF SHUTOFF. SEE DETAIL 8 ON SHEET C-601.
12. PROPOSED 14' x 57' LOADING ZONE.
13. PROPOSED BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
14. PROPOSED 24' x 128', 5 DISPENSER AUTO FUEL CANOPY. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
15. PROPOSED PAVEMENT MARKINGS. SEE DETAIL ON SHEET C-603.
16. PROPOSED FUEL TANK VENTS AND PAD. SEE DETAIL 5 ON SHEET C-603.
17. PROPOSED RETAINING WALL.
18. PROPOSED 6' BOARD-ON-BOARD FENCE. SEE DETAIL 3 ON SHEET C-602.
19. PROPOSED SITE LIGHT POLE AND FOUNDATION. SEE DETAIL 8 ON C-602 AND C-500 FOR DETAILS.
20. PROPOSED LANDSCAPE PROTECTOR. SEE DETAIL 1 ON SHEET C-602.
21. PROPOSED PARKING LANDSCAPE ISLAND. SEE DETAIL 4 ON SHEET C-602.
22. INSTALL "DO NOT ENTER" SIGN (R5-1-30) PER OHIO MUTCD.
23. PROPOSED CURB AND GUTTER.
24. PROPOSED ADA COMPLIANT RAMP.

SITE LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- PROPOSED STANDARD DUTY CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-601.
- PROPOSED FUEL TANK CONCRETE PAVEMENT. SEE DETAILS 2 & 10 ON SHEET C-601.
- PROPOSED HEAVY DUTY NON-REINFORCED CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-601.
- PROPOSED CONCRETE SIDEWALK. SEE DETAIL 1 ON SHEET C-601.
- PROPOSED APPROACH CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-601.
- SETBACK
- EASEMENT
- BUILDING
- CANOPY
- CONCRETE CURB
- PAVEMENT/WALK
- RETAINING WALL
- (7) PARKING SPACE COUNT
- SIGN
- (D) STORM MANHOLE
- (S) SANITARY MANHOLE
- CURB INLET
- CO CLEANOUT
- DS DOWN SPOUT
- BOLLARD

EXHIBIT "A" LEGAL DESCRIPTION

(See surveyor notes for Title Commitment information.)

The Land referred to herein below is situated in the County of WARREN, State of OHIO, and is described as follows:

Parcel 1:

Situate in the in the City of Franklin, County of Warren, State of Ohio and Being Lot Numbered Eight (8), Franklin Heights Subdivision, as recorded in Plat Book "3", Page(s) 165 of the Plat Records of Warren County, Ohio.

Parcel 2:

Situated in the City of Franklin, in the County of Warren, in the State of Ohio and being more particularly bounded and described as follows:

Being Lot Numbered Nine (9) as the same is known and designated on the Recorded Plat of Franklin Heights Subdivision, which plat is recorded in Plat Book 3, Page 165, of the Plat Records of Warren County, Ohio.

Parcel 3:

Situated in the City of Franklin, in the County of Warren, in the State of Ohio and more particularly bounded and described as follows: Being Lot Number Ten (10) as the same is known and designated on the Record Plat of the Franklin Heights Subdivision, which Plat is recorded in Plat Book 3, Page 165, of the Plat Records of Warren County, Ohio.

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

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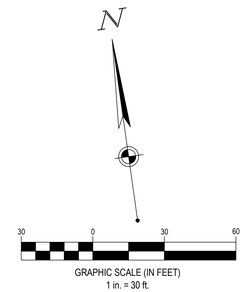
NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS



GRAPHIC SCALE (IN FEET)
1 in. = 30 ft.

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

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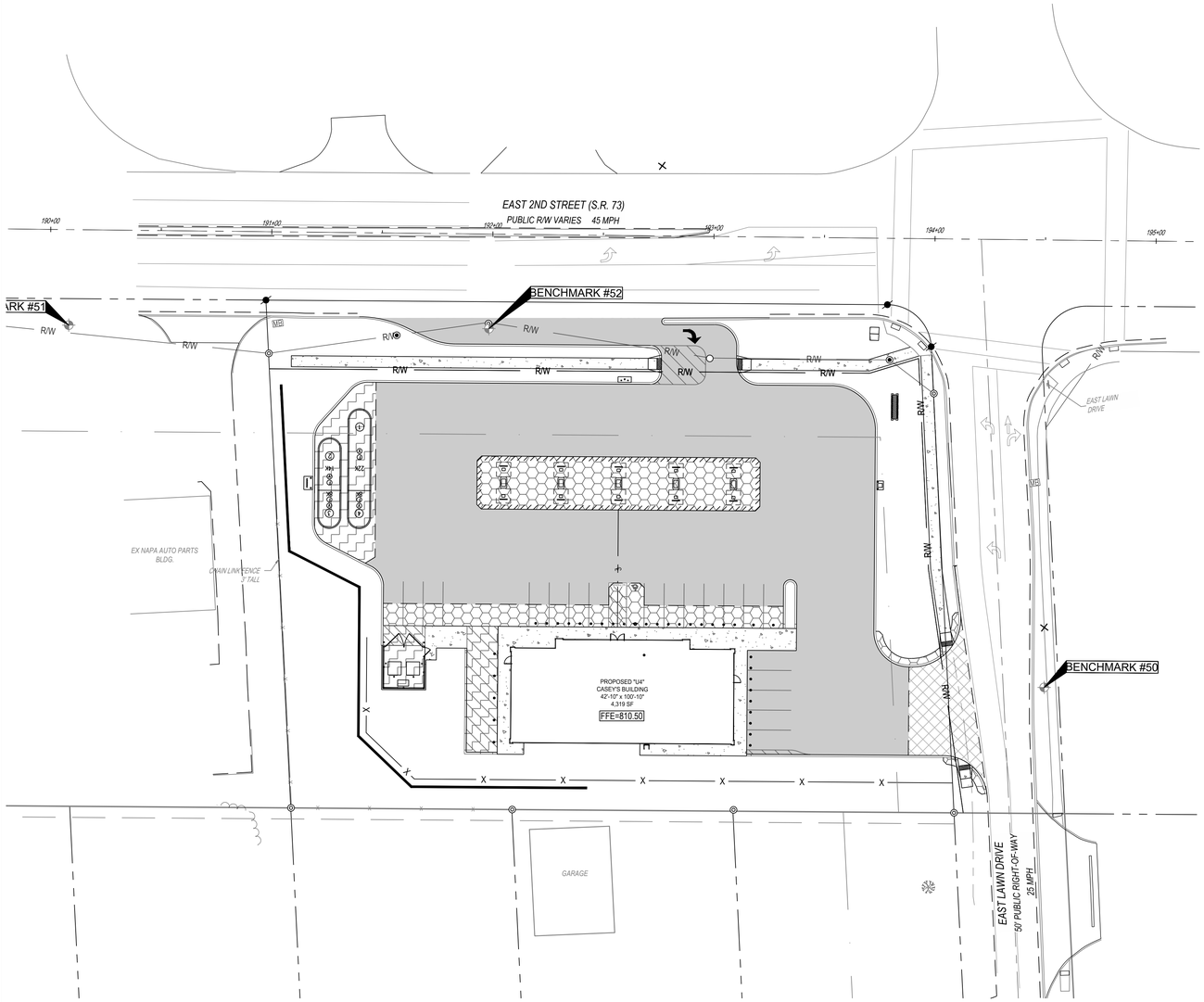
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
SITE PLAN

C-101

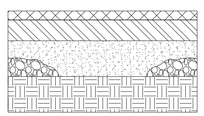


PAVEMENT LEGEND		APPROXIMATE QUANTITY (SQUARE FEET) **
— — —	PAVEMENT DELINEATION	N/A
	STANDARD DUTY ASPHALT PAVEMENT	25,543
	CONCRETE SIDEWALK PAVEMENT	3,914
	STANDARD 6" CONCRETE PAVEMENT	5,216
	APPROACH 7" CONCRETE PAVEMENT	1,404
	HEAVY DUTY 7" CONCRETE PAVEMENT	3,284

** MEASURED FROM EDGE OF CURB GUTTER

GENERAL NOTES

1. CONTRACTOR SHALL FULLY COMPLY WITH AHJ RULES AND REGULATIONS, AND ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION.
2. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT AHJ / DOT CONSTRUCTION AND MATERIAL SPECIFICATION.
3. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SUBGRADE COMPACTION.
4. ASPHALT PAVEMENT SPECIFICATIONS SHALL BE PER DOT SPECIFICATIONS SHOWN IN TABLE BELOW, OR MOST CURRENT DOT SPECIFICATION MANUAL.



A. ASPHALT PAVEMENT SURFACE COURSE
B. ASPHALT PAVEMENT BINDER COURSE
C. AGGREGATE BASE MATERIAL
D. SUBGRADE-COMPACT PER GEOTECHNICAL REPORT SECTION

ASPHALT PAVEMENT

PAVEMENT LAYER DEPTHS			
	ASPHALT		
	A	B	C
STANDARD DUTY			
HEAVY DUTY			

*PAVEMENT LAYER DEPTHS TO BE UPDATED ONCE GEOTECHNICAL REPORT IS COMPLETE.

ASPHALT PAVEMENT SECTION

NTS

DOT ASPHALT PAVEMENT SPECIFICATIONS

STATE	SURFACE COURSE	BINDER COURSE	AGGREGATE COURSE
OH	ITEM 441, MATERIALS 424.03, TABLE 441.02	ITEM 442, MIX DESIGN 401.02, MATERIAL 401.03	ITEM 304

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

BM "50": Bench tie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 809.15' (NAVD 88)

BM "51": Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts.

Elevation = 807.72' (NAVD 88)

BM "52": Bench tie set on south side of a power pole located on the south side of S.R. 73. It is the second pile west of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 810.44' (NAVD 88)

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

ASPHALT PAVING SPECIFICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. AGGREGATE BASE COURSE.
B. SINGLE COURSE BITUMINOUS CONCRETE PAVING.
C. DOUBLE COURSE BITUMINOUS CONCRETE PAVING.
D. SURFACE SEALER.

1.02 REFERENCE STANDARDS

A. AASHTO M 147 - STANDARD SPECIFICATION FOR MATERIALS FOR AGGREGATE AND SOIL-AGGREGATE SUBBASE, BASE AND SURFACE COURSES; 2017.
B. AI MS-2 - ASPHALT MIX DESIGN METHODS; 2015.
C. AI MS-19 - BASIC ASPHALT EMULSION MANUAL; 2008.
D. ASTM C136/C136M - STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 2019.
E. ASTM D946 - STANDARD SPECIFICATION FOR PENETRATION-GRADED ASPHALT CEMENT FOR USE IN PAVEMENT CONSTRUCTION; 2009A.
F. ASTM D2487 - STANDARD PRACTICE FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOIL CLASSIFICATION SYSTEM); 2017, WITH EDITORIAL REVISION.
G. ASTM D4318 - STANDARD TEST METHODS FOR LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX OF SOILS; 2017, WITH EDITORIAL REVISION (2018).

1.03 PERFORMANCE REQUIREMENTS

A. DESIGN PAVING AND SUBBASE AT HEAVY-DUTY AREAS FOR MOVEMENT OF TRUCKS.
B. DESIGN PAVING AND SUBBASE AT STANDARD-DUTY AREAS FOR LIGHT DUTY COMMERCIAL VEHICLE AND PASSENGER VEHICLE TRAFFIC.

1.04 QUALITY ASSURANCE

D. PERFORM WORK IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
E. MIXING PLANT: COMPLYING WITH STATE DOT HIGHWAYS STANDARDS.
F. OBTAIN MATERIALS FROM SAME SOURCE THROUGHOUT.

1.05 FIELD CONDITIONS

A. DO NOT PLACE ASPHALT WHEN AMBIENT AIR OR BASE SURFACE TEMPERATURE IS LESS THAN 40 DEGREES F (4 DEGREES C), OR SURFACE IS WET OR FROZEN.
B. PLACE BITUMEN MIXTURE WHEN TEMPERATURE IS NOT MORE THAN 15 F DEGREES (8 C DEGREES) BELOW BITUMEN SUPPLIER'S BILL OF LADING AND NOT MORE THAN MAXIMUM SPECIFIED TEMPERATURE.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

A. COMPLY WITH APPLICABLE CODE FOR PAVING WORK ON PUBLIC PROPERTY.

2.02 MATERIALS

A. ASPHALT CEMENT: ASTM D946.
B. AGGREGATE FOR BASE COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN BELOW IN SPECIFICATIONS TABLE.
C. AGGREGATE FOR BINDER COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN IN SPECIFICATIONS TABLE.
D. AGGREGATE FOR WEARING COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN IN SPECIFICATIONS TABLE.
E. FINE AGGREGATE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
F. MINERAL FILLER: FINELY GROUND PARTICLES OF LIMESTONE, HYDRATED LIME OR OTHER MINERAL DUST, FREE OF FOREIGN MATTER.
G. PRIMER: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
H. TACK COAT: HOMOGENEOUS, MEDIUM CURING, LIQUID ASPHALT.
I. SEAL COAT: AI MS-19, SAND TYPE.

2.03 ASPHALT PAVING MIXES AND MIX DESIGN

A. USE DRY MATERIAL TO AVOID FOAMING. MIX UNIFORMLY.
B. BASE COURSE: AGGREGATE PLACED AND COMPACTED IN ACCORDANCE WITH STATE DOT SPECIFICATIONS
C. BINDER COURSE: 4.5 TO 6 PERCENT OF ASPHALT CEMENT BY WEIGHT IN MIXTURE IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.
D. WEARING COURSE: 5 TO 7 PERCENT OF ASPHALT CEMENT BY WEIGHT IN MIXTURE IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.
E. SUBMIT PROPOSED MIX DESIGN OF EACH CLASS OF MIX FOR REVIEW PRIOR TO BEGINNING OF WORK.

2.04 SOURCE QUALITY CONTROL

A. TEST MIX DESIGN AND SAMPLES IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.

PART 3 EXECUTION

3.01 EXAMINATION

A. VERIFY THAT COMPACTED SUBGRADE IS DRY AND READY TO SUPPORT PAVING AND IMPOSED LOADS.
B. VERIFY GRADIENTS AND ELEVATIONS OF BASE ARE CORRECT.

3.02 AGGREGATE BASE COURSE

A. PLACE AND COMPACT AGGREGATE BASE COURSE.

3.03 PREPARATION - PRIMER

A. APPLY PRIMER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. APPLY PRIMER ON AGGREGATE BASE OR SUBBASE AT UNIFORM RATE OF 1/3 GAL/SQ YD (1.5 L/SQ M).
C. APPLY PRIMER TO CONTACT SURFACES OF CURBS, AND GUTTERS,
D. USE CLEAN SAND TO BLOT EXCESS PRIMER.

3.04 PREPARATION - TACK COAT

A. APPLY TACK COAT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. APPLY TACK COAT ON ASPHALT OR CONCRETE SURFACES OVER SUBGRADE SURFACE AT UNIFORM RATE OF 1/3 GAL/SQ YD (1.5 L/SQ M).
C. APPLY TACK COAT TO CONTACT SURFACES OF CURBS, AND GUTTERS
D. COAT SURFACES OF MANHOLE FRAMES WITH OIL TO PREVENT BOND WITH ASPHALT PAVEMENT. DO NOT TACK COAT THESE SURFACES.

3.05 PLACING ASPHALT PAVEMENT - SINGLE COURSE

A. INSTALL WORK IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
B. PLACE ASPHALT WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
C. INSTALL GUTTER DRAINAGE GRILLES AND FRAMES IN CORRECT POSITION AND ELEVATION.
D. COMPACT PAVEMENT BY ROLLING TO SPECIFIED DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT.
E. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH WITHOUT ROLLER MARKS.

3.06 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

A. PLACE ASPHALT BINDER COURSE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
B. PLACE WEARING COURSE WITHIN TWO HOURS OF PLACING AND COMPACTING BINDER COURSE.
C. INSTALL GUTTER DRAINAGE GRILLES AND FRAMES IN CORRECT POSITION AND ELEVATION.
D. COMPACT PAVEMENT BY ROLLING TO SPECIFIED DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT.
E. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH, WITHOUT ROLLER MARKS.

3.07 PLACING ASPHALT PAVEMENT - ADJACENT TO CONCRETE

A. CONCRETE PAVEMENT TO BE PLACED FIRST OR ASPHALT IS TO BE LAID BEYOND THE CONCRETE EDGE AND SAWCUT PRIOR TO CONCRETE PLACEMENT FOR A CLEAN LINE AND VERTICAL EDGE.

3.08 TOLERANCES

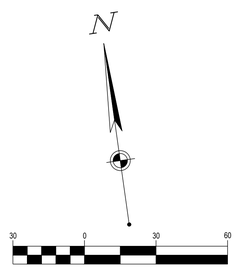
A. FLATNESS: MAXIMUM VARIATION OF 1/4 INCH (6 MM) MEASURED WITH 10 FOOT (3 M) STRAIGHT EDGE.
B. COMPACTED THICKNESS: WITHIN 1/4 INCH (6 MM) OF SPECIFIED OR INDICATED THICKNESS.
C. VARIATION FROM TRUE ELEVATION: WITHIN 1/2 INCH (12 MM).

3.09 FIELD QUALITY CONTROL

A. PROVIDE FIELD INSPECTION AND TESTING. TAKE SAMPLES AND PERFORM TESTS IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.

3.10 PROTECTION

A. IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM MECHANICAL INJURY UNTIL SURFACE TEMPERATURE IS LESS THAN 140 DEGREES F (60 DEGREES C).



GRAPHIC SCALE (IN FEET)
1 in. = 30 ft.

OHIO811.org Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
7777 Bonhomme Ave., Suite 1853
Clayton, MO 63105
Phone: 618.604.7157 Fax: 888.208.4826

Casey's

CASEY'S #5156

FRANKLIN, OH

1286 EAST 2ND STREET
FRANKLIN, OH 45005

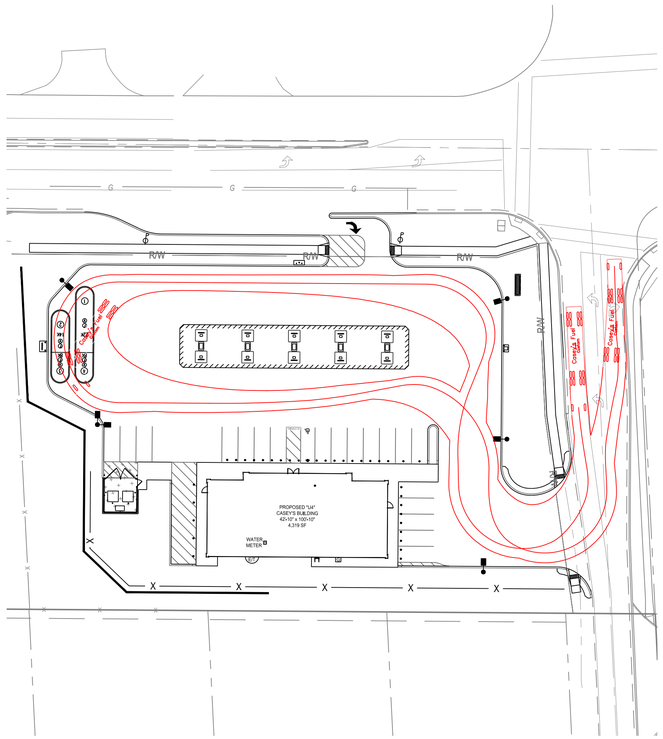
Revisions / Submissions

ID	Description	Date

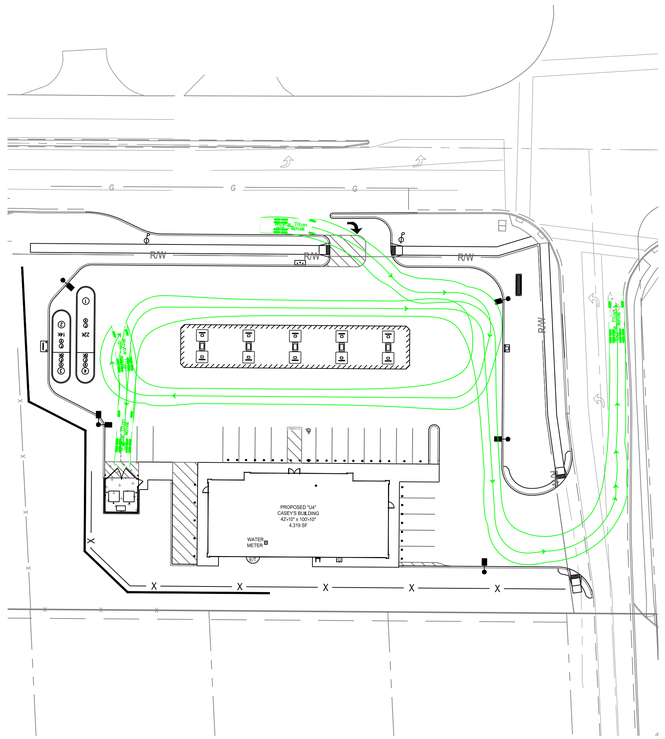
Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
ALTERNATIVE PAVEMENT PLAN

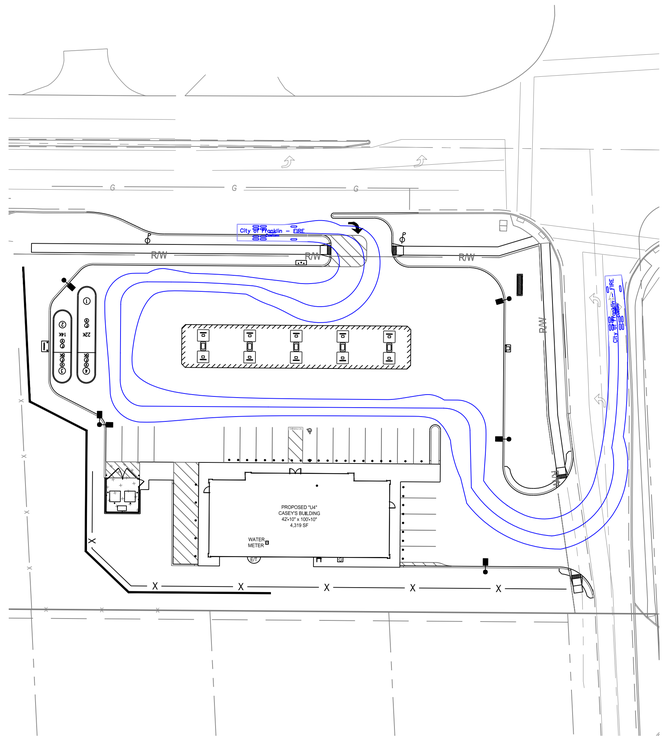
C-101A



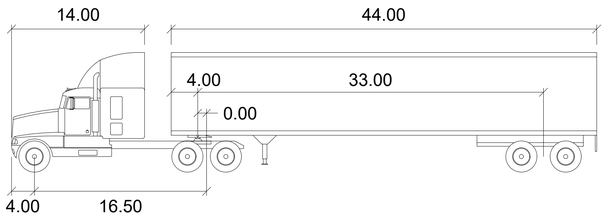
VEHICLE CIRCULATION (CASEYS FUEL TRUCK)
SCALE: 1" = 40'



VEHICLE CIRCULATION (TRASH TRUCK)
SCALE: 1" = 40'

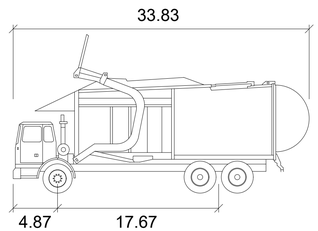


VEHICLE CIRCULATION (FIRE TRUCK)
SCALE: 1" = 40'



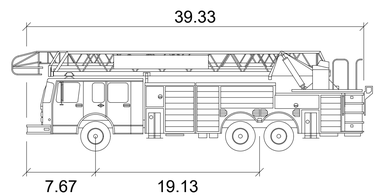
Casey's Fuel

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



Wayne Titan

	feet
Width	: 8.46
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



City of Franklin - FIRE

	feet
Width	: 9.25
Track	: 8.00
Lock to Lock Time	: 5.0
Steering Angle	: 60.0

GRAPHIC SCALE (IN FEET)
1 in. = 40 ft.

OHIO811.org Before You Dig

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Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

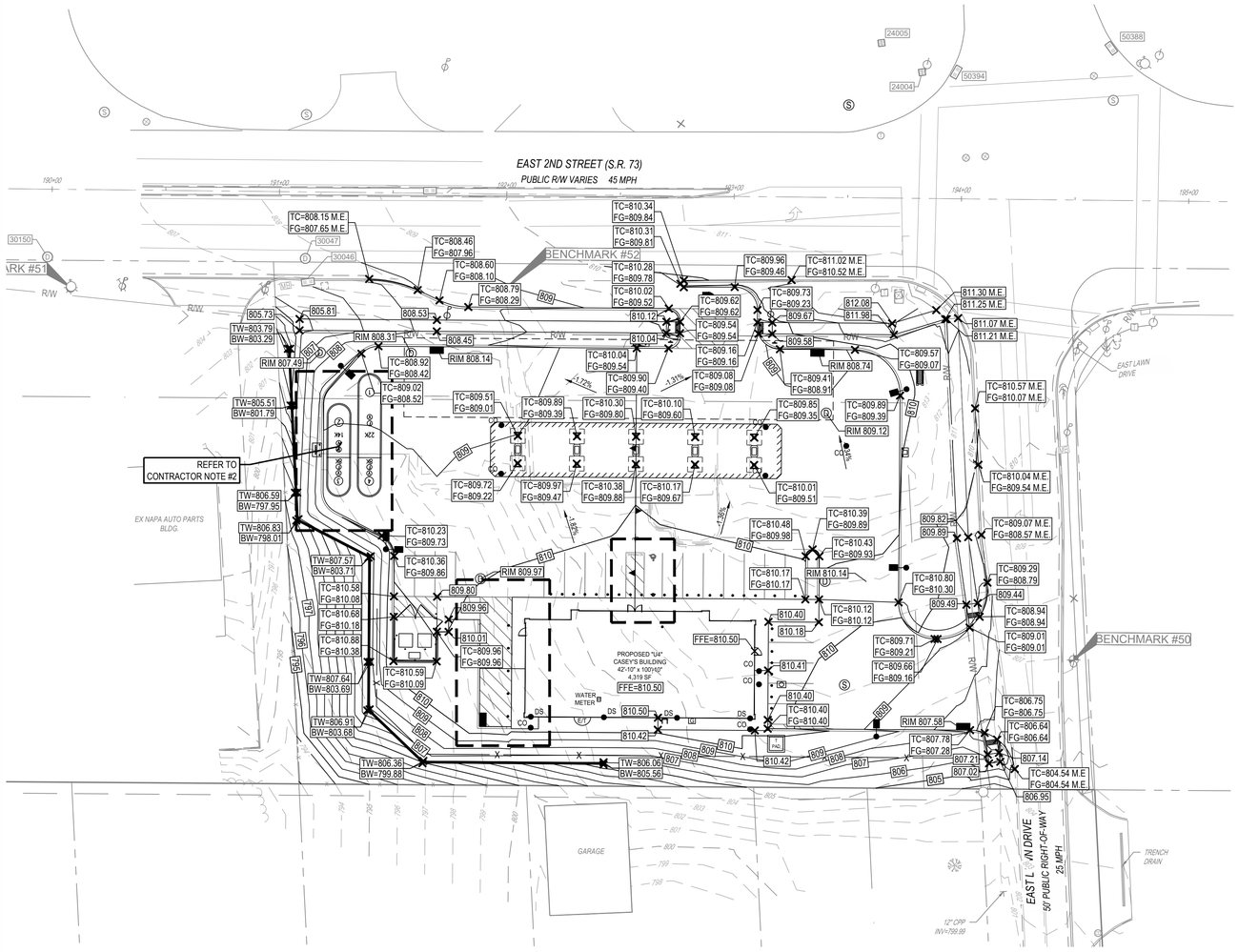
Revisions / Submissions

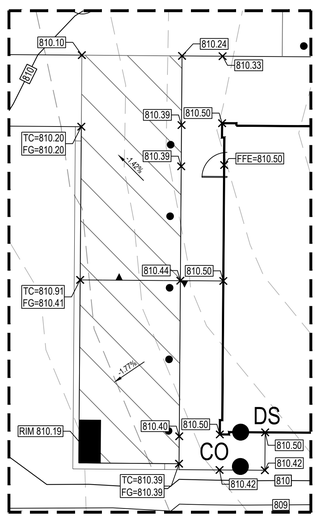
ID	Description	Date

Project Number:	766139
Scale:	1" = 40'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

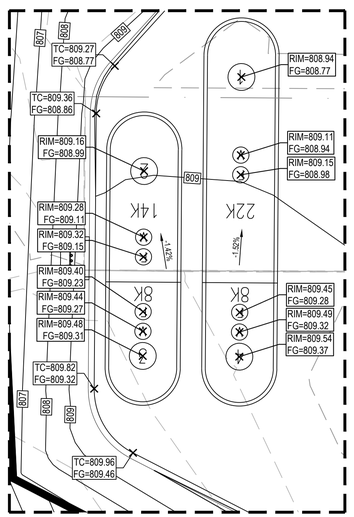
Drawing Title:
CIRCULATION PLAN

C-102

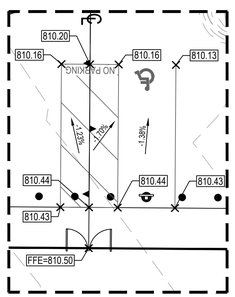




ENLARGED PLAN: LOADING AREA
SCALE: 1" = 10'



ENLARGED PLAN: TANK AREA
SCALE: 1" = 10'



ENLARGED PLAN: ADA AREA
SCALE: 1" = 10'

GRADING LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- BUILDING
- CANOPY
- RETAINING WALL
- SEE ENLARGED PLAN, THIS SHEET
- MAJOR CONTOUR (810)
- MINOR CONTOUR (809)
- GRADE BREAK
- FLOW LINE
- CATCH BASIN
- STORM MANHOLE
- CURB INLET
- CLEANOUT (CO)
- DOWNSPOUT (DS)
- XXX.XX — FINISHED GRADE ELEVATION
- RIM=XXX.XX — RIM ELEVATION
- TC=XXX.XX / FG=XXX.XX — TOP OF CURB ELEVATION / FINISHED GRADE ELEVATION
- RIM=XXX.XX / FG=XXX.XX — UGST RIM ELEVATION / FINISHED GRADE ELEVATION
- TW=XXX.XX / BW=XXX.XX — TOP OF WALL ELEVATION / BOTTOM OF WALL ELEVATION
- M.E. — MATCH EXISTING ELEVATION
- XX% — SLOPE ARROW

CONTRACTOR NOTES:

1. FOR FULL EXTENTS OF LIMITS OF DISTURBANCE, REFER TO OVERALL SITE PLAN, SHEET C-101.
2. CONTRACTOR TO PROVIDE DEWATERING NECESSARY FOR ANY EXCAVATIONS AND TO PREVENT TANKS FROM FLOATING WHILE THE TANKS ARE NOT COVERED BY PROPER OVERBURDEN. DEWATERING SHALL CONSIST OF SUPPLYING EQUIPMENT AND LABOR TO MAINTAIN PUMPING ACTIVITIES AS NECESSARY. COORDINATE WITH OWNER'S REPRESENTATIVE TO DETERMINE WHERE WATER CAN BE PUMPED.

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

BM "50":	Bench tie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive. Elevation = 809.15' (NAVD 88)
BM "51":	Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts. Elevation = 807.72' (NAVD 88)
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NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

N

30 0 30 60
GRAPHIC SCALE (IN FEET)
1 in. = 30 ft.

OHIO811.org Before You Dig

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Casey's

CASEY'S #5156
FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

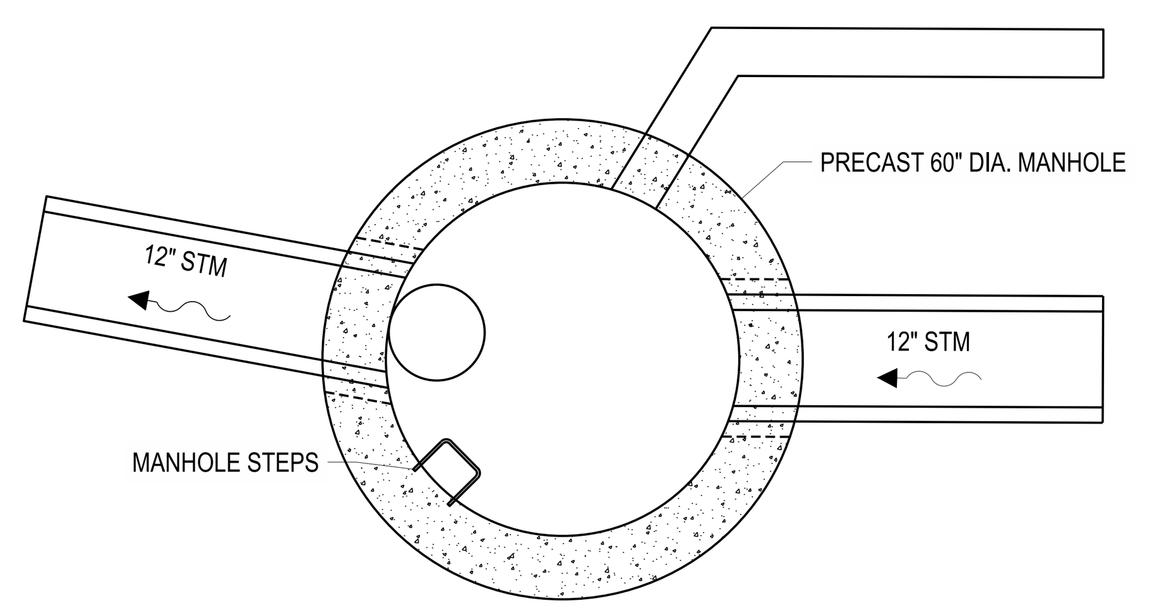
Revisions / Submissions

ID	Description	Date

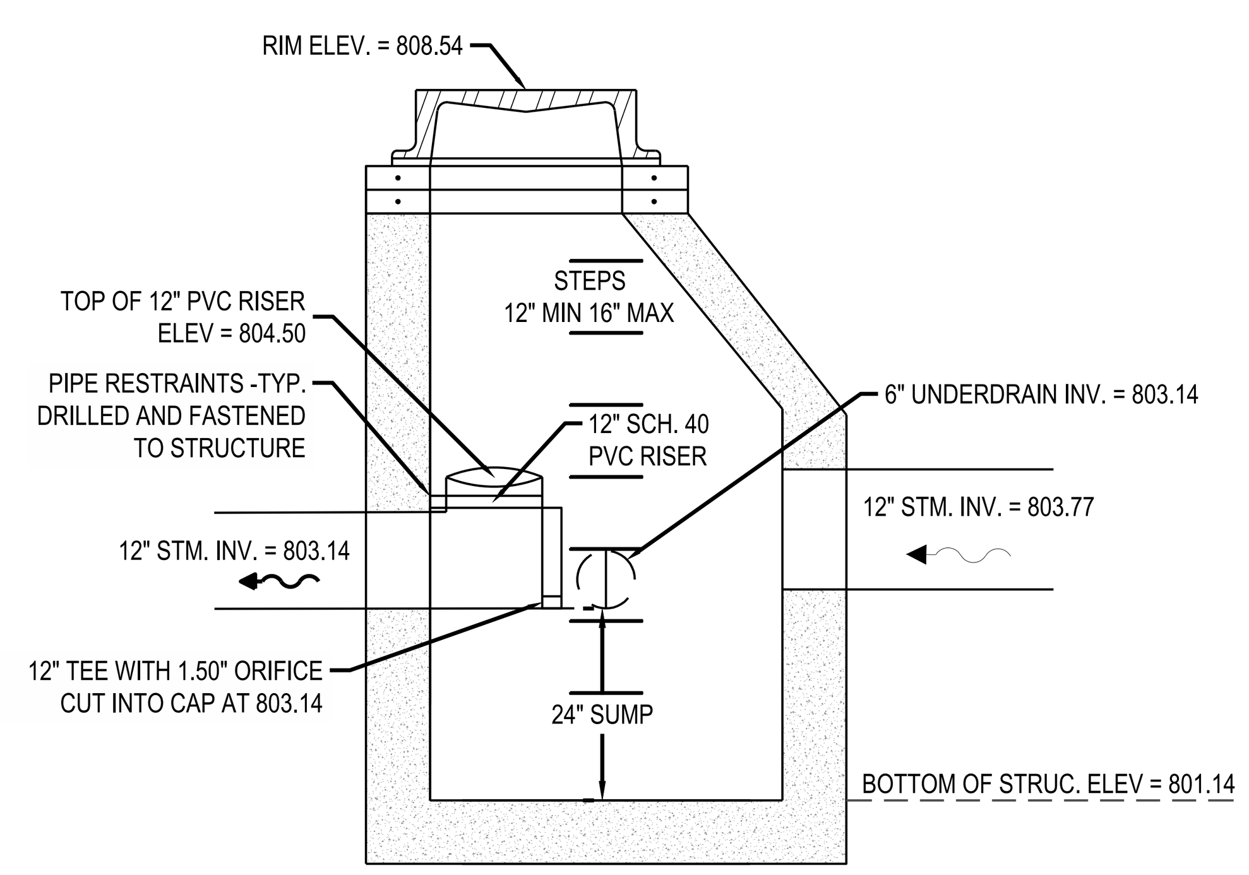
Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
GRADING PLAN

C-201



PLAN VIEW
NTS



STRUCTURE #7 - OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	

ADS Advanced Drainage Systems, Inc.

ADS SiteAssist FOR STORMTECH INSTALLATION INSTRUCTIONS VISIT OUR APP

CASEY'S #5156
FRANKLIN, OH, USA

SC-800 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-800.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

1. STORMTECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 3" (75 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-800 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

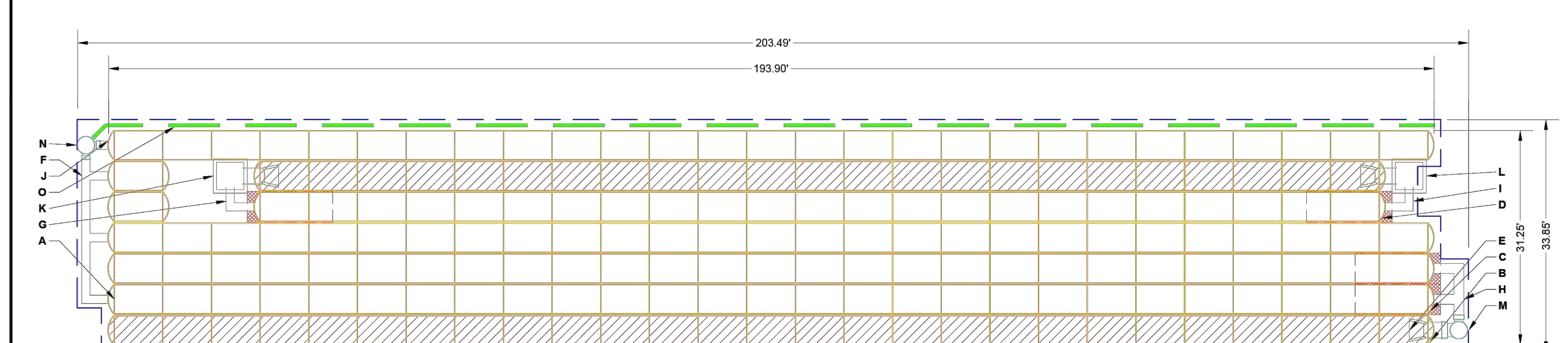
CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT	
183	STORMTECH SC-800 CHAMBERS
18	STORMTECH SC-800 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	STONE VOID
15734	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)
6759	SYSTEM AREA (SF)
481.4	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	814.39
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	808.14
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	807.64
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	807.64
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	807.64
TOP OF STONE:	806.89
TOP OF SC-800 CHAMBER:	806.39
12" x 12" TOP MANIFOLD INVERT:	804.84
12" x 12" TOP MANIFOLD INVERT:	804.84
15" x 15" TOP MANIFOLD INVERT:	804.58
24" ISOLATOR ROW PLUS INVERT:	803.83
24" ISOLATOR ROW PLUS INVERT:	803.83
24" ISOLATOR ROW PLUS INVERT:	803.83
12" x 12" BOTTOM MANIFOLD INVERT:	803.77
12" BOTTOM CONNECTION INVERT:	803.77
BOTTOM OF SC-800 CHAMBER:	803.64
UNDERDRAIN INVERT:	803.14
BOTTOM OF STONE:	803.14

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PRE-CORED END CAP	A	12" BOTTOM PRE-CORED END CAP, PART#: SC800EPE12BPC / TYP OF ALL 12" BOTTOM CONNECTIONS	1.60"	
PREFABRICATED EZ END CAP	B	24" BOTTOM PREFABRICATED EZ END CAP, PART#: SC800ECEZ / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.30"	
PRE-CORED END CAP	C	15" TOP PRE-CORED END CAP, PART#: SC800EPE15TPC / TYP OF ALL 15" TOP CONNECTIONS	11.30"	
PRE-CORED END CAP	D	12" TOP PRE-CORED END CAP, PART#: SC800EPE12TPC / TYP OF ALL 12" TOP CONNECTIONS	14.40"	
FLAMP	E	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: SC80024RAMP (TYP 3 PLACES)		
MANIFOLD	F	12" x 12" BOTTOM MANIFOLD, ADS N-12	1.60"	
MANIFOLD	G	12" x 12" TOP MANIFOLD, ADS N-12	14.40"	
MANIFOLD	H	15" x 15" TOP MANIFOLD, ADS N-12	11.30"	
MANIFOLD	I	12" x 12" TOP MANIFOLD, ADS N-12	14.40"	
PIPE CONNECTION	J	12" BOTTOM CONNECTION	1.60"	
CONCRETE STRUCTURE	K	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		2.3 CFS IN
CONCRETE STRUCTURE	L	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		2.3 CFS IN
NYLOPLAST (INLET W/ ISO PLUS ROW)	M	30" DIAMETER (24.00" SUMP MIN)		5.6 CFS IN
NYLOPLAST (OUTLET)	N	30" DIAMETER (DESIGN BY ENGINEER)		4.0 CFS OUT
UNDERDRAIN	O	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		



ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADSPLUS625 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION**: THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

CASEY'S #5156
FRANKLIN, OH, USA

StormTech® Chamber System

ADS 4640 TRUEMAN BLVD HILLIARD, OH 43026 1-800-733-7473

SHEET 2 OF 6

CESO
WWW.CESOINC.COM
7777 Bonhomme Ave., Suite 1853
Clayton, MO 63105
Phone: 618.604.7157 Fax: 888.208.4826

Casey's

CASEY'S #5156
FRANKLIN, OH
1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

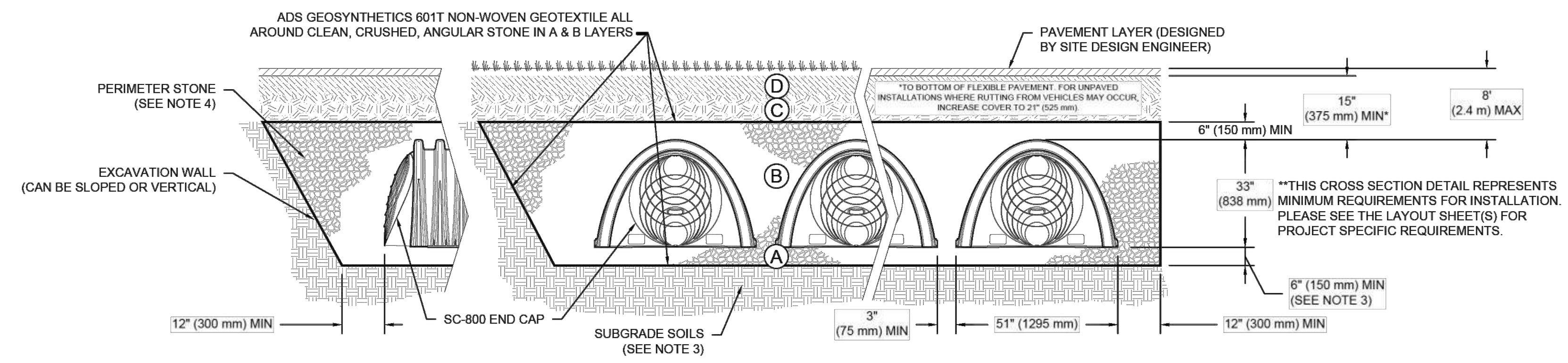
Drawing Title:
UNDERGROUND DETENTION DETAILS

C-202

ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

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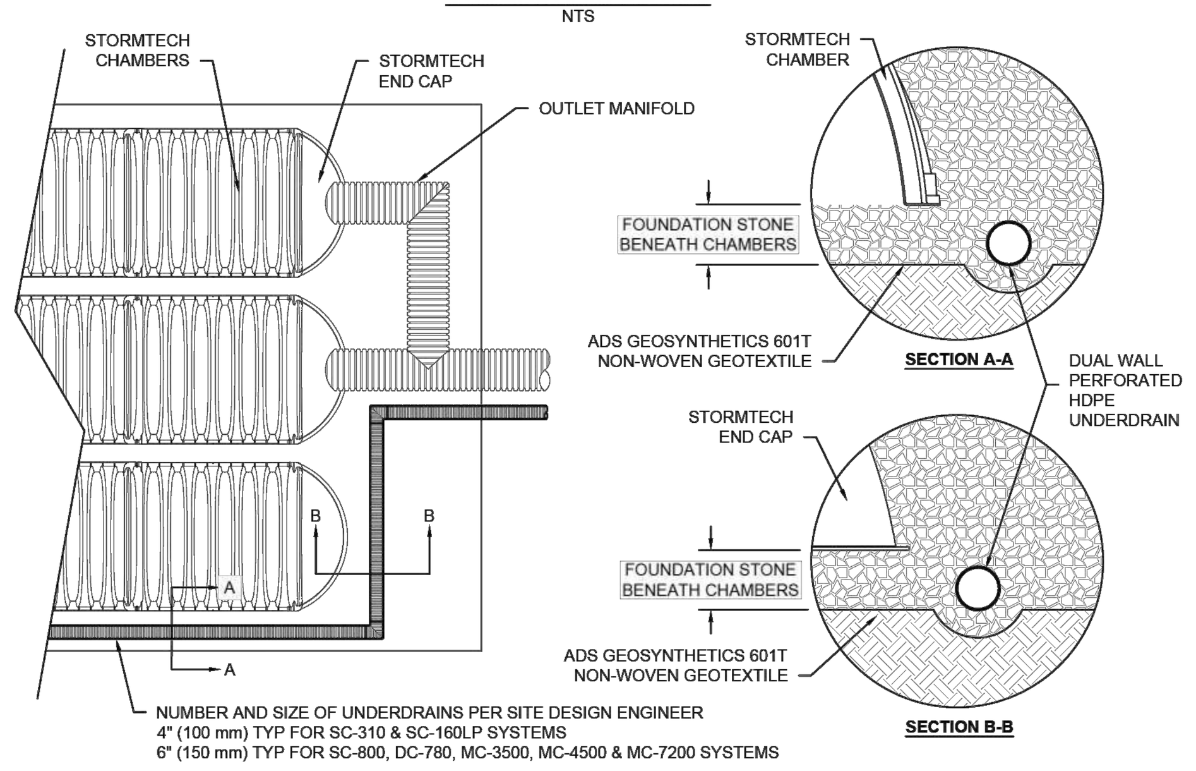
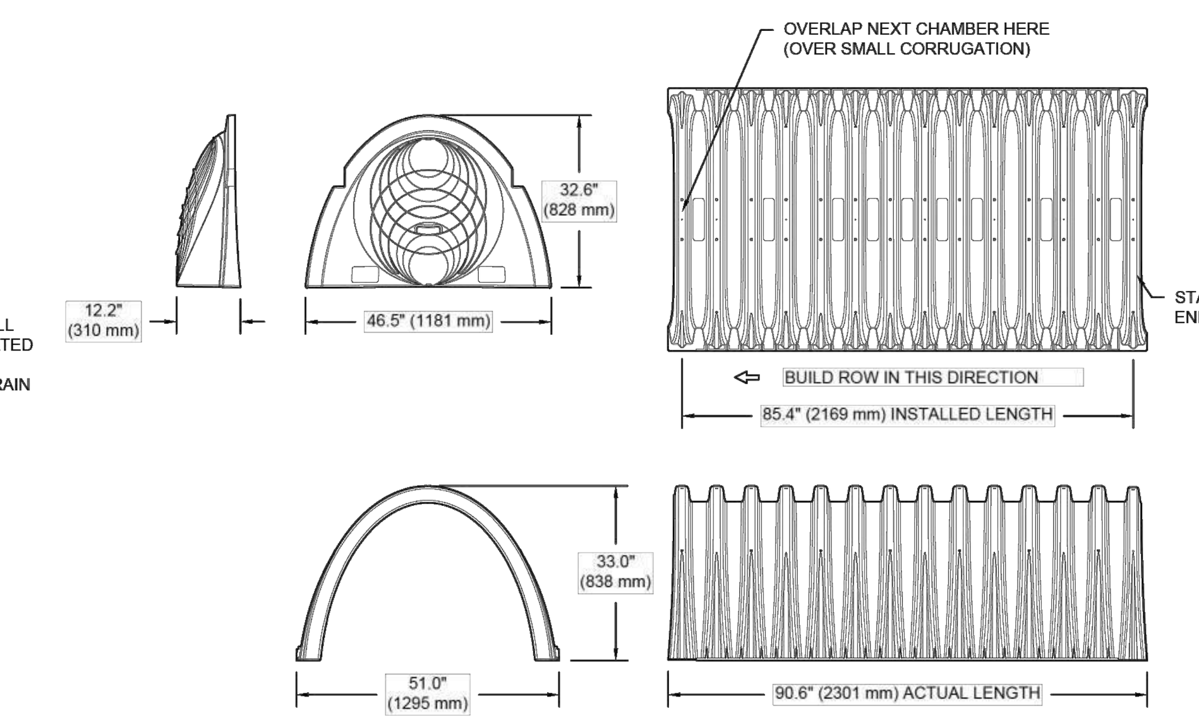
SHEET 3 OF 6

UNDERDRAIN DETAIL
NTS



SC-800 TECHNICAL SPECIFICATION
NTS



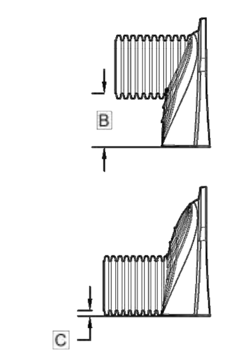
NOMINAL CHAMBER SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH) 51.0" X 33.0" X 85.4" (1295 mm X 838 mm X 2169 mm)
CHAMBER STORAGE 50.6 CUBIC FEET (1.43 m³)
MINIMUM INSTALLED STORAGE* 78.4 CUBIC FEET (2.22 m³)
WEIGHT 81.8 lbs. (37.1 kg)

NOMINAL END CAP SPECIFICATIONS
SIZE (W X H X INSTALLED LENGTH) 46.5" X 32.6" X 10.5" (1181 mm X 828 mm X 267 mm)
END CAP STORAGE 3.4 CUBIC FEET (0.09 m³)
MINIMUM INSTALLED STORAGE** 14.7 CUBIC FEET (0.42 m³)
WEIGHT 15.7 lbs. (7.1 kg)

* ASSUMES 6" (150 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS, 3" (75 mm) BETWEEN CHAMBERS
**ASSUMES 6" (150 mm) STONE ABOVE AND BELOW END CAPS, 3" (150 mm) BETWEEN ROWS, 12" (300 mm) BEYOND END CAPS

PRE-CORED HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "BPC"
PRE-CORED HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "TPC"

PART #	STUB	B	C
SC800EPE06TPC	6" (150 mm)	21.4" (544 mm)	---
SC800EPE06BPC		---	0.9" (23 mm)
SC800EPE08TPC	8" (200 mm)	19.2" (488 mm)	---
SC800EPE08BPC		---	1.0" (25 mm)
SC800EPE10TPC	10" (250 mm)	17.0" (432 mm)	---
SC800EPE10BPC		---	1.2" (30 mm)
SC800EPE12TPC	12" (300 mm)	14.4" (366 mm)	---
SC800EPE12BPC		---	1.6" (41 mm)
SC800EPE15TPC	15" (375 mm)	11.3" (287 mm)	---
SC800EPE15BPC		---	1.7" (43 mm)
SC800EPE18TPC	18" (450 mm)	8.0" (203 mm)	---
SC800EPE18BPC		---	2.0" (51 mm)
SC800EPE24BPC	24" (600 mm)	---	2.3" (58 mm)
SC800EPE	NONE	SOLID END CAP	



NOTE: ALL DIMENSIONS ARE NOMINAL

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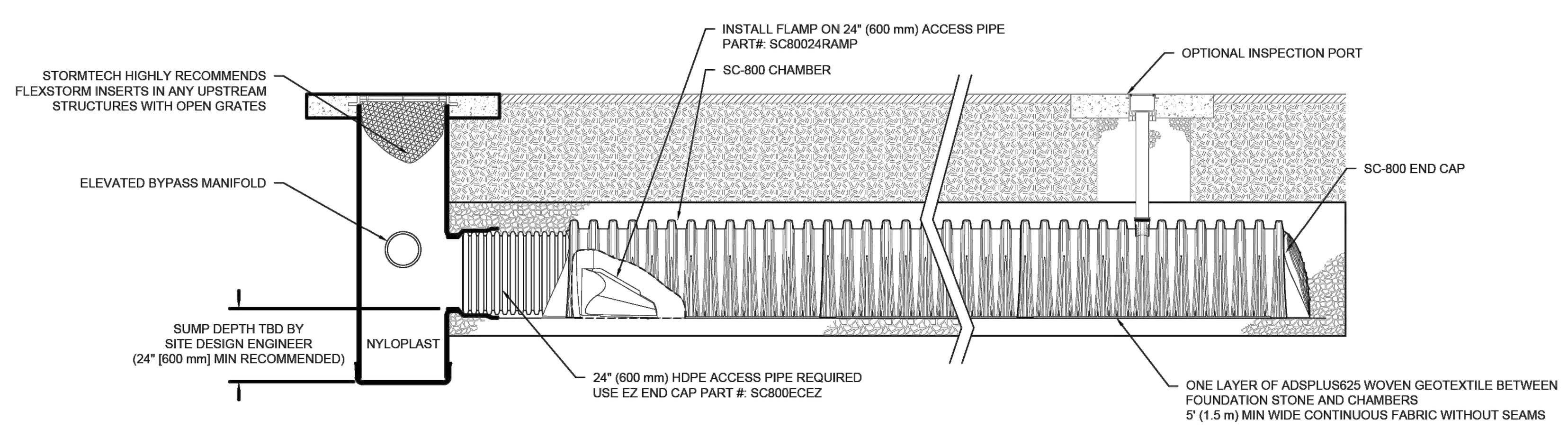

SC-800 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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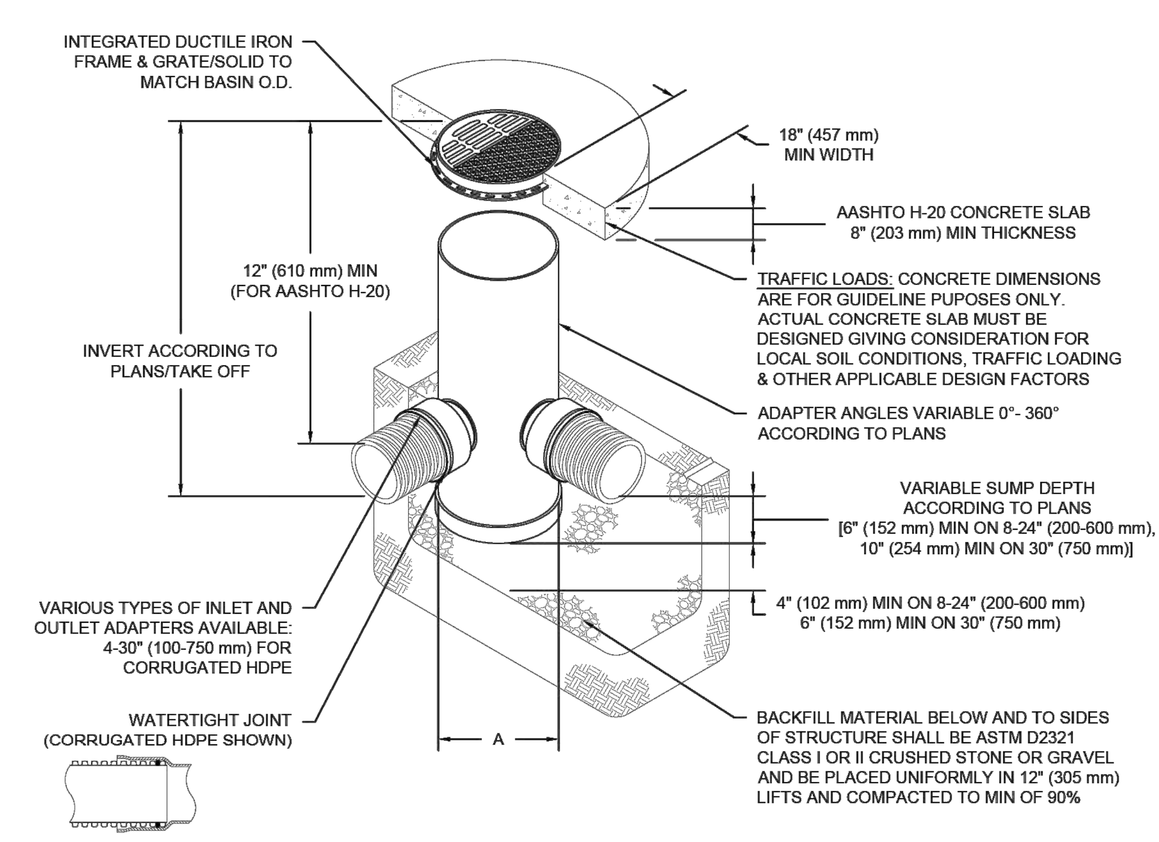
NYLOPLAST DRAIN BASIN
NTS



NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

CASEY'S #5156 FRANKLIN, OH, USA DATE: 07/29/2025 DRAWN: KH CHECKED: N/A PROJECT #:
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SHEET 6 OF 6

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Casey's

CASEY'S #5156
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1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

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Scale:	NTS
Drawn By:	JTP
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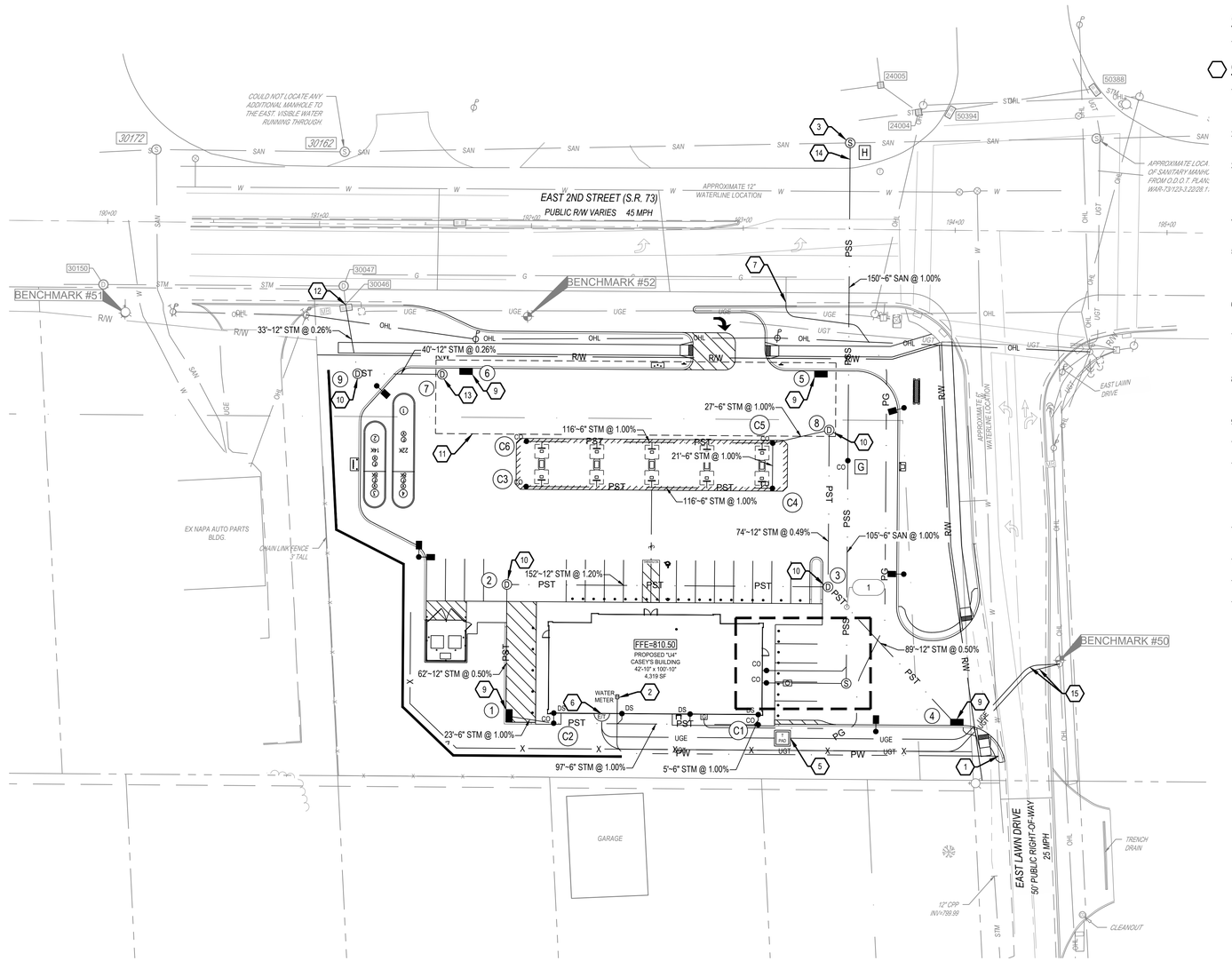
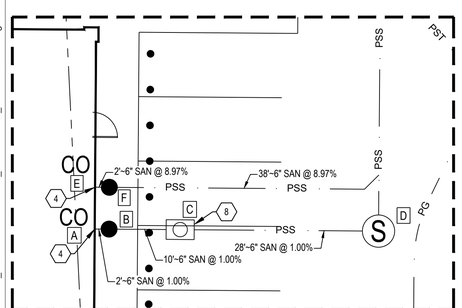
Issue:	PERMIT SET

Drawing Title:
UNDERGROUND DETENTION DETAILS

C-203





ENLARGED PLAN: SANITARY SEWER SERVICE
SCALE: 1" = 10'

CONTRACTOR NOTE:

1. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES.

CODED NOTES:

1. CONTRACTOR SHALL FURNISH AND INSTALL 2" COPPER TUBE SIZE POLYETHYLENE PIPING FROM METER TO NEW 2" TAP. CONTRACTOR IS RESPONSIBLE FOR ALL WORK PERMITS WITHIN THE PUBLIC RIGHT-OF-WAY. NEW WATER TAPS WILL NEED TO BE INSTALLED AT WATER MAIN.
2. A SEPARATE IRRIGATION METER SHALL BE PROVIDED. IRRIGATION SYSTEM SHALL BE DESIGN BUILD BY CONTRACTOR.
3. CONNECT 6" SDR-35 PVC SANITARY SERVICE TO EXISTING SANITARY SEWER LINE PER CITY OF FRANKLIN STANDARDS. CONTRACTOR TO FIELD LOCATE AND VERIFY EXISTING SANITARY SEWER LINE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO ENGINEER. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS FOR FINAL CONNECTION.
4. COORDINATE UTILITIES WITH PLUMBING CONTRACTOR, CAP AND MARK FOR FUTURE CONNECTION. FINAL CONNECTION BY PLUMBING CONTRACTOR.
5. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND THE LOCAL UTILITY COMPANY TO INSTALL PRIMARY RISER AS REQUIRED TO PROVIDE ELECTRICAL SERVICE TO THE PROPOSED BUILDING. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND THE LOCAL UTILITY COMPANY TO INSTALL NEW PAD MOUNTED TRANSFORMER.
6. ELECTRICAL AND TELEPHONE SERVICE ENTRANCE. COORDINATE WITH ELECTRICAL CONTRACTOR FOR CONNECTION LOCATION OF ELECTRICAL SERVICE.
7. CONNECTION TO GAS MAIN. LOCAL GAS COMPANY SHALL FURNISH AND INSTALL GAS LINE FROM METER TO NEW TAP. THE CONTRACTOR SHALL INSTALL THE GAS LINE FROM THE METER TO THE BUILDING SERVICE PER THE BUILDING DRAWINGS.
8. GREASE TRAP TO BE PROCURED AND INSTALLED BY CONTRACTOR. GREASE TRAP TO BE PROCURED FROM SCHIER PRODUCTS. CONTACT SCHIER PRODUCTS WITH ANY QUESTIONS OR CASEY'S TEAM MEMBER IF THERE IS AN ISSUE.
9. SUPPLY AND INSTALL (4) CASEY'S STANDARD 24" CURB INLETS.
10. SUPPLY AND INSTALL (4) CITY OF FRANKLIN STANDARD MANHOLE.
11. SUPPLY AND INSTALL UNDERGROUND DETENTION SYSTEM WITH ACCESS MANHOLES PER MANUFACTURER'S DETAILS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT A REPRESENTATIVE FROM THE MANUFACTURER IS ON-SITE DURING INSTALLATION. GEOTEXTILE FABRIC TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. REFER TO SHEET C-202 & C-203 FOR DETAILS.
12. CONNECT PROPOSED STORM OUTLET PIPE TO EXISTING CATCH BASIN (EX-30046) FOR DISCHARGE. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR CONNECTION.
13. SUPPLY AND INSTALL (1) OUTLET CONTROL STRUCTURE. REFER TO SHEET C-202 FOR DETAILS.
14. PROPOSED SANITARY SEWER TO BE BORED UNDERNEATH EAST 2ND STREET.
15. PROPOSED UNDERGROUND ELECTRIC & TELEPHONE LINE TO BE BORED UNDERNEATH EAST LAWN DRIVE.

UTILITY LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- BUILDING
- CANOPY
- SEE ENLARGED PLAN, THIS SHEET
- CONCRETE CURB
- PAVEMENT/WALK
- PST — STORM SEWER LINE
- PSS — SANITARY SEWER LINE
- PW — DOMESTIC WATER LINE
- PG — GAS SERVICE LINE
- UGE — UNDERGROUND ELECTRIC LINE
- OHE — OVERHEAD ELECTRIC LINE
- UGT — UNDERGROUND TELEPHONE LINE
- (D) STORM SEWER
- (S) SANITARY SEWER
- CURB INLET
- CO CLEANOUT
- DS DOWNSPOUT
- E/T ELECTRICAL SERVICE ENTRANCE
- E PAD ELECTRICAL TRANSFORMER PAD
- WATER VALVE
- W WATER METER
- G GAS METER

SANITARY STRUCTURE CHART

30172
SANITARY MANHOLE
RIM 809.34
INV 8" CLAY (W) = 795.79
INV 8" CLAY (E) = 795.79
INV 8" PVC (S) = 798.99

30162
SANITARY MANHOLE
RIM 808.58
INV 8" CLAY (W) = 796.38
INV 8" CLAY (E) = 796.38

STORM STRUCTURE CHART

30150
STORM MANHOLE
RIM 809.07
INV 12" RCP (S) = 799.97
INV 12" RCP (W) = 799.97

30047
STORM MANHOLE
RIM 807.65
INV 12" RCP (S) = 802.60
INV 12" RCP (W) = 802.60

30046
CURB INLET
GRATE 809.95
INV 12" RCP (N) = 802.95

24009
STORM MANHOLE
RIM 808.73
INV 18" RCP (NW) = 805.06
INV 18" RCP (SE) = 805.00

50388
CURB INLET
GRATE 809.31
INV 18" RCP (W) = 806.36
INV 18" RCP (SE) = 806.00

50394
CURB INLET
GRATE 809.67
INV 15" RCP (W) = 807.57
INV 18" RCP (E) = 807.57

24005
CATCH BASIN
GRATE 810.94
INV 12" CPP (NW) = 807.94
INV 12" CPP (W) = 808.14
INV 15" RCP (E) = 807.79

24004
CATCH BASIN
GRATE 811.67
INV 24" CPP (W) = 807.87
INV 24" CPP (N) = 807.82
INV 12" RCP (SE) = 807.82

X SANITARY SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
A	BUILDING CONNECTION		805.50 (6") E
B	6" CLEANOUT	810.47	805.48 (6") W 805.48 (6") E
C	GREASE INTERCEPTOR	810.22	805.38 (6") W 805.38 (6") E
D	SANITARY DROP MANHOLE	809.78	805.10 (6") W 802.00 (6") N
E	BUILDING CONNECTION		805.50 (6") E
F	6" CLEANOUT	810.47	805.32 (6") W 805.32 (6") E
G	6" CLEANOUT	809.33	800.95 (6") S 800.95 (6") N
H	SANITARY MANHOLE	811.20	799.45 (6") S (PR.) 797.96 (8") E (EX.) 797.95 (8") W (EX.)

X STORM SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
1	CURB INLET	810.19	806.76 (6") E 806.26 (12") N
2	STORM MANHOLE	809.97	805.95 (12") S 805.95 (12") E
3	STORM MANHOLE	810.05	804.13 (12") SE 804.13 (12") W 804.13 (12") N
4	CURB INLET	807.58	804.58 (12") NW
5	CURB INLET	808.74	803.77 (12") W 804.84 (12") S
6	CURB INLET	808.14	804.84 (12") S 803.77 (12") E
7	OUTLET CONTROL STRUCTURE	808.31	803.14 (6") NE 803.77 (12") E 803.14 (12") W
8	STORM MANHOLE	809.12	803.77 (12") S 804.95 (6") W 804.58 (15") N 803.77 (15") NW
9	STORM MANHOLE	807.49	803.04 (12") E 803.04 (12") N
30046	CURB INLET	806.95	802.95 (12") S (PR.) 802.95 (12") N (EX.)

X STORM SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
C1	6" CLEANOUT	810.43	807.96 (6") N 807.96 (6") W
C2	6" CLEANOUT	810.43	806.99 (6") E 806.99 (6") W
C3	6" CLEANOUT	809.26	806.60 (6") E
C4	6" CLEANOUT	809.55	805.44 (6") W 805.44 (6") N
C5	6" CLEANOUT	809.27	805.23 (6") S 805.23 (6") W 805.23 (6") E
C6	6" CLEANOUT	808.89	806.39 (6") E

X UTILITY CROSSING SCHEDULE

NO.	UTILITY	ELEVATIONS	DIFF.
1	12" STM	B/PIPE = 804.20	1.94'
	6" SAN	T/PIPE = 802.26	

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

BM "50": Bench tie set in side of a power pole located on the east side of East Lawn Drive. It is the 3rd pole south of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 809.15' (NAVD 88)

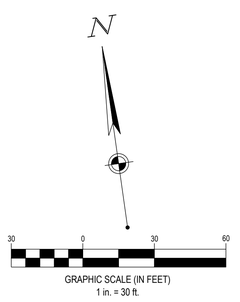
BM "51": Cross notch set on south bolt of fire hydrant. Located on the south side of S.R. 73 in front of the Napa Auto Parts.

Elevation = 807.72' (NAVD 88)

BM "52": Bench tie set on south side of a power pole located on the south side of S.R. 73. It is the second plle west of the intersection of S.R. 73 and East Lawn Drive.

Elevation = 810.44' (NAVD 88)

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
7777 Bonhomme Ave., Suite 1853
Clayton, MO 63105
Phone: 618.604.7157 Fax: 888.208.4826

Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

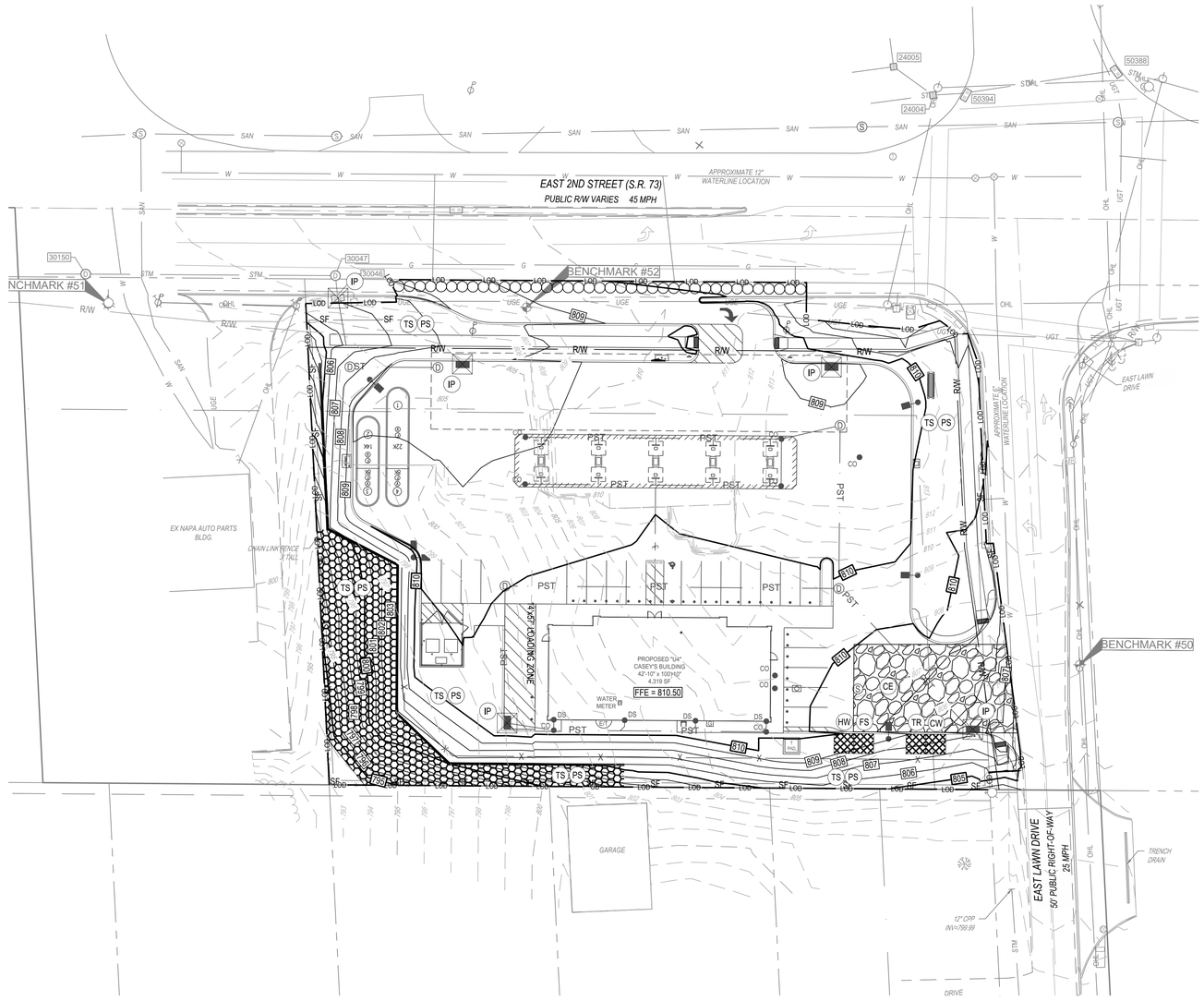
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
UTILITY PLAN

C-301



STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PROJECT NARRATIVE:

PLAN ENGINEERS:
CESO, INC.
7777 BONHOMME AVE.
CLAYTON, MO 63105
PHONE: (618) 604-7157
CONTACT: PAUL HANSON
EOR: ZACH FRESHNER, P.E.

DEVELOPER:
CASEY'S GENERAL STORES, INC.
ONE SE CONVENIENCE BLVD.
ANKENY, IA 50021
PHONE: (515) 446-6402

THE PROPOSED PROJECT IS THE CONSTRUCTION OF GAS STATION AND CONVENIENCE STORE. THE SUBJECT PARCEL IS 1.44 ACRES. THE TOTAL DISTURBED AREA IS 1.54 ACRES.

THE ENTIRE SITE DRAINS SOUTH TOWARDS THE NEIGHBORING PROPERTY.

ON-SITE SOILS:
- ±0.9 AC - UrvB - URBAN LAND-RUSSELL-MIAMIAN COMPLEX, 2 TO 6 PERCENT SLOPES, ERODED — 60%
- ±0.1 AC - MrUC2 - MIAMIAN-RUSSELL-URBAN LAND COMPLEX, 6 TO 12 PERCENT SLOPES — 7%
- ±0.5 AC - UrvB2 - URBAN LAND-RUSSELL-MIAMIAN COMPLEX, 2 TO 6 PERCENT SLOPES, MODERATELY ERODED — 33%

HYDROLOGIC SOIL GROUPS: UrvB - C/D; MrUC2 - C/D; UrvB2 - C

EXISTING ON-SITE CONDITIONS: THE EXISTING SITE IS A 1.44 AC COMBINED PARCEL MADE UP OF THREE RESIDENTIAL DWELLINGS. THE SITE HAS FRONTAGE ALONG EAST SECOND STREET AND EASTLAWN DRIVE BORDERS THE SITE TO THE EAST. A GENERAL COMMERCIAL USE BORDERS THE SITE TO THE WEST AND RESIDENTIAL BORDERS THE SITE TO THE SOUTH.

SEQUENCE OF CONSTRUCTION

1. NOTIFY CITY OF FRANKLIN ADMINISTRATOR BEFORE WORK IS TO BEGIN.
2. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES INCLUDING SILT FENCE, CONSTRUCTION EXIT, FILTER SACKS, CONCRETE WASHOUT.
3. SITE DEMOLITION AND CLEARING.
4. ROUGH GRADING. PROVIDE TEMPORARY SEEDING OF DISTURBED AREAS WHICH ARE INACTIVE.
5. STORM SEWER AND UNDERGROUND UTILITY CONSTRUCTION.
6. BUILDING PAD.
7. CURB CONSTRUCTION.
8. FINE GRADING AND PAVEMENT SUBGRADE PREPARATION
9. ASPHALT PAVING AND REMAINING CONCRETE FLATWORK.
10. FINAL SEEDING.

* CONTRACTOR SHALL MODIFY THE SEQUENCE OF CONSTRUCTION BASED ON SITE CONDITIONS. CONTRACTOR TO NOTIFY PROJECT MANAGER PRIOR TO CHANGING SEQUENCE OF CONSTRUCTION.

SWPPP LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- 810 — MAJOR CONTOUR
- 809 — MINOR CONTOUR
- PAVEMENT/WALK
- PST — STORM SEWER
- SF — SF — SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- CE — STABILIZED CONSTRUCTION ENTRANCE
- CW — CONCRETE WASHOUT
- IP — INLET PROTECTION
- D — STORM MANHOLE
- PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
- CATCH BASIN
- CURB INLET
- TS — TEMPORARY SEEDING
- PS — PERMANENT SOD
- HW — HAZARDOUS WASTE STORAGE AREA
- FS — FUEL STORAGE AREA
- TR — TRASH AREA
- HZ — HAZARDOUS MATERIAL STORAGE

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

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Elevation = 810.44' (NAVD 88)

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

N

GRAPHIC SCALE (IN FEET)
1 in. = 1 ft.

OHIO811.org Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

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Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	1" = 30'
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
SWPPP

C-401

Specifications
for
Silt Fence

1. Silt fence shall be constructed before upslope land disturbance begins.
2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
3. Ends of the silt fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
4. Silt fence shall be placed on the flattest area available.
5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see details).
10. Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or 3) other practices shall be installed.

    Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.

    Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

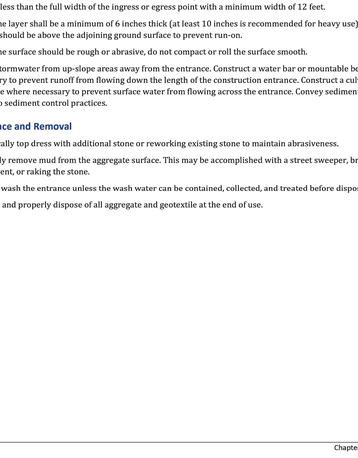
Criteria for silt fence materials

1. Fence post – The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
2. Silt fence fabric – See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (ODOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751
Minimum Permittivity	1X10-2 sec.-1	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

Specifications
for
Silt Fence



Practice Specification
Temporary Seeding

Seed and Seeding

1. Select the plant species appropriate for the length of time the area will be idle and the season in which temporary cover is needed. Table 5.6.1 provides guidance on recommended annual species. Equivalent mixes recommended by the Natural Resource Conservation Service – Ohio, Ohio Department of Natural Resources, or Ohio State University's Cooperative Extension may also be used.

Table 5.6.1 Recommended temporary seeding species, seeding rates, and seeding dates. (adapted from USDA-NRCS, Ohio)

Annual Plant Species	Pure Live Seeding Rate (lb/ac)	Seeding Dates	Seed Depth
Annual Rye Grass (*Lolium multiflorum*)	100	March 1 to May 1 August 1 to October 1	½ inch
Spring Oats (*Avena sativa*)	128	March 1 to August 1	1 inch
Winter (Cereal) Rye (*Secale cereale*)	100	March 1 to November 1	1 inch
Oats (*Avena sativa*) Sorghum Sudangrass (*Sorghum × drummondii*)	64 40	June 1 to August 1	1 inch ¼ inch
Pearl Millet (*Pennisetum glaucum*)	20	June 1 to August 1	¼ inch
Winter Wheat (*Triticum aestivum*)	100	October 1 to November 1	1 inch

2. Seed must be labeled according to Ohio Department of Agriculture regulations and Ohio Revised Code section 907.03.
3. Complete temporary seeding prior to November 1. Between November 1 and March 1 use mulch temporary stabilization. Mulch temporary stabilization over winter has limited effectiveness at an increased cost.
4. Thoroughly mix all seed and sow evenly over 100 percent of the prepared areas at the required rates. Apply the seed mix with a mechanical seeder, hydroseed, or broadcast onto loose soil and in a manner that will result in good seed-to-soil contact. Broadcast seed shall be covered by raking or dragging the soil or using a cultipacker. Note that broadcast seeding may not sufficiently bury annual grains such as oats, wheat, and rye. Annual grains are likely best planted with a seed drill.

Mulching

1. Mulch material shall be applied immediately following the temporary seeding. Apply the mulch material by hand or mechanically so 75 to 90 percent of the soil surface is uniformly covered. Additional protective measures may be necessary to keep soil and seed from washing away on temporarily seeded slopes.
2. Mulch shall be unrotten cereal grain straw applied at the rate of two tons per acre, woodchips with a minimum particle size of ¾ inches applied to a minimum depth of two inches, wood-fiber hydraulic mulch applied to the manufacturer's specifications at a rate of 1,500 to 2,000 pounds/acre with a tackifier, or rolled erosion control matting applied according to manufacturer's specifications.

    Wood fiber hydraulic mulches are typically short-lived (less than 3 months) and only relied upon to establish vegetation. Do not apply hydraulic mulches to shallow vegetated channels unless used with an erosion control blanket or to saturated soils.

Woodchips must be manufactured expressly from clean raw wood and be free of contaminants. Do not use woodchips where flowing water could wash them away.

Do not use grass clippings or other materials with carbon to nitrogen (C:N) ratios less than 20:1. These materials may release nitrate-nitrogen that could cause water quality impairments.

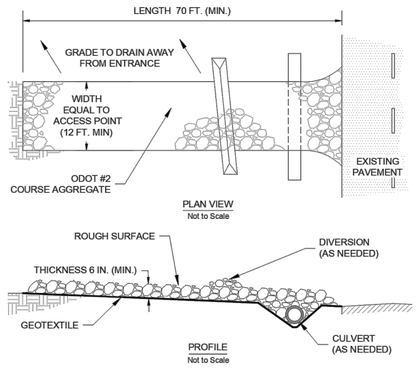
3. Mulch shall be anchored immediately after placement to hold it in place. The following are acceptable methods for anchoring mulch.
    a. A straw crimper or similar coulter-like implement may be used to punch straw mulch into the soil. Soil penetration should be about three to four inches. Crimped straw shall generally be longer than six inches (finely chopped straw cannot be crimped). On sloping land where equipment can operate safely, the crimp along the contour.
    b. Cotton, jute, or synthetic nettings may be used according to the manufacturer's specifications. Pin or staple netting per the manufacturer's recommendations. Biodegradable netting is recommended.
    c. Polymeric emulsion blend or organic tackifiers (guar, psyllium, starch, and pitch and rosin emulsions) may be applied at the manufacturer's recommended application rates if weather conditions are compatible with the manufacturer's recommendations. Apply synthetic or organic binders in such a manner that will not result in direct contact with waters of the state. Follow weather forecasts and the product's required drying time to ensure the binders will not be washed into waters of the state. Binders must be physiologically harmless and not result in a phytotoxic effect or impede the growth of turfgrass. Petroleum-based binders are prohibited.

Remove and properly dispose of all non-organic or non-biodegradable mulch and anchoring materials when the practice is terminated.

Irrigation

1. Water temporary seedings performed during summer months or periods of drought at a rate of one-half inch per week until 70% cover is established.
2. Irrigate at a rate and method that will not erode soil or dislodge mulch cover.

Practice Specification
Construction Entrance Stabilization



Scope

Furnish all materials, labor, and equipment necessary for constructing construction entrance stabilization in accordance with the construction drawings and these specifications.

Timing

The stabilized construction entrance shall be installed as soon as practicable and before major grading activities commence. It shall remain in place and functional until all disturbed areas are stabilized or replaced with a permanent roadway.

Materials

1. Stone aggregate shall meet the gradation requirements for #2 (1.5 - 2.5 inch) coarse aggregate in Table 703.01 of the current Ohio Department of Transportation (ODOT) Construction and Material Specification (CMS) Specification 703, or equivalent. Poorly graded aggregate develops an abrasive surface and is preferred.
2. Geotextile shall be polymeric fibers formed into a woven or non-woven fabric that meets the current ODOT CMS specification 712.09 for Type D: Subgrade-Base Separation or Stabilization, or equivalent.
3. Abrasive manufactured mats may be used as an alternative. They must be installed to the same dimensions as stone stabilization and in accordance with the manufacturer's specifications, including allowable loads, anchoring, and connections.

Installation

1. Remove and stockpile all topsoil. Lay geotextile over the entire subgrade prior to placing the stone layer.
2. The construction entrance shall be not less than 70 feet long (30 feet on an individual residence lot less than 1 acre) and not less than the full width of the ingress or egress point with a minimum width of 12 feet.
3. The stone layer shall be a minimum of 6 inches thick (at least 10 inches is recommended for heavy use). The stone surface should be above the adjoining ground surface to prevent run-on.
4. The stone surface should be rough or abrasive, do not compact or roll the surface smooth.
5. Divert stormwater from up-slope areas away from the entrance. Construct a water bar or mountable berm where necessary to prevent runoff from flowing down the length of the construction entrance. Construct a culvert under the stone where necessary to prevent surface water from flowing across the entrance. Convey sediment-laden runoff to sediment control practices.

Maintenance and Removal

1. Periodically top dress with additional stone or reworking existing stone to maintain abrasiveness.
2. Routinely remove mud from the aggregate surface. This may be accomplished with a street sweeper, broom attachment, or raking the stone.
3. Do NOT wash the entrance unless the wash water can be contained, collected, and treated before disposal.
4. Remove and properly dispose of all aggregate and geotextile at the end of use.

Specifications
for
Silt Fence

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4. Silt fence shall be placed on the flattest area available.
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6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see details).
10. Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or 3) other practices shall be installed.

    Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.

    Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

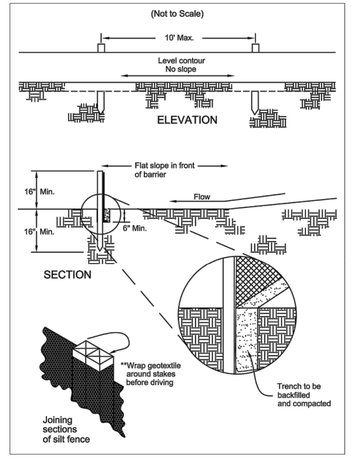
Criteria for silt fence materials

1. Fence post – The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
2. Silt fence fabric – See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (ODOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751
Minimum Permittivity	1X10-2 sec.-1	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

Specifications
for
Silt Fence



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Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
SWPPP DETAILS

C-402

Practice Specification
Permanent Seeding

Timing

1. Permanent seed areas within 50 feet of surface waters of the state within two days of reaching final grade and all other areas within seven days of reaching final grade. Do not delay permanent seeding of any portion of the site at final grade, including stormwater basins, while construction on another portion of the site is being completed. Complete permanent seeding in phases, if necessary.
2. Permanent seed any areas that will lie dormant for one year or more within seven days of the most recent disturbance.
3. Conduct permanent seeding according to the timeframes in Table 5.8.1.

Table 5.8.1 Ohio Seeding Dates (adapted from USDA-NRCS Ohio, 2019)

March 15 to May 31[1]	Spring permanent seeding window
June 1 to July 31	Permanent seeding with irrigation until 70% cover is established[2]
August 1 to September 15[1]	Fall permanent seeding window
September 16 to October 15	Permanent seeding with an additional 30 lb/ac of cereal rye[2]
October 15 to December 1	Permanent seeding is not recommended as seeds are likely to germinate but not be able to survive the winter. Use temporary stabilization until the spring window.
December 1 to March 14	Dormant permanent seeding coupled with mulch temporary stabilization[2,3]

Footnotes:
1. Spring and fall seeding dates may be extended two weeks beyond the date range listed based on a site-specific evaluation of the site and the local weather conditions at the time.
2. Seeding must be evaluated for adequate establishment after the following spring or fall seeding window.
3. Increase seeding rates by 50% for dormant seeding and follow mulch temporary stabilization specification.

Seedbed Preparation, Fertilizer, and Lime

1. Prior to the start of seeding operations, perform soil tests to determine site-specific application rates for both lime and fertilizer. Soil samples taken for engineering purposes or soil restoration may also be used for chemical analyses.
2. The soil being seeded must be of sufficient tilth with adequate nutrients and water-holding capacity to support vegetation. The seedbed should be firm and rough with small clods, moist at the surface, and free of weeds and competing vegetation.
   a. If the soil has become compacted or crusted, loosen it to a depth of three to five inches with a suitable agricultural or construction implement, such as a disc harrow, tine harrow, chisel plow, or ripper. Leave the seedbed in loose condition until after fertilization and seeding. If necessary, firm it with a cultipacker.
   b. Track walk sloped areas (greater than 3:1) leaving the surface in an irregular condition with ridges running parallel to the contour of the slope. (see Chapter 5.5 Soil Roughening)
3. Apply starter fertilizer and lime as recommended by a soil test and work into loose soil. If fertilizer is not incorporated, apply one-half the rate described above during seedbed preparation and repeat another one-half rate application of the same fertilizer within three to five weeks after seeding.

   When not specified by a soil test, apply standard commercial fertilizer 10-20-10 evenly over the surface at a standard dry application rate of 20 pounds per 1,000 square feet. Other commercial fertilizer mixture ratios may be applied at the application rate specific for that ratio to provide an equivalent quantity of nutrients. All dry or liquid fertilizers must be fully labeled, delivered, and stored per applicable laws and registered with the Ohio Department of Agriculture (ODA) in accordance with Ohio Revised Code (ORC) section 905.33.

When not specified by a soil test, apply two tons of pulverized agricultural-grade lime per acre to develop a slightly acidic growing environment. Equivalent liming materials described in Bulletin 472, *Ohio Agronomy Guide*, published by the Ohio State University Cooperative Extension Service (OSU Extension) may also be used. Liming material must be from a manufacturer licensed by ODA in accordance with ORC section 905.52.

Seed

1. Select a seed mix from Table 5.8.2 or an equivalent mixture recommended by the Natural Resource Conservation Service – Ohio, Ohio Department of Natural Resources, or OSU Extension.
2. Seed must be labeled according to ODA regulations and Ohio Revised Code section 907.03.
3. Legume seed must be properly inoculated with nitrogen-fixing bacteria specifically prepared for the species prior to seeding and should be applied at a rate of two pounds of inoculant per 100 pounds of seed. Use four times the recommended rate when hydroseeding.

Seeding Methods

1. Thoroughly mix all seed and evenly sow the seed over 100 percent of the prepared areas at the required rates. Seed may be applied by dry seeding, a mechanized seeder, or hydroseeding.
2. Dry seeding may be performed with a conventional drop or cyclone seeder. Seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth of one-quarter inch by raking or dragging or with a cultipacker or similar implement to assure good seed-to-soil contact. Seed may also be covered with compost or engineered soil media applied to a minimum depth of ¼ inch over the prepared areas. Where feasible, apply seed in two directions perpendicular to each other using half the seeding rate in each direction. After seeding, firm the soil with cultipacker or similar implement
3. Mechanized seeders may be used to bury the seed at least one-quarter inches. Where practical, apply seed in two directions perpendicular to each other, using one-half of the seeding rate in each direction. On sloping land, operate seeding equipment on the contour where feasible.
4. Hydroseeding should follow a two-step process to ensure the seed is in direct contact with the soil. First seed and fertilize with 25 to 30 percent mulch and tackifier onto soil in the first lift. Place the remaining 70 to 75 percent of the mulch and tackifier over the first lift in a second application. If seed, fertilizer, and mulch are applied in a single step, the seed rates in Table 5.7.2 should be increased by 50 percent to compensate for seeds not having direct contact with the soil. Hydroseeding alone does not provide adequate erosion control.

Mulching

1. Mulch material shall be applied immediately following permanent seeding. Apply the mulch material by hand or mechanically so 85 to 90 percent of the soil surface is uniformly covered.
2. Mulch shall be unrotten cereal grain straw applied at the rate of two tons per acre, woodchips with a minimum particle size of ¾ inches applied to a minimum depth of two inches, wood-fiber hydraulic mulch applied to the manufacturer's specifications at a rate of 1,500 to 2,000 pounds/acre with a tackifier, or rolled erosion control matting applied according to manufacturer's specifications.

   Wood fiber hydraulic mulches are generally short-lived (less than 3 months) and should only be used during the spring and fall seeding window. Do not apply hydraulic mulches to shallow vegetated channels unless used with an erosion control blanket or to saturated soils.

   Woodchips must be manufactured expressly from clean raw wood and be free of contaminants. Do not use woodchips where flowing water could wash them away.

   Organic mulch materials with carbon to nitrogen (C:N) ratios of less than 20:1 such as grass clippings will release nitrate-nitrogen that could cause water quality impairments and should be avoided.
3. Mulch shall be anchored immediately after placement to hold it in place. The following are acceptable methods for anchoring mulch.

   a. Use a straw crimper or similar coulter-like implement to punch the straw mulch into the soil. Soil penetration should be about three to four inches. Crimped straw shall generally be longer than six inches (finely chopped straw cannot be crimped). On sloping land where equipment can operate safely, the operation should be on the contour.
   b. Cotton, jute, or synthetic netting may be used according to the manufacturer's specifications. Pin or staple netting per the manufacturer's recommendations. Degradable netting is recommended for areas to be mowed.
   c. High polymer synthetic emulsions or organic binders may be used at the manufacturer's recommended application rates if weather conditions are compatible with the manufacturer's recommendations. All applications of synthetic or organic binders must be conducted in such a manner that there is no direct contact with waters of the state. Weather forecasts must be considered to ensure the binders will not be washed into waters of the state. Binders must be physiologically harmless and not result in a phytotoxic effect or impede vegetation growth.

   All non-organic or non-biodegradable mulch and anchoring materials shall be removed and properly disposed of when the practice is terminated.

Irrigation

1. Thoroughly water permanent seeded areas after seed germination. Apply a total rate of 300 gallons per 1,000 square feet in at least two applications spread over seven days. Perform a secondary water application seven and ten days after the primary applications. If a one-half inch or greater of rainfall occurs within the irrigation period, watering may be omitted. Irrigation seedings performed between June 1 and July 31 at a rate of one-half inch per week until 70% cover is established.
2. Irrigate at a rate and method that will not erode soil or dislodge mulch cover.

Dormant Seeding

1. Dormant seeding may occur if soil moisture conditions allow access for seeding.
2. Increase all seeding rates by 50 percent when dormant seeding.
3. Dormant seeding shall be mulched so that 100 percent of the ground surface is uniformly covered with cereal grain straw applied at the rate of three to four tons per acre or bonded fiber matrix hydraulically applied at a rate of 3,500 to 4,000 pounds per acre. Hydroseed and standard hydraulic fiber mulch do not sufficiently protect dormant seeded ground from erosion.

Table 5.8.2 Recommended Permanent Seeding Mixes and Seeding Rates.[1] (adapted from USDA-NRCS Ohio and ODOT)

	Mix Use	Plant Species	Pure Live Seeding Rate (lb/ac)[2,3]	Percent of Mix
1	Multipurpose Lawn	Turf Type Fescue (*Festuca arundinadea*)	40	47
		Kentucky Bluegrass (*Poa pratensis*)	20	23
		Perennial Ryegrass (*Lolium perenne*)	25	30
			85 lb/ac total PLS rate	
2	Quick Cover	Kentucky Bluegrass (*Poa pratensis*)	15	41
		Creeping Red Fescue (*Festuca rubra*)	16.5	27
		Annual Ryegrass (*Lolium multiflorum*)	1.5	2
		Perennial Ryegrass (*Lolium perenne*)	19	30
			52 lb/ac total PLS rate	
3	Secondary Wildlife Benefits Cover	Kentucky Bluegrass (*Poa pratensis*)	11	18
		Orchardgrass (*Dactylis glomerata*)	22.5	37
		Annual Ryegrass (*lolium multiflorum*)	1.5	10
		Perennial Ryegrass (*Lolium perenne*)	19	31
		Red Clover (*Trifolium portum*)	2	4
			56 lb/ac total PLS rate	
4	Steep Slopes	Hard Fescue (*Festuca longifolia*)	55	55
		Creeping Red Fescue (*Festuca rubra*)	35	35
		Annual Ryegrass (*Lolium multiflorum*)	10	10
			100 lb/ac total PLS rate	
5	Meadow / Conservation Area[4]	New England Aster (*Symphyotrichum novae-angliae*), Partridge Pea (*Chamaecrista fasciculata*), Purple Coneflower (*Echinacea purpurea*), Rattlesnake Master (*Eryngium yuccifolium*), Ox-Eye Sunflower (*Heliopsis helianthoides*), Bergamot (*Monarda fistulosa*), Grey-Headed Coneflower (*Ratibida pinnata*), Orange Coneflower (*Rudbeckia fulpida*), Prairie Dock (*Silphium terebinthinaceum*), Whorled Rosinweed (*Silphium trifoliatum*), Stiff Goldenrod (*Solidago rigida*) (a mixture of 5 to 12 species with any one not to exceed 5% of the mix)	15	25
		Big Blue Stem (*Andropogon gerardii*)	2	3
		Little Blue Stem (*Schizachyrium scoparium*)	3	5
		Indian Grass (*Sorghastrumnutans*)	1	2
		Annual Ryegrass (*Lolium multiflorum*)	40	65
			61 lb/ac total PLS rate	

Footnotes:
1. Small variations within the seeding rates listed within the planned mix are acceptable so long as the mix includes all the listed species, and the total proportion of the seed mixture is 100% or more.
2. The seeding rates used in this document assume the seed used is all viable. All rates listed in this document are listed as Pure Live Seed (PLS). This PLS rate must be adjusted to account for the quality of the seed being used.
3. PLS seeding rates are to be increased by 20% if the method of seeding does not result in good soil seed contact included to account for the increased risk of poor emergence. For example, if the planned method involves broadcast seeding with no additional activities to improve seed-to-soil contact.
4. This is a general mix. Ecoregion-specific seed mixes are recommended where feasible.

Specifications
for

Additional Construction Site Pollution Controls

1. Construction personnel, including subcontractors who may use or handle hazardous or toxic materials, shall be made aware of the following general guidelines regarding disposal and handling of hazardous and construction wastes:
   - Prevent spills
   - Use products up
   - Follow label directions for disposal
   - Remove lids from empty bottles and cans when disposing in trash
   - Recycle wastes whenever possible
   - Don't pour into waterways, storm drains or onto the ground
   - Don't pour down the sink, floor drain or septic tanks
   - Don't bury chemicals or containers
   - Don't burn chemicals or containers
   - Don't mix chemicals together
2. **Containers shall be provided for the proper collection of all waste material including construction debris, trash, petroleum products and any hazardous materials used on-site.** Containers shall be covered and not leaking. All waste material shall be disposed of at facilities approved for that material. Construction Demolition and Debris (CD&D) waste must be disposed of at an Ohio EPA approved CD&D landfill.
3. **No construction related waste materials are to be buried on-site.** By exception, clean fill (bricks, hardened concrete, soil) may be utilized in a way which does not encroach upon natural wetlands, streams or floodplains or result in the contamination of waters of the state.
4. **Handling Construction Chemicals.** Mixing, pumping, transferring or other handling of construction chemicals such as fertilizer, lime, asphalt, concrete drying compounds, and all other potentially hazardous materials shall be performed in an area away from any watercourse, ditch or storm drain.
5. **Equipment Fueling and Maintenance,** oil changing, etc., shall be performed away from watercourses, ditches or storm drains, in an area designated for that purpose. The designated area shall be equipped for recycling oil and catching spills. Secondary containment shall be provided for all fuel oil storage tanks. These areas must be inspected every seven days and within 24 hrs. of a 0.5 inch or greater rain event to ensure there are no exposed materials which would contaminate storm water. Site operators must be aware that Spill Prevention Control and Countermeasures (SPCC) requirements may apply. An SPCC plan is required for sites with one single above ground tank of 660

gallons or more, accumulative above ground storage of 1330 gallons or more, or 42,000 gallons of underground storage. Contaminated soils must be disposed of in accordance with Item 8.

6. **Concrete Wash Water** shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance. A sump or pit with no potential for discharge shall be constructed if needed to contain concrete wash water. Field tile or other subsurface drainage structures within 10 ft. of the sump shall be cut and plugged. For small projects, truck chutes may be rinsed away from any water conveyances.
7. **Spill Reporting Requirements:** Spills on pavement shall be absorbed with sawdust or kitty litter and disposed of with the trash at a licensed sanitary landfill. Hazardous or industrial wastes such as most solvents, gasoline, oil-based paints, and cement curing compounds require special handling. Spills shall be reported to Ohio EPA (1-800-282-9378). Spills of 25 gallons or more of petroleum products shall be reported to Ohio EPA, the local fire department, and the Local Emergency Planning Committee within 30 min. of the discovery of the release. All spills which contact waters of the state must be reported to Ohio EPA.
8. **Contaminated Soils.** If substances such as oil, diesel fuel, hydraulic fluid, antifreeze, etc. are spilled, leaked, or released onto the soil, the soil should be dug up and disposed of at licensed sanitary landfill or other approved petroleum contaminated soil remediation facility. (not a construction/demolition debris landfill). Note that storm water run off associated with contaminated soils are not be authorized under Ohio EPA's General Storm Water Permit associated with Construction Activities.
9. **Open Burning.** No materials containing rubber, grease, asphalt, or petroleum products, such as tires, autoparts, plastics or plastic coated wire may be burned (OAC 3745-19). Open burning is not allowed in restricted areas, which are defined as: 1) within corporation limits; 2) within 1000 feet outside a municipal corporation having a population of 1000 to 10,000; and 3) a one mile zone outside of a corporation of 10, 000 or more. Outside of restricted areas, no open burning is allowed within a 1000 feet of an inhabited building on another property. Open burning is permissible in a restricted area for: heating tar, welding, smudge pots and similar occupational needs, and heating for warmth or outdoor barbeques. Outside of restricted areas, open burning is permissible for landscape or land-clearing wastes (plant material, with prior written permission from Ohio EPA), and agricultural wastes, excluding buildings.
10. **Dust Control or dust suppressants** shall be used to prevent nuisance conditions, in accordance with the manufacturer's specifications and in a manner, which prevent a discharge to waters of the state. Sufficient distance must be provided between applications and nearby bridges, catch basins, and other waterways. Application (excluding water) may not occur when rain is imminent as noted in the short term forecast. Used oil may not be applied for dust control.
11. **Other Air Permitting Requirements:** Certain activities associated with construction will require air permits including but not limited to: mobile concrete batch plants, mobile asphalt plants, concrete crushers, large generators, etc. These activities will require specific Ohio EPA Air Permits for installation and operation. Operators must seek authorization from the corresponding district of Ohio EPA. For demolition of all

commercial sites, a Notification for Restoration and Demolition must be submitted to Ohio EPA to determine if asbestos corrective actions are required.

12. **Process Waste Water/Leachate Management.** Ohio EPA's Construction General Permit only allows the discharge of storm water and does not include other waste streams/discharges such as vehicle and/or equipment washing, on-site septic leachate concrete wash outs, which are considered process wastewaters. All process wastewaters must be collected and properly disposed at an approved disposal facility. In the event, leachate or septage is discharged; it must be isolated for collection and proper disposal and corrective actions taken to eliminate the source of waste water.
13. **A Permit To Install (PTI)** is required prior to the construction of all centralized sanitary systems, including sewer extensions, and sewerage systems (except those serving one, two, and three family dwellings) and potable water lines. Plans must be submitted and approved by Ohio EPA. Issuance of an Ohio EPA Construction General Storm Water Permit does not authorize the installation of any sewerage system where Ohio EPA has not approved a PTI.

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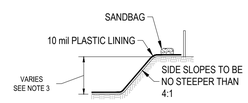
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
SWPPP DETAILS

C-403



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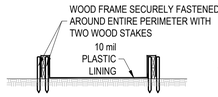

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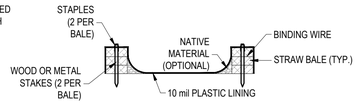

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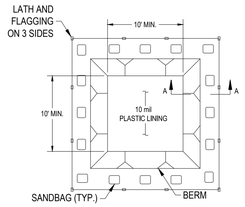
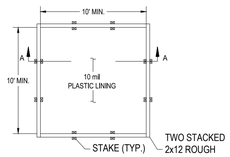
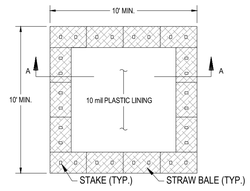


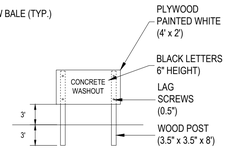
BELOW GRADE



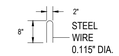
ABOVE GRADE WITH WOOD PLANKS



ABOVE GRADE W/ HAYBALES



CONCRETE WASHOUT SIGN DETAIL



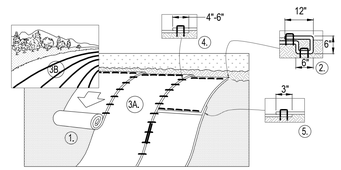
STAPLE DETAIL

NOTES:

1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING BUT NOT LIMITED TO OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

CONCRETE WASHOUT

NTS

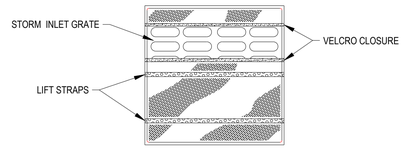


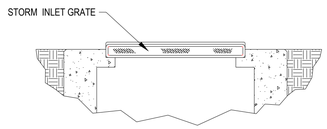
NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH AS SHOWN IN DETAIL 2. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

EROSION CONTROL BLANKET

NTS



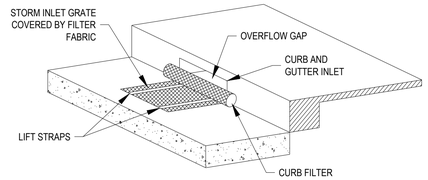


NOTE:

INLET PROTECTION SHALL BE DANDY BAG OR APPROVED OTHER.

INLET PROTECTION

NTS



NOTE:

INLET PROTECTION SHALL BE DANDY CURB BAG OR APPROVED OTHER.

CURB INLET PROTECTION

NTS

CESO
WWW.CESOINC.COM
7777 Bonhomme Ave., Suite 1853
Clayton, MO 63105
Phone: 618.604.7157 Fax: 888.208.4826

Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

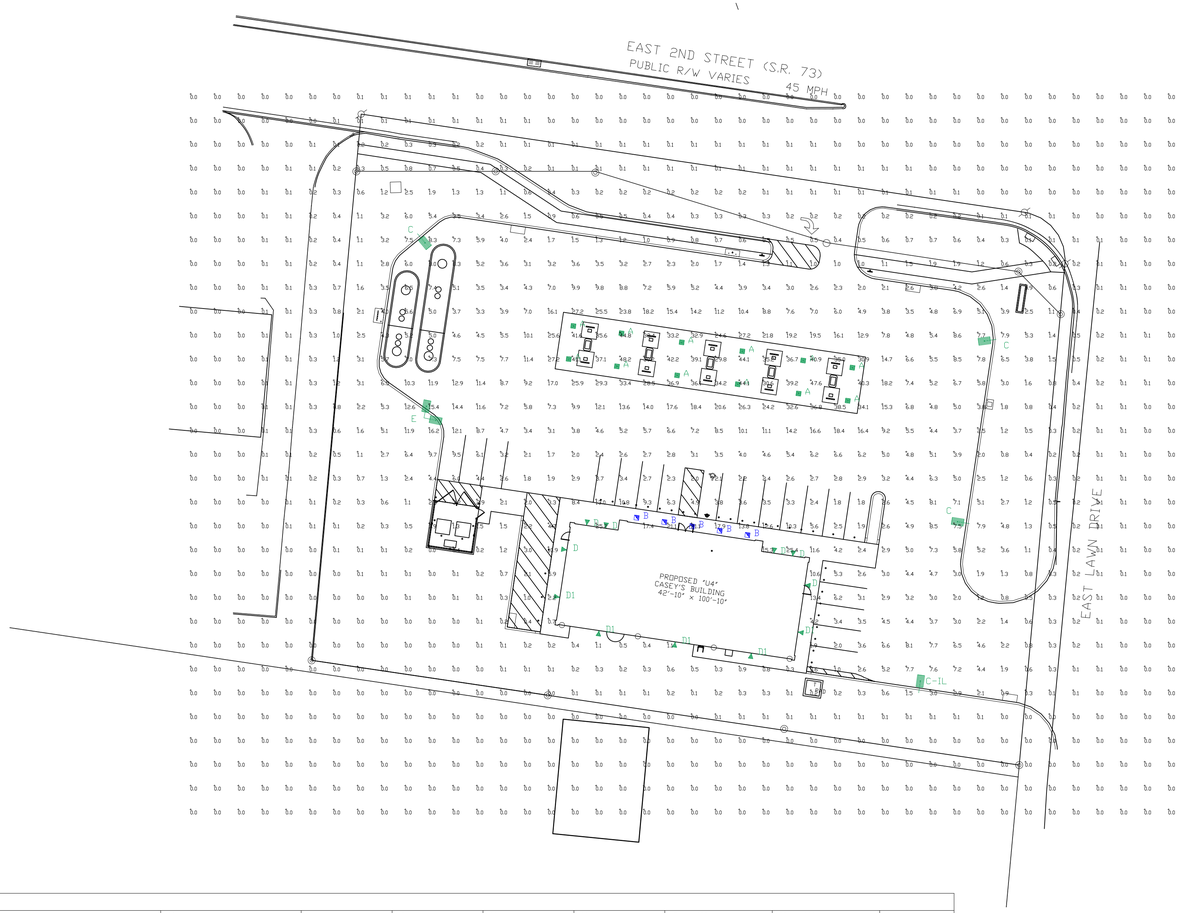
Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
SWPPP DETAILS

C-404



Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Z
ALL CALC POINTS	Illuminance	Fc	3.01	48.2	0.0	N.A.	N.A.	0
CANOPY	Illuminance	Fc	37.49	48.2	28.5	1.32	1.69	
PAVED AREA	Illuminance	Fc	7.21	33.4	0.6	12.02	55.67	

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	Mounting Height	LLF	Arr. Lum. Lumens	Arr. Watts	BUG Rating
	12	A	Single	SCV-LED-20L-SC-50-WHT-REDI	16.5'	1.000	20234	133	B4-U0-G1
	5	B	Single	XSPS-S-LED-SS-CW-DFL	10'	1.000	3966	31.1	B2-U0-G1
	3	C	Single	SLM-LED-18L-SIL-FT-50-70CRI-SINGLE	15' POLE + 2' BASE	1.000	18904	135	B3-U0-G3
	1	C-IL	Single	SLM-LED-18L-SIL-FT-50-70CRI-IL	15' POLE + 2' BASE	1.000	12043	135	B1-U0-G2
	6	D	Single	GSR-06L-FT-50	13'	1.000	5958	49	B2-U0-G1
	5	D1	Single	GSR-02L-FT-50 DIMMED 80%	13'	0.200	2373	18	B1-U0-G1
	1	E	2 @ 90	SLM-LED-18L-SIL-FT-50-70CRI-D90	15' POLE + 2' BASE	1.000	37808	270	B3-U0-G3

PHOTOMETRIC EVALUATION
NOT FOR CONSTRUCTION

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine the applicability of the layout to existing or future field conditions.

This lighting plan represents illumination levels calculated from laboratory data taken under controlled conditions in accordance with The Illuminating Engineering Society (IES) approved methods. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in lamps/LED's and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted. Fixture nomenclature noted does not include mounting hardware or poles. This drawing is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

The IES no longer uses the Cutoff Classification System for LED fixtures. The IES classifies LED fixtures with the BUG rating which refers to the Backlight-Uplight-Glare system. An Uplight of "U0" most closely matches the old Full Cutoff rating.

Dimensions of drawings that have been scaled or converted from PDF files or scanned /submitted images are approximate.

Total Project Watts
Total Watts = 2945.5

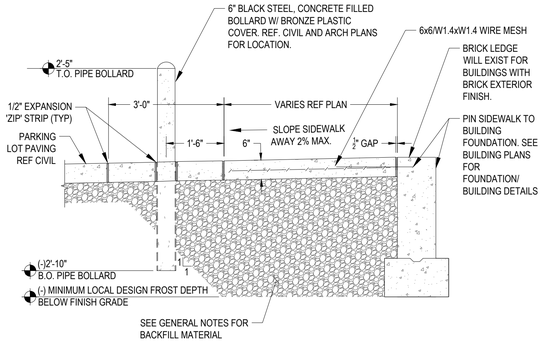
10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
(513) 793-3200 • FAX (513) 793-6023

LIGHTING PROPOSAL LD-162722-1

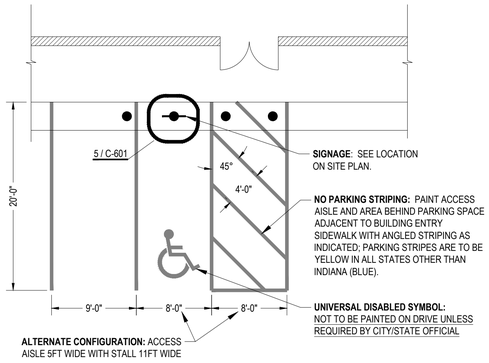
CASEY'S
E 2nd ST & EASTLAWN DR
FRANKLIN, OH

BY:MVE	DATE:6/23/25	REV:07-25-25	SHEET 1 OF 1

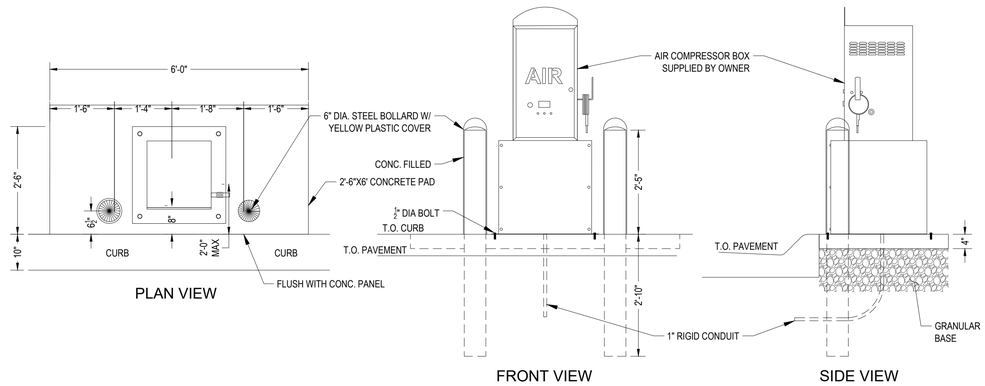
SCALE: 1"=30' 0 30



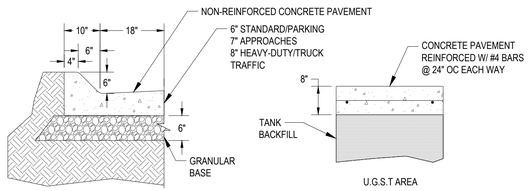
1 TYPICAL BUILDING SIDEWALK AND BOLLARD
NOT TO SCALE



4 ADA PARKING SPACES
NOT TO SCALE

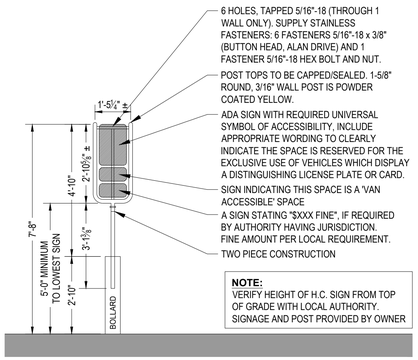


7 AIR COMPRESSOR
NOT TO SCALE



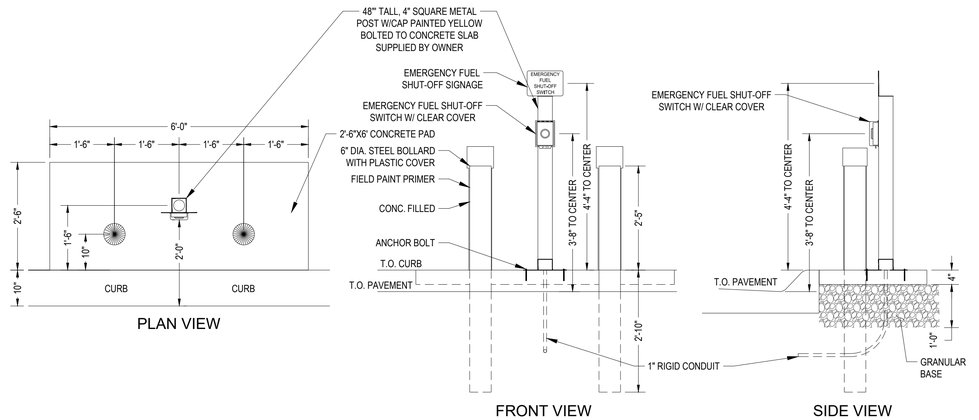
LIGHT BROOM FINISH
CONTROL JOINTS: 100 FT² - 125 FT², 25% DEEP
CONSTRUCTION JOINTS: PINNED 4' O.C. 12" EACH WAY W/ #4 REBAR
ALL JOINTS TO BE SEALED WITH BACKER RODS AND CAULKED
APPLY CURING AGENT TO ALL EXTERIOR CONCRETE. SEE GENERAL NOTES
SUBGRADE AGGREGATE SECTION TO BE DESIGNED BASED ON SITE SOILS AND USE

2 CONCRETE PAVING AND CURB
NOT TO SCALE

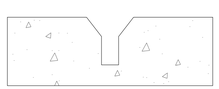


*** THE STATE OF TENNESSEE REQUIRES LANGUAGE BELOW THE UNIVERSAL SYMBOL LISTING OUT THE FINE AMOUNT FOLLOWED BY THE BUSINESS NAME AND BUSINESS TELEPHONE NUMBER. THE VAN ACCESSIBLE SIGN IS TO REMAIN BELOW THE MAIN SIGN. ***

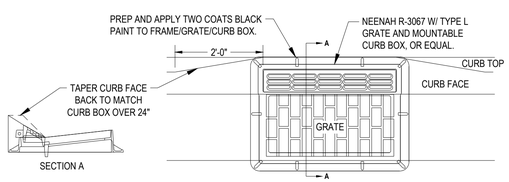
5 ADA PARKING SIGN
NOT TO SCALE



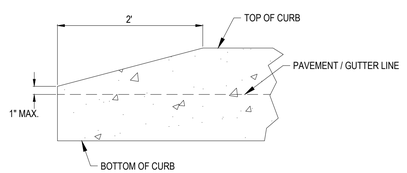
8 EMERGENCY STOP
NOT TO SCALE



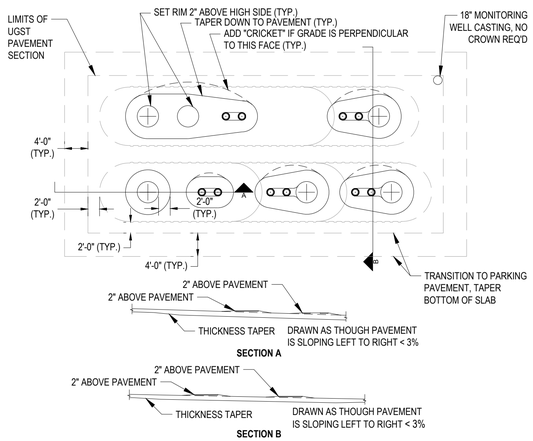
3 PAVING SAW-CUT
NOT TO SCALE



6 CURB INLET
NOT TO SCALE



9 CURB TAPER
NOT TO SCALE



10 UGST PAVING FOR PAVEMENT SLOPE <3%
NOT TO SCALE

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Phone: 618.604.7157 Fax: 888.208.4826

Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

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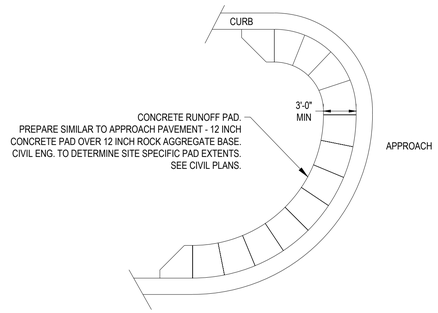
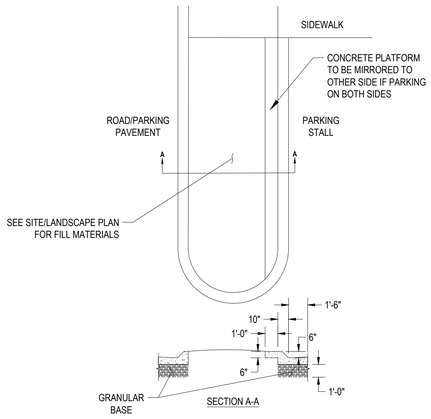
Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
CONSTRUCTION DETAILS

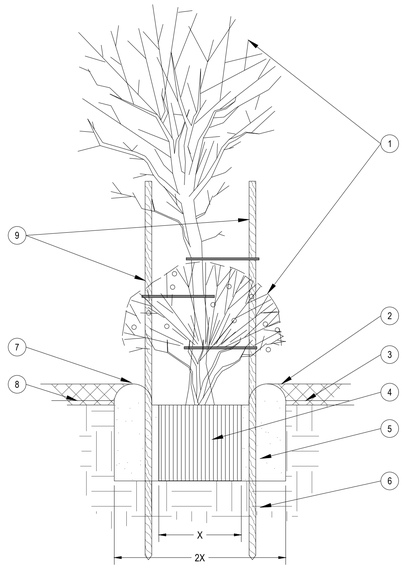
C-601



1 LANDSCAPE PROTECTOR
NOT TO SCALE

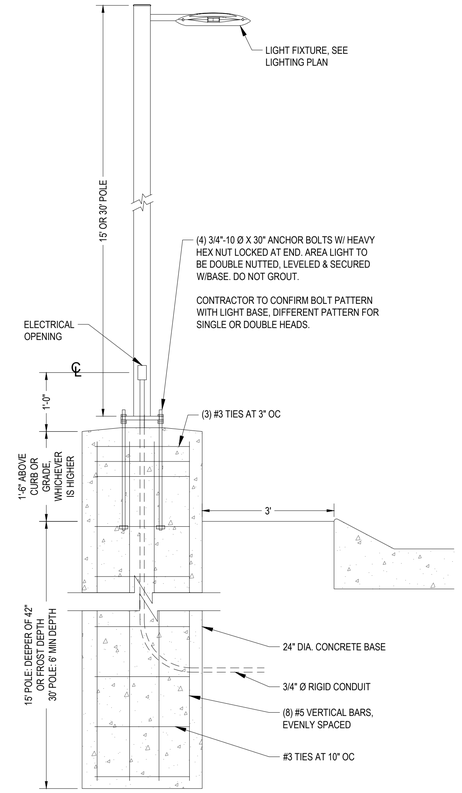


4 PARKING LANDSCAPE ISLAND DETAIL
NOT TO SCALE

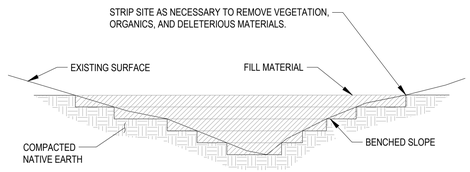


1. TREE/SHRUB, PERENNIAL, OR ORNAMENTAL GRASS.
2. GROUNDCOVER: 3" DEPTH OF 3/4" WASHED STONE OR WASHED BRICK CHIPS AS INDICATED IN LANDSCAPING PLAN.
3. FINISH GRADE.
4. ROOT BALL.
5. BACKFILL. AMEND AND FERTILIZE AS RECOMMENDED BY LOCAL SUPPLIER.
6. UNDISTURBED NATIVE SOIL.
7. 3" HIGH EARTHEN WATERING BASIN.
8. HEAVY WEED FABRIC UNDER GROUNDCOVER.
9. FOR TREES, 2 STAKES/GUIDEPOSTS MIN; 3 REQ ON SLOPES WITH TIES

6 PLANT/TREE INSTALLATION
NOT TO SCALE

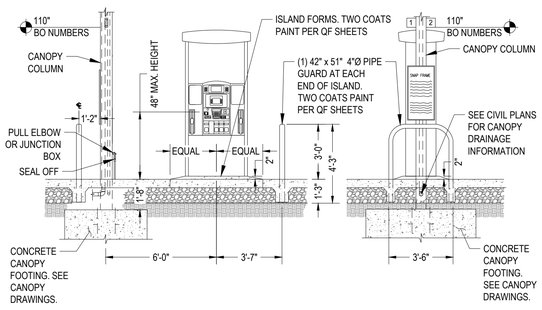


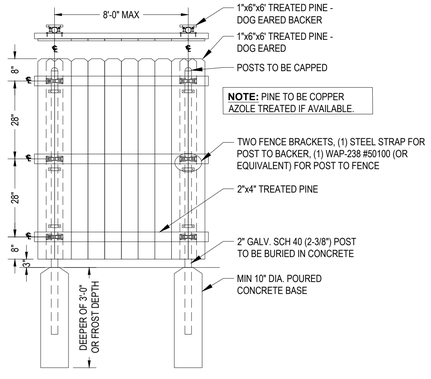
8 AREA LIGHTING
NOT TO SCALE



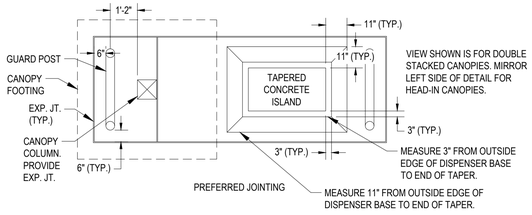
NOTES:
1. BENCH SLOPES TO MAINTAIN VERTICAL SIDE SLOPES AT FILL LIMITS +/- 3' VERTICAL TO +/- 8' HORIZONTAL.
2. COMPACTION SHALL BE IN 8" LIFTS TO 95% STANDARD PROCTOR OR OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT.
3. SCARIFY ORIGINAL GROUND AND BLEND WITH FIRST LIFT ON EACH BENCH.
4. ALL FILL MATERIALS, INCLUDING FILL GENERATED ON-SITE, SHALL BE OF SUITABLE MATERIAL. UNSUITABLE FILL MATERIAL INCLUDES, BUT IS NOT LIMITED TO, SOIL THAT CONTAINS LARGE ROCKS, TREE AND PLANT ROOTS, CONCRETE, TRASH, ETC.

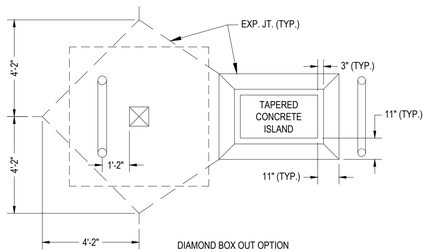
2 TYPICAL FILL SECTION
NOT TO SCALE



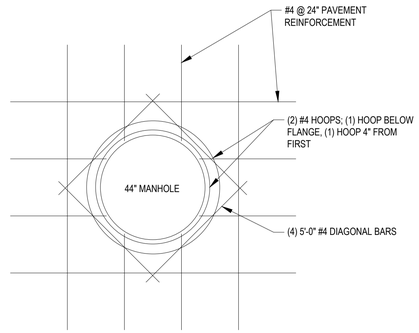


3 SCREEN/PRIVACY FENCE
NOT TO SCALE





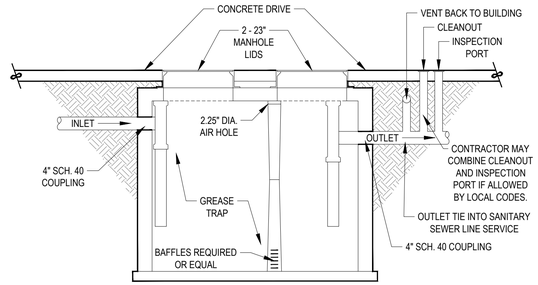
5 GAS TAPERED FUEL ISLAND (PREFERRED OPTION)
NOT TO SCALE



GENERAL NOTES:

1. ALL REINFORCING IS CENTER OF SLAB.

7 UGST MANHOLE DETAIL
NOT TO SCALE



NOTES:

1. 750 GALLON MIN.
2. FOLLOW MANUFACTURES SPECIFICATIONS ON INSTALLATION PROCEDURES

9 GREASE INTERCEPTOR
NOT TO SCALE

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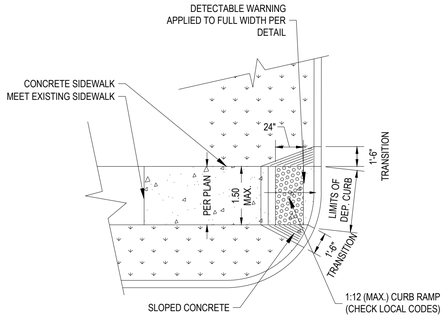
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

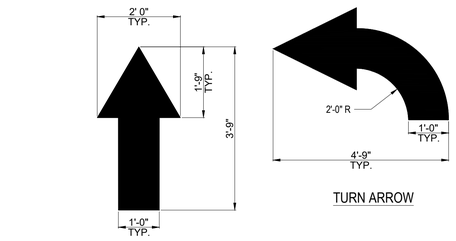
Drawing Title:
CONSTRUCTION DETAILS

C-602



ACCESSIBLE CURB RAMP

NTS

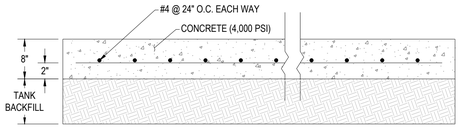


TURN ARROW

ARROW

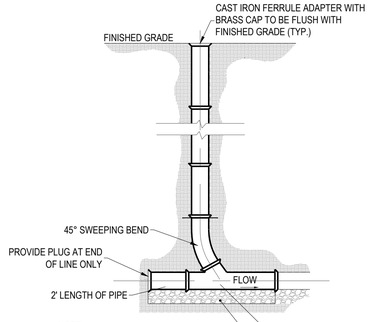
PAVEMENT MARKINGS

NTS



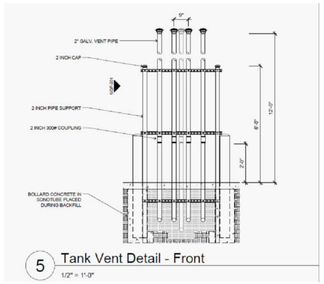
FUEL TANK AREA CONCRETE

NTS



CLEAN OUT

NTS



5 Tank Vent Detail - Front

1/2" = 1'-0"

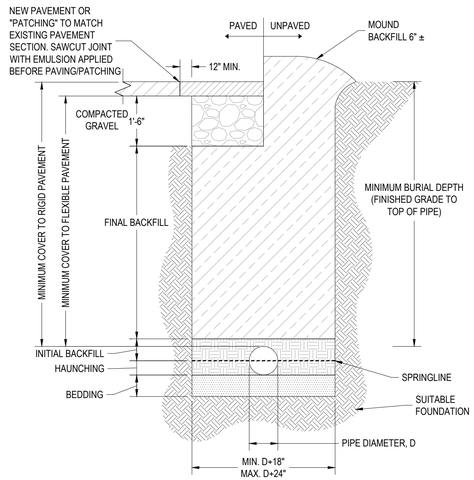


TABLE 1: BACKFILL AND EMBEDMENT MATERIALS	
SOIL CLASSIFICATIONS (AS DEFINED IN ASTM D2487 AND D2321)	
CLASS I	CRUSHED ROCK ANGULAR (CLEAN).
CLASS II	GRAVEL AND/OR SANDS, WITH LITTLE OR NO FINES.
CLASS III	SAND/SILT AND SAND/CLAY MIXTURES.
CLASS IV	INORGANIC CLAYS
CLASS V	ORGANIC SILTS, CLAYS, AND PEATS.
SOIL CLASSIFICATIONS (AS DEFINED IN ASCE 15-98)	
CATEGORY I	GRAVELLY SAND
CATEGORY II	SANDY SILT
CATEGORY III	SILTY CLAY

NOTES:

1. IN THE CASE OF TRENCH BOTTOM BEING UNSTABLE, THE CONTRACTOR SHALL REPLACE FOUNDATION WITH SUITABLE MATERIAL AS SPECIFIED BY GEOTECHNICAL ENGINEER.
2. COMPACTION PERCENTAGES SPECIFIED REFER TO STANDARD PROCTOR PERCENT COMPACTION.
3. CONTRACTOR TO MANDATE DEWATERING IN TRENCHES DURING CONSTRUCTION.
4. TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS.
5. FOR HDPE AND PVC WATERLINES AND LONG SEWER LATERALS, INSTALL METALLIC LOCATOR TAPE 12" (MIN) AND 18" (MAX) BELOW FINISHED SUBGRADE ELEVATION. INSTALL TRACER WIRE LOCATED AT THE TOP OF THE PIPE WITHIN THE INITIAL BACKFILL.

DESIGNER NOTES:

1. REPLACE TRENCH DETAILS / SECTIONS OF THIS DETAIL WITH AHJ STANDARD DETAILS FOR WATERLINES, SEWER TRENCHES, ETC. CERTAIN SECTIONS OR TABLES MAY BE REMOVED AS LOCAL DETAILS WILL SUPERCEDE THESE REQUIREMENTS.
2. REVIEW FILL HEIGHTS AND PIPE MATERIALS (PIPE CLASS, SDR, DR, ETC.) UNDER GENERAL NOTES FOR SHALLOW AND DEEP PIPE INSTALLATIONS. ADDITIONAL MEASURES MAY NEED TO BE SPECIFIED ON THE PLANS SUCH AS CONCRETE ENCASEMENT
3. REFER TO WWW.CONCRETEPIPE.ORG FOR CONCRETE PIPE DESIGN MANUAL INCLUDING CLASS OF PIPE AND LOAD TABLES, SEE ALSO ELLIPTICAL PIPE TRENCH RECOMMENDATIONS FROM CONCRETEPIPE.ORG.

PVC PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (12" COMMON)** CLASS I, II, AND III*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III COMPACTED*
BEDDING	DEPTH = 4-6" CLASS I, II, AND III COMPACTED*

NOTE: HAUNCHING ZONE MUST BE COMPACTED PRIOR TO PLACEMENT AND COMPACTION OF INITIAL AND FINAL BACKFILLS TO PREVENT PIPE DEFLECTION.

HDPE PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	MINIMUM COVER UNPAVED AREAS = 12" MINIMUM COVER PAVED AREAS (D <=48") = 12***,*** MINIMUM COVER PAVED AREAS (D>48") = 24***,*** CLASS I AND II (COMPACTED 90% SPD) AND CLASS III (COMPACTED 95% SPD)*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (CAN EXTEND TO THE CROWN OF THE PIPE)** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
BEDDING	DEPTH (D <= 24") = 4*** DEPTH (D > 24") = 6*** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*

NOTE: THE MIDDLE $\frac{1}{3}$ BENEATH THE PIPE INVERT IN THE BEDDING ZONE SHALL BE LOOSELY PLACED

RC PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CATEGORY I, II, III*
INITIAL BACKFILL	DEPTH = D/2** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
HAUNCHING	DEPTH = D/2** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
BEDDING	MINIMUM DEPTH = D/24 (NOT LESS THAN 3")** IF ROCK FOUNDATION, MINIMUM DEPTH = D/12 (NOT LESS THAN 6")** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*

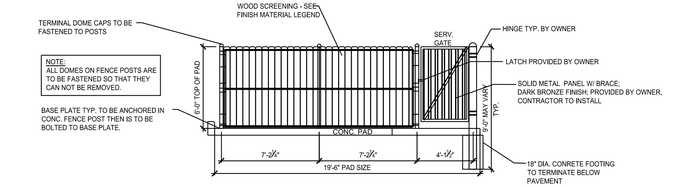
NOTE: FOR ELLIPTICAL AND ARCH PIPE, D SHALL REPRESENT HORIZONTAL SPAN OF PIPE.

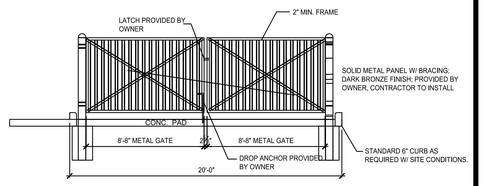
DI PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	DEPTH = D/2** CLASS I, II, AND III (APPROX. 90% STANDARD PROCTOR PER AASHTO T-99)*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III*
BEDDING	MINIMUM DEPTH = 4" CLASS I, II, AND III*

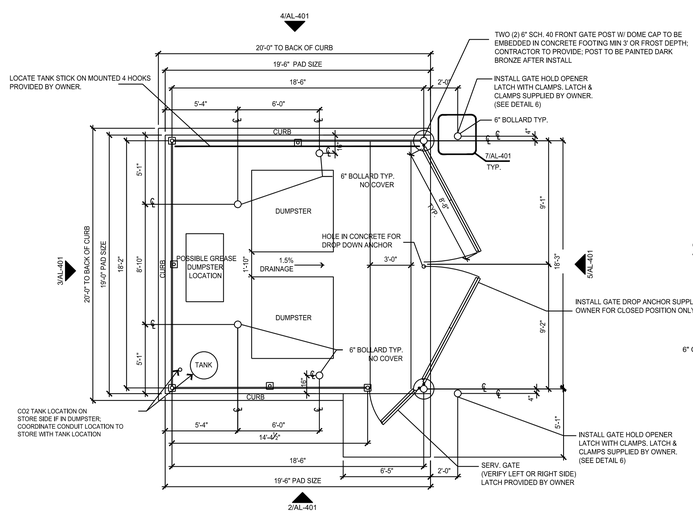
*SEE TABLE 1 FOR SPECIFICATIONS ON SOIL MATERIALS
** D = PIPE DIAMETER
*** MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

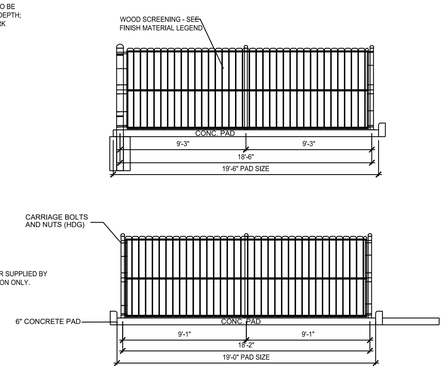
UTILITY PIPE TRENCH AND BEDDING

NTS









WOOD ENCLOSURE

NTS

CESO
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Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
CONSTRUCTION DETAILS

C-603

D-25-15
Exhibit A

GENERAL SPECIFICATIONS

1.0 GENERAL NOTES
All construction within the City of Franklin shall comply with the City of Franklin's UDO, City of Franklin Standard Construction Details and Specifications, Warren County Requirements, and ODOT. Where conflict occurs between requirements, the most stringent of these shall apply.

PIPE MATERIAL SPECIFICATIONS

1.0 PRESSURE PIPE

1.1 PIPE MATERIAL
PVC Pipe shall conform to ANSI/AWWA C-900, DR 18, pressure class 200.

Ductile iron pipe shall conform to the American National Standards Institute Specification," ANSI A21.51 (AWWA C151) and ODOT 748.01. Ductile Iron Pipe shall be Class 52 Pipe.

1.1.1 JOINTS
Mechanical joints, bell and spigot joints and flanged joint for ductile iron pipe in sizes from two inches (2") through forty-eight inches (48") in diameter shall conform to all of the dimensions, shapes, and requirements of ANSI A21.10 (AWWA C110) "Cast Iron Fittings, 2 inches through 48 inches for Water and Other Liquids." The mechanical joint shall also conform in all respects to ANSI A21.11 (AWWA C111), "Rubber Gasket Joints for Cast Iron Pressure Pipe and Fittings."

Push-on joints shall be a single rubber gasket joint designed to be assembled by the positioning of a continuous, molded rubber ring gasket in an annular recess in the pipe and forcing of the plain end of the entering pipe into the socket, thereby compressing the gasket radially to the pipe to form a positive seal. The gasket and the annular recess shall be so designed and shaped that the gasket is locked in place against displacement as the joint is assembled. The push-on type joint shall conform to the requirements of ANSI A21.10 (AWWA C110) and ANSI A21.11 (AWWA C111) where applicable.

Where ductile iron pipe with bell and socket-type joints are specified, they shall be of the mechanical gland or push-on joint type. Provisions shall be made for longitudinal expansion and contraction with a positive stop against disengagement of the joint. Up to fifteen degrees (15°) angular deflection shall be accommodated without leakage and without decrease in full diameter of pipe.

1.1.2 FITTINGS
Cast iron or ductile iron fittings in sizes 2-inches through 48-inches for mechanical joints; bell and spigot joints and flange joints shall conform to all the requirements of ANSI A21.10 (AWWA C110), "Cast Iron Fittings 2-inches through 48-inches, for Water and Other Liquids," and to the requirements of ANSI A21.11 (AWWA C111), "Rubber Gasket Joints for Cast Iron Pressure Pipe Fittings," for mechanical joints and push-on type joints. Push-on joints for cast iron fittings shall be as described in 1.1.1 of this specification.

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The fittings for use on ductile iron pipe may be either cast iron or ductile iron. The fittings larger than 12-inches shall have a minimum pressure rating of 200 p.s.i., unless otherwise shown on the construction drawings.

1.1.3 COATING FOR DUCTILE IRON PIPE AND FITTINGS
The ductile iron pipe and cast iron or ductile iron fittings shall be furnished with cement mortar lining in accordance with ANSI Specification A21.4 (AWWA C104), "Cement Mortar Lining for Cast Iron Pipe Fittings." The lining will be one-sixteenth (1/16) inch thick for pipe sizes four inches (4") through twelve inches (12") in diameter and three thirty-seconds (3/32) inch thick for sizes fourteen inches (14") through twenty-four inches (24") in diameter. A bituminous seal coat shall be applied to the lining surface immediately following the lining operation to prevent loss of moisture and ensure proper curing of the cement mortar. The outside of the iron pipe shall be furnished with a protective bituminous coating.

1.1.4 ANCHORING
Special anchoring may be required at places along the pipe lines. Where the construction drawings call for special anchoring, it shall include the use of mechanical joint anchoring fittings, couplings and pipe or positively restrained push-on joint-type pipe and fittings which allow for deflection at the joint after assembly, EBAA Iron Works, "Megalug", or approved equal.

2.0 GRAVITY PIPE

2.1 REINFORCED CONCRETE PIPE STORM SEWER

2.1.1 GENERAL
Reinforced concrete pipe shall conform in all respects to the requirements of ASTM C76, "Reinforced Concrete Culvert, Storm Drain and Sewer Pipe." Wall "B" thickness designs shall be supplied.

Table V of ASTM C76 shall be modified as specified in ODOT 706.02.

Class for the reinforced concrete pipe shall be as shown on the construction drawings, but no less than Class IV.

2.1.2 JOINTS
Bituminous plastic cement, which meets with the requirements of ODOT Specification 706.10, and which is applied in conformance with the requirement of ODOT Specification 603.06, will be accepted as a joining material. (Storm Sewer Only) Sanitary sewer joints shall conform to ASTM C443, "Joints for Circular Concrete and Culvert Pipe, Using Flexible, Watertight, Rubber Gaskets." Lubricants and/or adhesives shall be used as recommended by the manufacturer of the pipe and shall be supplied in quantities sufficient to assemble all of the concrete sewer pipe joints.

2.1.3 SERVICE CONNECTIONS
Service connections to a non-reinforced concrete sewer shall be made through a wye pipe saddle. Each wye shall be furnished with a stopper, which shall be sealed and banded into the branch opening until the service line is installed. The stopper joint shall be suitable to withstand an internal pressure of five (5) psi without leaking.

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	PIPE MATERIAL SPECIFICATIONS	

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2.2 ABS DOUBLE WALL PIPE STORM SEWER

2.2.1 GENERAL
The thermoplastic material utilized for the manufacturer of the pipe walls shall be virgin, rigid acrylonitrice-butadiene-styrene (ABS). The material shall conform to the requirements of Type One, Grade One or Two, or Type Four, Grade One, ASTM D-1788, except that the minimum heat deflection temperature ASTM D648 shall be 180 degrees Fahrenheit.

2.2.2 COMPOSITE PIPE
Composite pipe consisting of two (2) ABS tubes integrally braced across the annulus with ABS webbing and with the resultant annular space filled with an inert filler the equal of Portland Cement Perlite Concrete, shall conform to the requirements of ASTM D-2680, except as specifically modified herein. The ends of manufactured sections of pipe shall be square and smoothly finished to prevent the rupture and/or loss of the concrete filler material.

Eight-inch (8") thru fifteen inch (15") nominal inside diameter pipe shall conform to the dimensions and tolerances given in Table 1, "Pipe Dimensions" of ASTM D-2680.

2.2.3 SOLID WALL PIPE
Solid wall pipe of ABS material shall conform to the requirements of ASTM D-2751. Wall thickness, however, shall not be less than 0.180 inches for four-inch (4") diameter pipe or 0.265 inch for six-inch (6") diameter pipe.

2.2.4 JOINTS
The sections of pipe shall be joined by chemically-welded couplings. Couplings shall be solid wall, molded of the same material as the pipe. Primer for chemical welding shall be Methyl-Ethyl-Keytone (MEK). Cement shall be MEK containing a minimum of twenty (20) percent dissolved ABS. Primer and cement shall be provided by the manufacturer of the ABS pipe.

2.2.5 SERVICE CONNECTIONS
The service lateral connections to the main line shall be made by use of saddles with stainless steel bands. The fittings shall be molded from the same material as the pipe. The service connection shall include such adapters as may be approved by the City Engineer to provide connection to the service line.

Each service shall be furnished with a spigot end cap, which shall be chemically welded onto the branch opening until the service line is installed. The joint shall be suitable to withstand an internal pressure of five (5) psi without leaking.

2.3 PVC PIPE SANITARY SEWER

2.3.1 GENERAL
The material used for unplasticized polyvinyl chloride (PVC) plastic pipe shall be clean, virgin Type 1, Grade 1 PVC compound conforming to ASTM D-1784. All PVC plastic used in the manufacture of pipe for this project shall be all new material and shall not include any rework or scrap PVC material from previous manufacturing processes.

Rubber compounds for the joint sealing ring shall conform to the requirements of ASTM D-1869.

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	PIPE MATERIAL SPECIFICATIONS	

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2.3.2 PIPE
Solid wall PVC plastic pipe and fittings for gravity sewer installation shall conform to ASTM D-3034, SDR 35 for pipes buried at a depth less than 12 feet and D-3034, SDR 26 for pipes buried at a depth greater than 12 feet.

4-inch Diameter	0.125-inch Minimum Wall Thickness
6-inch Diameter	0.180-inch Minimum Wall Thickness
8-inch Diameter	0.240-inch Minimum Wall Thickness
10-inch Diameter	0.300-inch Minimum Wall Thickness
12-inch Diameter	0.360-inch Minimum Wall Thickness
15-inch Diameter	0.437-inch Minimum Wall Thickness

For pipe larger than 15", material and specifications shall be approved by City Engineer.

2.3.3 JOINTS
Pipe shall be bell and spigot, the bells being formed integrally with the pipe. The bells shall contain two (2) PVC retainer rings, which accurately and securely contain the solid rubber joint sealing ring. Joint design shall permit expansion and contraction of the pipeline as well as flexibility at the joint.

2.3.4 SERVICE CONNECTIONS
The service lateral connections to the main line shall be made by the use of wyes or saddles. Fittings shall be manufactured of the same material as the main line pipe and have similar style joints. The service connection shall include such adapters as may be approved by the City Engineer to provide connection to the service line.
Factory-molded fittings shall be required.

Each branch or tee shall be furnished with a suitable stopper which shall be sealed into the branch opening until the service line is installed. The stopper joint shall be suitable to withstand an internal pressure of five (5) psi without leaking.

Roof drains , foundation drains, and all other clean water connections to the sanitary sewer system are prohibited.

2.4 SANITARY SEWER PUMP STATION
Sanitary lift station shall be aluminum, no vault type pump station with appropriately sized chopper pumps, such as Excel Fluid Group, LLC, EX-ALNV2 or approved equal.

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	PIPE MATERIAL SPECIFICATIONS	

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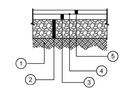
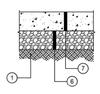
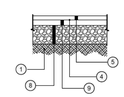
Exhibit A



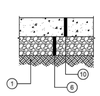
LIGHT DUTY ASPHALT PAVEMENT
N.T.S.



LIGHT DUTY CONCRETE PAVEMENT
N.T.S.



HEAVY DUTY ASPHALT PAVEMENT
N.T.S.



HEAVY DUTY CONCRETE PAVEMENT
N.T.S.

1. ITEM 204 - SUBGRADE COMPACTION (INCIDENTAL TO ITEM 608), PROOF ROLLED IN PRESENCE OF CITY INSPECTOR
2. ITEM 304 - AGGREGATE BASE (8" MIN) CRUSHED LIMESTONE, ADJUST FOR DESIGN
3. ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448) (2")
4. ITEM 407 - ASPHALT TACK COAT (INCIDENTAL TO ITEM 441)
5. ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446 & 448), PG64-22 (1.5")
6. ITEM 203 - AGGREGATE BASE (6" MIN) CRUSHED LIMESTONE, ADJUST FOR DESIGN
7. ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT (6"), CLASS QC1
8. ITEM203 - AGGREGATE BASE (10" MIN) CRUSHED LIMESTONE, ADJUST FOR DESIGN
9. ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448) (3.5")
10. ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT (8"), CLASS QC1

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	PRIVATE DEVELOPMENT TYPICAL PAVEMENT SECTIONS	

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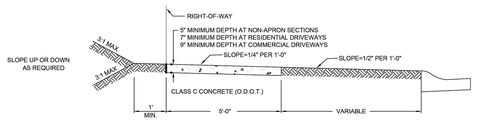
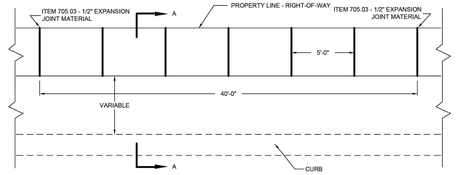


SECTION A-A



PLAN VIEW

NOTE:
1. PROVIDE LIGHT BROOM FINISH TO ALL EXPOSED SURFACES
2. CONCRETE SHALL CONFORM TO ODOT ITEM 608

REVISIONS		DWG NO.
3/29/2025	REVISION TO CITY STANDARD DETAILS	100-6
	CONCRETE SIDEWALK DETAILS	

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Casey's

CASEY'S #5156

FRANKLIN, OH
1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
CONSTRUCTION DETAILS

C-604

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D-25-10
Exhibit A

2.0 GRAVITY PIPELINES

2.1 TRENCH EXCAVATION

2.1.1 GENERAL
Trenches for underground gravity pipelines shall be excavated so that the pipes and appurtenances can be installed to the alignments and grades required. The specifications for the installation of gravity pipelines are intended to conform with ASTM D-2321, "Underground installation of Flexible Thermo-Plastic Sewer Pipe," excepting therefrom Section 7, and as further modified by Appendix A1, ASTM D-2680, "ABS Composite Pipe." The City Engineer shall require compliance with the applicable stated ASTM Specification for installation, except where modified by these specifications.

Special installation instructions, issued by the manufacturer of the pipe, relative to making pipe joints shall be adhered to by the Contractor.

2.1.2 TRENCH DEPTH
The trench shall be excavated to a minimum depth of four (4) inches below the outermost dimension of the pipe barrel or pipe bell to be installed therein. Rock, if present in the trench bottom, shall be excavated to a minimum depth five (5) inches below the outermost dimensions of the pipeline.

The trench for lateral service gravity pipelines shall be excavated to a minimum depth of four (4) inches below the outermost dimension of the pipe barrel or pipe bell to be installed therein. Rock, if present in the lateral service gravity pipeline trench bottom,shall be excavated to a minimum depth four (4) inches below the outermost dimensions of the pipeline.

2.2 INSTALLING GRAVITY PIPELINES
The gravity pipelines shall be laid in a finished trench commencing at the low point with the spigot ends pointing in the direction of flow. All gravity pipe, including service laterals, shall be placed on a dry, stable bedding sand shaped to receive the barrel support for the full length of the pipe, and form a straight gravity pipeline with a uniform grade true to the established line and grade. If the open end of the pipe section is low, the individual pipe must be removed and the bed prepared to the proper grade.

Line and grade for the gravity pipeline may be established by the Contractor using batter boards, grade strings, plumb lines and grade rods. The batter boards shall be placed at each grade stake. Three (3) consecutive batter boards shall be in place at all ties unless otherwise approved by the Director of Public Works. Distance between grade stakes shall not exceed twenty-five (25) feet or by the use of a laser beam, with a minimum of stakes placed at each manhole and 100 feet upstream of each branch.

2.3 BEDDING

2.3.1 PIPE BEDDING - ALL PIPE (BEDDING SAND)
A cradle pipe bedding sand shall be furnished for all gravity pipelines. The bedding sand shall be thoroughly compacted by hand-placing under the pipeline and hand-tamping to produce a dense cradle free from voids to completely support the pipeline throughout its entire length. There shall be a minimum of four (4) inches of bedding between the outermost dimension of the pipe and the bottom of the excavation areas for normal excavation. There shall be a minimum of five (5) inches of bedding sand between the outermost dimension of the pipe and the bottom of the excavation in areas of rock excavation.

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As soon as possible after joint is made, the balance of the bedding sand shall be placed up to the spring line of the pipe to offset conditions that might tend to move the pipe off from line or grade. Disturbing the pipe in any manner after the joints have been made shall not be permitted. The balance of the bedding sand shall be thoroughly compacted by hand-placing and hand-tamping to produce a dense fill around the pipeline. The pipe bedding shall extend laterally to the outermost limits of the trench.

2.3.2 INITIAL BACKFILL (SAND)
The trench shall be backfilled by hand or approved mechanical methods from the spring line of the pipe to a height one (1) foot above the top of the pipe. The material used shall be the equal of the sand specified for bedding. The Contractor shall use special care in placing this portion of the backfill so as to avoid injuring or displacing the pipeline. Mechanized equipment, such as bulldozers, front-end loaders, etc., shall, under no condition, be used to push excavated material directly into the open trench as backfill between the bottom of the trench and a point one (1) foot above the top of the pipe.

2.4 INSTALLING GRAVITY SERVICE LINES

2.4.1 GENERAL
Gravity service connections to main line gravity pipes shall not be installed until their location has been approved by the City Engineer. No service lines to be backfilled until checked by the City Inspector.

Gravity service lines shall terminate at a point one (1) foot behind the utility easement on the property to be served, unless otherwise indicated by the Director of Public Works. Gravity service lines will be fitted with a stopper into the upper end. The slope of service line from upper end toward the main line gravity pipeline shall be two (2) feet per 100 linear feet of service line, unless otherwise authorized or approved by the City Engineer. The service lines shall be laid on a straight grade unless otherwise directed or approved by the City Engineer. No sewer line may be cut or broken in the field to permit the installation of a service wye.

2.4.2 INSTALLATION
Appropriate sections of this Specification for trench excavation, pipeline installation, flushing, cleaning and testing, pipe bedding, initial backfill and balance of backfill shall apply to the installation of the specific type of material used for the gravity service lines. The balance of backfill material shall be gravel for all gravity service lines installed within the street for roadway.

2.4.3 SERVICE LINE POLE
The Contractor shall install a 2" x 4" wooden pole at the intermediate upper end of all gravity service lines. The pole shall be installed in a vertical plane extending from the bottom of the service pipe to a point twelve (12) inches above ground elevation. The pole shall be painted green. Care should be exercised to keep the pole plumb during backfilling operations and to preserve the above-ground extension during clean up and restoration operations.

2.5 CLEANING AND ALIGNMENT CHECK
The Contractor shall clean out the completed gravity pipeline of all sand, gravel, stones, or other debris by proper flushing. Other methods may be used if approved by the Director of Public Works. Particular care shall be taken at the location where a connection is made to an existing system to prevent any foreign materials from entering an operating pipeline. The outlet for a new gravity pipeline shall be bulkheaded at the existing manhole and bulkhead shall not be removed until the project is completed.

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The Contractor and the Director of Public Works will then check the pipeline between manholes for alignment by means of mandrel testing. If the test shows any misalignment, displaced pipe, or any other defects, the defects designated by the Director of Public Works shall be remedied by the Contractor.

2.6 TESTING

2.6.1 LEAKAGE
The Contractor shall furnish all labor, equipment, and materials which are required to test the sections of the gravity pipeline and manholes for tightness. Either the infiltration test or the hydrostatic test will be ordered by the Director of Public Works. All tests shall be conducted under the supervision of the City.

The Contractor shall determine the locations where excess water is entering or leaving the pipeline. If the amount of leakage exceeds the allowable , the gravity pipeline and/or manholes shall be repaired and retested until the leakage of the system is within the allowable limits as specified. The tests for leakage shall include portions of the service lines to be installed by the Contractor.

All visible leaks shall be repaired by the Contractor whether amount of leakage exceeds the allowable or not.

2.6.2 INFILTRATION TEST
The infiltration test will be conducted on that portion of the pipeline where the top of the pipe at the upper manhole is a minimum of one (1) foot below the level of the ground water table.

The infiltration test shall be made by installing a weir or other measuring device approved by the Director of Public Works in the lower end of the pipeline section to be tested. The incoming pipe or pipes in the upper end of the test section shall be securely sealed. The quantity of ground water infiltrating into the test section shall be measured. The allowable leakage for gravity pipelines shall not exceed one-hundred (100) gallons per day per mile of pipe per inch of pipe diameter.

The following formulae are given for the ease of calculations:
Gallons per Minute Allowed = 0.000131*L*d
Cubic Feet per Second Allowed = 0.00016*L*d
Where L = Length of 100-Foot Stations of Sewer Being Tested and
d = Nominal Diameter in Inches of Sewer Being Tested

Each size of main sewer pipe shall be tested separately. Each test section shall not exceed 1,000 feet of sewer pipe.

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2.6.3 EXFILTRATION TEST
The exfiltration test shall be conducted over a twenty (20) minute period. Water for testing shall be supplied by the Contractor. The elevation of the level of water in the manhole and the drop in the level of the water in the upper manhole shall be carefully measured during the duration of the test. The allowable leakage for the hydrostatic test shall not exceed 100 gallons per day per mile of pipe per inch of inside diameter of the pipe tested.

The exfiltration test shall be conducted between two (2) successive manholes. The lower end of the pipeline and all inlet pipes of the upper manhole shall be sealed with pipe stoppers. The span of gravity pipeline to be tested shall be filled with water to a point four (4) feet above the top of the crown of the pipeline in the upper manhole, or the outside water table, whichever is higher. The water shall stand in the pipe and manhole so that absorption can take place if the concrete in the manhole or pipeline is dry.

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3/26/2025	REVISION TO CITY STANDARD DETAILS	CONSTRUCTION SPECIFICATIONS	DWG NO. 1000-12

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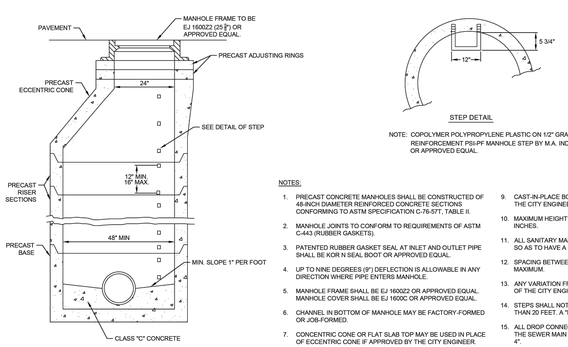
Exhibit A



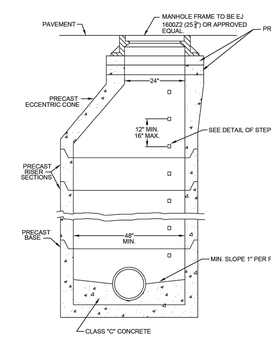
NOTE: COPOLYMER POLYPROPYLENE PLASTIC ON 1/2" GRADE 60 STEEL REINFORCEMENT PSI-PF MANHOLE STEP BY M.A. INDUSTRIES INC, OR APPROVED EQUAL.

NOTES:

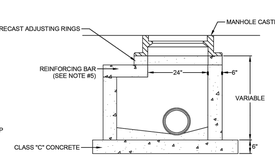
1. PRECAST CONCRETE MANHOLES SHALL BE CONSTRUCTED OF 48-INCH DIAMETER REINFORCED CONCRETE SECTIONS CONFORMING TO ASTM SPECIFICATION C-76-5?T, TABLE II.
2. MANHOLE JOINTS TO CONFORM TO REQUIREMENTS OF ASTM C-443 (RUBBER GASKETS).
3. PATENTED RUBBER GASKET SEAL AT INLET AND OUTLET PIPE SHALL BE KOR N SEAL BOOT OR APPROVED EQUAL.
4. UP TO NINE DEGREES (9°) DEFLECTION IS ALLOWABLE IN ANY DIRECTION WHERE PIPE ENTERS MANHOLE.
5. MANHOLE FRAME SHALL BE EJ 1600Z2 OR APPROVED EQUAL, MANHOLE COVER SHALL BE EJ 1600C OR APPROVED EQUAL.
6. CHANNEL IN BOTTOM OF MANHOLE MAY BE FACTORY-FORMED OR JOB-FORMED.
7. CONCENTRIC CONE OR FLAT SLAB TOP MAY BE USED IN PLACE OF ECCENTRIC CONE IF APPROVED BY THE CITY ENGINEER.
8. ECCENTRIC OR FLAT SLAB REDUCER SHALL BE USED WHERE BASE SECTION OF MANHOLE IS LARGER THAN 48-INCHES IN DIAMETER AND SHALL BE INSTALLED DIRECTLY ABOVE THE BASE.
9. CAST-IN-PLACE BOTTOMS ARE ACCEPTABLE IF APPROVED BY THE CITY ENGINEER.
10. MAXIMUM HEIGHT OF ADJUSTING RINGS SHALL NOT EXCEED 12 INCHES.
11. ALL SANITARY MAINS BETWEEN MANHOLES SHALL BE DESIGNED SO AS TO HAVE A MINIMUM CLEANSING VELOCITY OF 2.0 FPS.
12. SPACING BETWEEN SANITARY MANHOLES SHALL BE 400' MAXIMUM.
13. ANY VARIATION FROM THIS STANDARD MUST HAVE APPROVAL OF THE CITY ENGINEER.
14. STEPS SHALL NOT BE INSTALLED ON ANY MANHOLE DEEPER THAN 20 FEET. A "NO ENTRY INSERT" SHALL BE PROVIDED.
15. ALL DROP CONNECTIONS SHALL BE EXTERIOR DROPS, UNLESS THE SEWER MAIN IS LESS THAN 8" AND RISER PIPE LESS THAN 4".

REVISIONS			
3/26/2025	REVISION TO CITY STANDARD DETAILS	SANITARY SEWER MANHOLE	DWG NO. 400-1

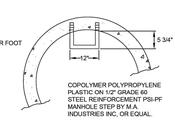
D-25-10
Exhibit A



CONE TOP



SLAB TOP



COPOLYMER POLYPROPYLENE PLASTIC ON 1/2" GRADE 60 STEEL REINFORCEMENT PSI-PF MANHOLE STEP BY M.A. INDUSTRIES INC, OR EQUAL.

STEP DETAIL

GENERAL NOTES:

1. PRECAST CONCRETE MANHOLES MAY BE CONSTRUCTED OF REINFORCED CONCRETE SECTIONS CONFORMING TO ASTM SPECIFICATION C-76-5? T, TABLE II.
2. MANHOLE FRAME TO BE EJ 1600Z2 OR APPROVED EQUAL.
3. SANITARY MANHOLE COVER TO BE EJ 1600C3 OR APPROVED EQUAL.
4. STORM MANHOLE COVER TO BE EJ 1600C OR APPROVED EQUAL.
5. BASE SECTION MAY BE PRECAST OR CAST IN PLACE.
6. ECCENTRIC CONE MAY BE USED IN PLACE OF CONCENTRIC CONE OR FLAT SLAB TOP IF APPROVED BY THE CITY ENGINEER.
7. TOP SLAB SHALL BE 6" THICK WITH #4 REINFORCING BAR 6" O.C. BOTH WAYS. IF LOCATED IN STREETS, TOP SLAB SHALL BE 7" THICK WITH #5 REINFORCING BARS 6" O.C. BOTH WAYS.
8. CHANNEL IN BOTTOM OF MANHOLE MAY BE FACTORY OR JOB FORMED.
9. THE MAXIMUM HEIGHT OF ADJUSTING RINGS SHALL NOT EXCEED 12".
10. SPACING BETWEEN STORM MANHOLES SHALL BE 400' MAX.
11. STORM MANHOLES SHALL BE USED WHEN THE PIPE DIAMETERS IN THE STORM SEWER SYSTEM ARE GREATER THAN 18". PIPE DIAMETERS 18" & UNDER CAN RUN FROM CATCH BASIN TO CATCH BASIN.
12. ANY VARIATION FROM THIS STANDARD MUST HAVE APPROVAL OF CITY ENGINEER.

REVISIONS			
3/26/2025	REVISION TO CITY STANDARD DETAILS	STORM MANHOLE	DWG NO. 200-1

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Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	NTS
Drawn By:	JTP
Checked By:	JMS
Date:	08/22/2025
Issue:	PERMIT SET

Drawing Title:
CONSTRUCTION DETAILS

C-605

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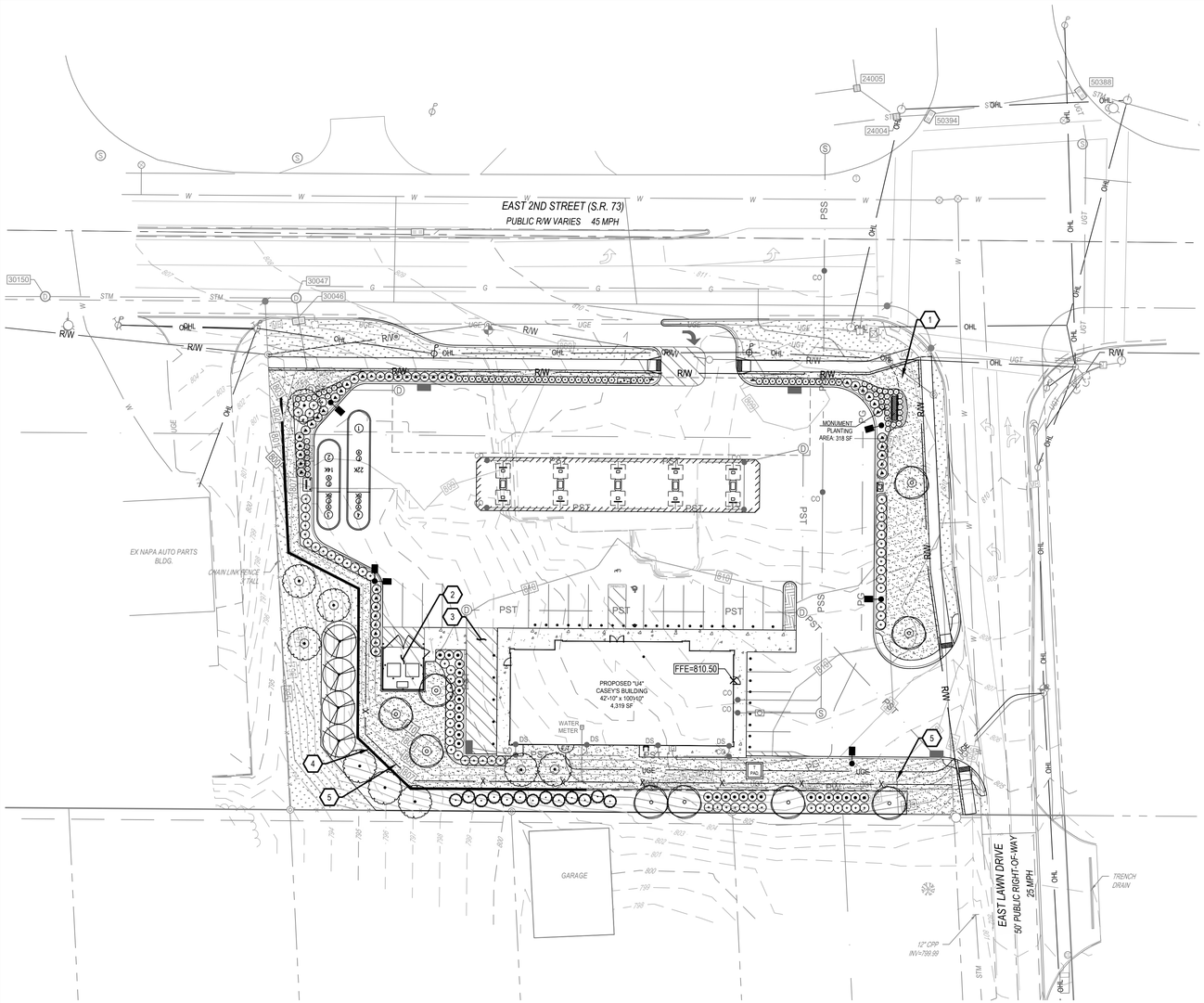


CODED NOTES:

1. CASEY'S MONUMENT OR PYLON SIGN, PER SIGNAGE PLAN..
2. PROPOSED 20' X 20' DUMPSTER ENCLOSURE AND PAD. SEE ARCHITECTURAL PLANS FOR DETAILS.
3. PROPOSED 14' x 57' LOADING ZONE
4. PROPOSED RETAINING WALL
5. PROPOSED 6' PRIVACY FENCE

SITE LEGEND

EXISTING

REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

- PROPOSED CONCRETE SIDEWALK
- RIGHT OF WAY LINE
- PROPERTY BOUNDARY LINE
- SETBACK
- EASEMENT
- BUILDING
- CANOPY
- CONCRETE CURB
- RETAINING WALL
- PARKING SPACE COUNT
- SIGN
- STORM MANHOLE
- SANITARY MANHOLE
- CURB INLET
- CLEANOUT
- DOWN SPOUT
- BOLLARD
- STORM DRAIN
- OVERHEAD POWER LINE
- SANITARY SEWER
- WATER LINE
- GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND ELECTRIC LINE
- SOD LIMIT

PLANT SCHEDULE LANDSCAPE CONCEPT

SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	MIN HT / SPR	SPACING
DECIDUOUS TREES					
	9	GINKGO BILOBA `PRINCETON SENTRY` PRINCETON SENTRY MAIDENHAIR TREE	2.5" CAL	8-12` HT	AS SHOWN
	9	ZELKOVA SERRATA `MUSASHINO` MUSASHINO JAPANESE ZELKOVA	2.5" CAL	8` HT	AS SHOWN
EVERGREEN TREES					
	4	PICEA PUNGENS COLORADO SPRUCE	---	8` HT	AS SHOWN
	13	THUJA OCCIDENTALIS 'SMARAGD' EMERALD GREEN ARBORVITAE	---	4` HT	6`-0" OC
SHRUBS					
	27	SPIRAEA BETULIFOLIA BIRCHLEAF SPIREA	---	24" HT	4`-0" OC
	43	SPIRAEA JAPONICA 'MONHUB' LIMEMOUND® JAPANESE SPIREA	---	18" HT	2`-6" OC
EVERGREEN SHRUBS					
	43	ILEX GLABRA INKBERRY HOLLY	---	24" HT	4`-0" OC
	64	JUNIPERUS X PFITZERIANA PFITZER JUNIPER	---	24" HT	4`-0" OC
	40	TAXUS X MEDIA 'HICKSII' HICKS JAPANESE YEW	---	24" HT	3`-0" OC
GROUND COVERS					
	54	JUNIPERUS CONFERTA `BLUE PACIFIC` BLUE PACIFIC SHORE JUNIPER	---	3 GAL	1`-6" OC
SOD/SEED					
	1,945 SF	SEED	---		
	14,251 SF	POA PRATENSIS KENTUCKY BLUEGRASS	---		

LANDSCAPE REQUIREMENTS

LANDSCAPE BUFFERS

WEST - 'TYPE A' 10 LF (221 LF) (2 CANOPY TREES, 2 DECIDUOUS SHRUBS, AND 2 EVERGREEN TREES PER 100 LF ALONG SIDE LOT LINE)
REQUIRED: 4 CANOPY TREES, 4 EVERGREENS
PROVIDED: 4 CANOPY TREES, 4 EVERGREENS
REQUIRED: 4 SHRUBS
PROVIDED: 10 SHRUBS

SOUTH - 'TYPE E' 15 LF (314 LF) (3 CANOPY TREES, 4 DECIDUOUS SHRUBS, AND 4 EVERGREEN TREES PER 100 LF ALONG REAR LOT LINE)
REQUIRED: 9 CANOPY TREES, 13 EVERGREENS
PROVIDED: 9 CANOPY TREES, 13 EVERGREENS
REQUIRED: 4 SHRUBS
PROVIDED: 28 SHRUBS (FOUNDATION SHRUBS ADDED TO THIS BUFFER)

EAST - NONE
NORTH - NONE

FOUNDATION LANDSCAPING (298 LF OF BUILDING PERIMETER)
(10 SHRUBS & 3 DECIDUOUS TREES PER 100 LF OF BUILDING PERIMETER)
REQUIRED: 30 SHRUBS
PROPOSED: 30 SHRUBS ALONG LOADING ZONE AND SOUTH BUFFER DUE TO SITE CONSTRAINTS
REQUIRED: 3 TREES
PROPOSED: 3 TREES WEST OF LOADING ZONE DUE TO SITE CONSTRAINTS

SIGNAGE LANDSCAPING
REQUIRED: PLANTING AROUND THE FOUNDATION OF THE SIGN
PROPOSED: 14 SHRUBS, 87 GROUNDCOVER

PARKING LANDSCAPE

PERIMETER SCREENING (PLANT MATERIAL SCREEN TO HAVE 75% OPAQUENESS)
PROVIDED: 2 CANOPY TREES (EAST PERIMETER), 83 SHRUBS

20 PARKING SPACES (1 CANOPY TREE EVERY 10 PARKING SPACES, CAN BE ADDED TO PERIMETER LANDSCAPE IF CONFLICTING)
REQUIRED: 2 CANOPY TREES
PROVIDED: 2 CANOPY TREES (EAST PERIMETER)

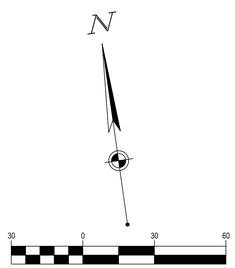
INTERIOR LANDSCAPE
PARKING AREA: 26,000 SF (5% INTERIOR LANDSCAPE REQUIRED)
REQUIRED: 1,300 SF
PROPOSED: 90 SF IN ISLAND, 1,217 SF RELOCATED ALONG WEST FENCE DUE TO SITE CONSTRAINTS

MULCH

ALL PLANT BEDS SHALL CONTAIN A 3" LAYER OF LOCALLY SOURCED LANDSCAPE STONE. CONTRACTOR TO PROVIDE A SAMPLE FOR REVIEW PRIOR TO INSTALLATION.
CONTRACTOR TO PLACE A 4' DIAMETER MULCH RING AROUND ALL TREES IN LAWN.
PLACE "DEWITT 15 YEAR WEED BARRIER WOVEN POLYPROPYLENE OR APPROVED EQUAL IN ALL PLANT BEDS AND AT EACH TREE RING.

IRRIGATION

THE CONTRACTOR SHALL DESIGN, SUPPLY, AND INSTALL IRRIGATION SYSTEM FOR ALL SODDED AND PLANTING AREAS AS SHOWN ON THIS SHEET. DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. A SEPARATE METER IS PREFERRED UNLESS NOT ALLOWED BY THE AHJ. METER AND IRRIGATION TO BE COORDINATED W/ ARCHITECTURAL PLANS AS NEEDED. MOUNT RAIN SENSOR ON BACK OF RAILING OF ROOF.



GRAPHIC SCALE (IN FEET)
1 in. = 30 ft.

OHIO811.org Before You Dig

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: OHIO UTILITIES PROTECTION SERVICE AT 811 OR 800-362-2764 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

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Clayton, MO 63105
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Casey's

CASEY'S #5156

FRANKLIN, OH

1288 EAST 2ND STREET
FRANKLIN, OH 45005

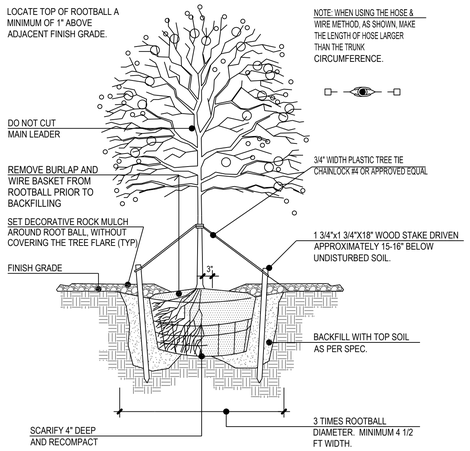
Revisions / Submissions

ID	Description	Date

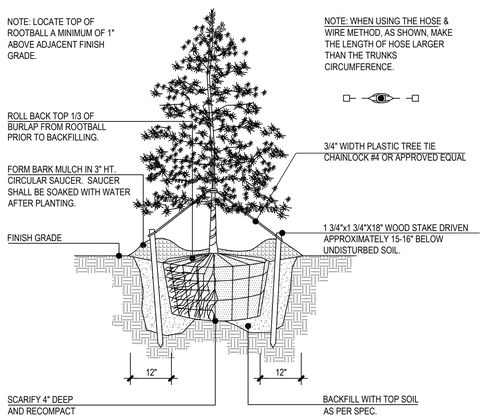
Project Number:	766139
Scale:	1" = 30'
Drawn By:	PJD
Checked By:	EAB
Date:	08/25/2025
Issue:	PERMIT SET

Drawing Title:
LANDSCAPE PLAN

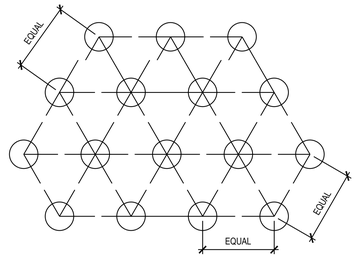
C-700



1 DECIDUOUS TREE STAKING N.T.S.



2 EVERGREEN TREE STAKING N.T.S.



ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING PER ON CENTER SPACING AS SPECIFIED ON PLANTING PLAN.

LOCATE GROUND COVER ONE HALF OF SPECIFIED SPACING DISTANCE FROM ANY CURB, SIDEWALK, OR OTHER HARD SURFACE, UNLESS OTHERWISE NOTED.

3 GROUND COVER SPACING N.T.S.

GENERAL NOTES: LANDSCAPE PLAN

1. CONTRACTOR TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY LOCATE SERVICE 72 HOURS PRIOR TO CONSTRUCTION.
2. SITE CONDITIONS BASED UPON SURVEY PROVIDED BY OWNER. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
3. REFER TO SITE CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWING AS NEEDED.
4. REESTABLISH EXISTING TURF IN AREAS DISTURBED BY GRADING OR UTILITY TRENCHING, INCLUDING AREAS IN RIGHT-OF-WAY, TO MATCH EXISTING SPECIES.
5. CONTRACTOR SHALL EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.
6. CONTRACTOR TO REPORT ALL DAMAGES TO EXISTING CONDITIONS AND INCONSISTENCIES WITH PLANS TO LANDSCAPE ARCHITECT.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL LANDSCAPE BEDS AND ALL LAWN AREAS.
8. CONTRACTOR TO FINE GRADE AND ROCK-HOUND ALL TURF AREAS PRIOR TO SEEDING, TO PROVIDE A SMOOTH AND CONTINUAL SURFACE, FREE OF IRREGULARITIES (BUMPS OR DEPRESSIONS) & EXTRANEOUS MATERIAL OR DEBRIS.
9. REMOVE EXISTING WEEDS FROM PROJECT SITE PRIOR TO THE ADDITION OF ORGANIC AMENDMENTS AND FERTILIZER. APPLY AMENDMENTS AND FERTILIZER AS NEEDED.
10. QUANTITIES SHOWN ARE INTENDED TO ASSIST CONTRACTOR IN EVALUATING THEIR OWN TAKE OFFS AND ARE NOT GUARANTEED AS ACCURATE REPRESENTATIONS OF REQUIRED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS BID QUANTITIES AS REQUIRED BY THE PLANS AND SPECIFICATIONS. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER LABELED ON THE PLANT LEGEND AND THE QUANTITY OF GRAPHIC SYMBOLS SHOWN, THE GREATER QUANTITY SHALL GOVERN.
11. COORDINATE LANDSCAPE INSTALLATION WITH INSTALLATION OF UNDERGROUND SPRINKLER AND DRAINAGE SYSTEMS.
12. ALL SIZES AND QUALITY OF PLANT MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014). THE LANDSCAPE CONTRACTOR SHALL INSTALL ALL PLANT MATERIAL IN SIZE AS INDICATED IN THE PLANT SCHEDULE UNLESS OTHERWISE SPECIFIED ON THE PLAN SET. ALL PLANTS THAT DO NOT MEET THE SIZE AND SPECIFICATIONS SET FORTH BY THE AMERICAN STANDARD FOR NURSERY STOCK WILL BE REJECTED BY LANDSCAPE ARCHITECT AT NO COST TO OWNER.
13. ONCE PROJECT IS AWARDED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PLANT MATERIAL IN THE SIZE SPECIFIED ON PLAN PRIOR TO INSTALLATION. IN THE EVENT THE PLANT MATERIAL IS NOT AVAILABLE IN THE SIZE SPECIFIED, THE CONTRACTOR SHALL INSTALL LARGER AT NO COST TO OWNER.
14. THE LANDSCAPE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AND REPLACED BY CONTRACTOR AT NO COST TO THE OWNER.
15. PRIOR TO MOBILIZATION THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, IN WRITING, IF HE/SHE BELIEVES ANY OF THE PLANT MATERIAL IDENTIFIED ON THE PLAN MAY NOT BE SUITABLE FOR THE SITE OR MAY DIE. SUBSTITUTION REQUESTS WILL BE GRANTED BY THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. IF NOTIFICATION IS NOT GIVEN TO THE LANDSCAPE ARCHITECT ALL PLANTING WHICH FAILS TO GROW (EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE AS DETERMINED BY THE OWNER, NEGLECT, OR VANDALISM) SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
16. WHERE PROPOSED TREE LOCATIONS OCCUR UNDER EXISTING OVERHEAD UTILITIES OR CROWD EXISTING TREES, NOTIFY LANDSCAPE ARCHITECT TO ADJUST TREE LOCATIONS.
17. ALL PLANT MASSES TO BE TOP DRESSED WITH MULCH AS SPECIFIED IN PLANT SCHEDULE, SPREAD UNIFORMLY IN DEPTH OVER THE PLANTING BEDS AS DELINEATED ON THE PLANS UNLESS OTHERWISE NOTED.
18. BED EDGE TO BE NO LESS THAN 12" AND NO MORE THAN 18" FROM OUTER EDGE OF PLANT MATERIAL BRANCHING. WHERE GROUND-COVER OCCURS, PLANT TO LIMITS OF AREA AS SHOWN.
19. ALL PLANTS SHALL BE GUARANTEED FOR 1 YEAR AFTER SUBSTANTIAL COMPLETION OCCURS AND FINAL ACCEPTANCE BY OWNER.
20. LANDSCAPE MAINTENANCE PERIOD BEGINS IMMEDIATELY AFTER THE COMPLETION OF ALL PLANTING OPERATIONS AND WRITTEN ACCEPTANCE FROM THE OWNER AND LANDSCAPE ARCHITECT. MAINTAIN TREES, SHRUBS, LAWNS, AND OTHER PLANTS AS PER THE PROJECT MANUAL AND/OR WRITTEN SPECIFICATIONS, IF APPLICABLE. LANDSCAPE MAINTENANCE IS THE LANDSCAPING CONTRACTORS RESPONSIBILITY UNTIL FINAL ACCEPTANCE BY THE OWNER.
21. ALL LANDSCAPE MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING STANDARDS.
22. REFER TO PROJECT MANUAL OR WRITTEN SPECIFICATIONS, IF AVAILABLE, FOR ADDITIONAL REQUIREMENTS.

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Casey's

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Revisions / Submissions

ID	Description	Date

Project Number:	766139
Scale:	
Drawn By:	PJD
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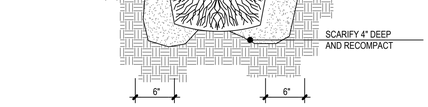
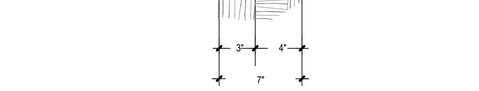
Date:	08/25/2025
Issue:	PERMIT SET

Drawing Title:
PLANTING DETAILS AND NOTES

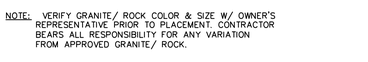
C-701



4 EVERGREEN / DECIDUOUS SHRUB N.T.S.

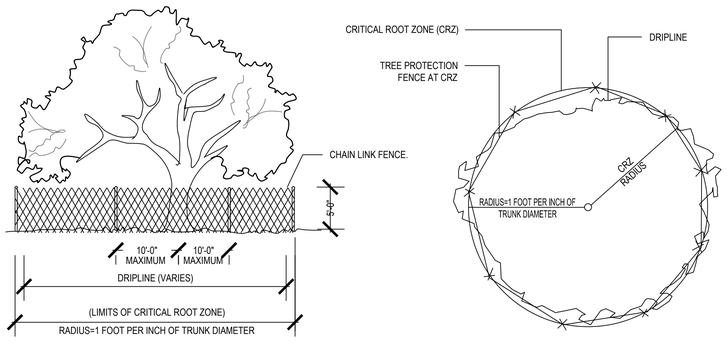


5 TRENCH EDGING N.T.S.



NOTE: VERIFY GRANITE/ ROCK COLOR & SIZE W/ OWNER'S REPRESENTATIVE PRIOR TO PLACEMENT. CONTRACTOR BEARS ALL RESPONSIBILITY FOR ANY VARIATION FROM APPROVED GRANITE/ ROCK.

6 DECORATIVE ROCK MULCH N.T.S.



NOTES:
1. NO TRUCKS OR HEAVY EQUIPMENT ALLOWED WITHIN BARRIERS, ONLY HAND LABOR ALLOWED.
2. NO CONSTRUCTION MATERIALS, SOILS DEPOSITS, OR SOLVENTS SHALL BE ALLOWED WITHIN BARRIERS.
3. BARRIERS ARE TO IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES WITH-IN TREE AREA.
4. BARRIERS ARE TO STAY IN PLACE UNTIL ALL PAVING, CONSTRUCTION, AND HEAVY EQUIPMENT IS REMOVED FROM THE AREA.
5. CRITICAL ROOT ZONE: 1 INCH OF TREE AT DIAMETER BREAST HEIGHT (DBH) IS EQUAL TO 1 FOOT OF CRITICAL ROOT ZONE (CRZ). IE. 30 INCH DBH = 30 FOOT CRZ

7 TYP. TREE PROTECTION N.T.S.

TREE PROTECTION NOTES

1. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, DO NOT PLACE SOIL DEPOSITS, DEBRIS SOLVENTS, MACHINERY CONSTRUCTION MATERIAL OF ANY KIND WITHIN THE DRIP LINE OF A TREE TO REMAIN.
2. BEFORE CONSTRUCTION STARTS ALL PROTECTED TREES SHALL BE PRUNED AS FOLLOWS UNLESS OTHERWISE DIRECTED BY THE OWNER OR HIS REPRESENTATIVE: REMOVE ANY DEAD OR DISEASED TRUNKS OR BRANCHES, AND REMOVE WEAK OR CROSSED BRANCHES. ALL CUTS SHALL BE MADE SUFFICIENTLY CLOSE TO THE TRUNK OR PARENT LIMB, WITHOUT CUTTING INTO THE BRANCH COLLAR OR LEAVING A PROTRUDING STUB, SO THAT CLOSURE CAN READILY START. ALL TRIMMING SHALL BE DONE BY A QUALIFIED TREE SURGEON. PRUNING SHALL BE IN ACCORDANCE WITH ANSI A-300 PRUNING STANDARDS.
3. ALL ROOTS TO BE REMOVED DURING THE SITE CLEARING SHALL BE SEVERED CLEAN AT THE PERIMETER OF THE DESIGNATED PROTECTED RADIUS. A 3" LAYER OF MULCH SHALL BE IMMEDIATELY APPLIED OVER THE SURFACE OF EXPOSED ROOTS OF PROTECTED TREES. A SOIL AUGER WILL BE USED TO BORE UNDER ROOT SYSTEMS UTILITIES ARE TO BE INSTALLED WITHIN 10' OF A PROTECTED TREE.

ROOT PRUNING NOTE:

WHEN THE CRITICAL ROOT ZONE WILL BE DISTURBED, AFFECTED ROOTS MUST BE SEVERED BY CLEAN PRUNING CUTS AT THE POINT WHERE CONSTRUCTION IMPACTS THE ROOTS. ROOTS CAN BE PRUNED BY UTILIZING TRENCHING EQUIPMENT DESIGNED FOR THIS PURPOSE OR BY HAND DIGGING A TRENCH AND PRUNING ROOTS WITH A PRUNING SAW, CHAIN SAW OR OTHER EQUIPMENT DESIGNED FOR TREE PRUNING. ROOTS LOCATED WITHIN A CRITICAL ROOT ZONE THAT WILL BE IMPACTED BY CONSTRUCTION MUST BE PRUNED TO A DEPTH OF 18 INCHES BELOW THE EXISTING GRADE OR TO THE DEPTH OF DISTURBANCE IF LESS THAN 18 INCHES FROM THE EXISTING GRADE. WHEN UNDERGROUND UTILITY LINES ARE TO BE INSTALLED WITHIN THE CRITICAL ROOT ZONE, THE ROOT PRUNING REQUIREMENTS MAY BE WAIVED IF THE LINES ARE INSTALLED VIA TUNNELING OR DIRECTIONAL BORING AS OPPOSED TO OPEN TRENCHING. A LICENSED CERTIFIED ARBORIST SHALL PROVIDE PRUNING.

SOIL PLANTING MIXTURE (MIX ONSITE)

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH FROM THEIR SOURCE A GOOD CLEAN, NATIVE SOIL WHICH SHALL MEET THE APPROVAL OF THE OWNER'S REPRESENTATIVE. THIS SOIL SHALL BE USED FOR THE PLANTING MIXTURE AS FOLLOWS:
   A. ONE PART COMPOST/MANURE PLANTING MIX, TOPSOIL OR APPROVED EQUAL
   B. ONE PART NATIVE SOIL
2. SOILS WITHIN PLANTING AREAS MUST BE SUITABLE FOR PROPOSED PLANTED MATERIAL & SOD WITH REGARD TO: pH, SOIL TEXTURE, SOIL STRUCTURE, AND SEASONAL HIGH WATER TABLE. THE CONTRACTOR SHALL ANALYZE EXISTING SOILS LOCATED IN PROXIMITY TO PROPOSED PLANT MATERIAL AND BE RESPONSIBLE TO AMEND THE SOIL TO OBTAIN ESSENTIAL REQUIREMENTS NECESSARY FOR THE ESTABLISHMENT AND GROWTH OF PLANT LIFE. LANDSCAPE CONTRACTOR TO PROVIDE SOILS REPORT AND APPROPRIATE RECOMMENDATIONS PRIOR TO INSTALLATION TO OWNER'S REPRESENTATIVE FOR REVIEW. FAILURE TO PROVIDE REPORT MAY RESULT IN PLANT MATERIAL BEING REJECTED BY OWNER'S REPRESENTATIVE AND REPLACED AT NO COST TO OWNER.
3. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO PLANTING, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, POOR PLANTING SOIL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS.