CITY OF FORT WRIGHT

KENTON COUNTY, KENTUCKY

AMSTERDAM ROAD RECONSTRUCTION

ITEM No. 6-438

160777

FORT WRIGHT CITY OFFICIALS

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CITY ATTORNEY
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PUBLIC WORKS DIRECTOR
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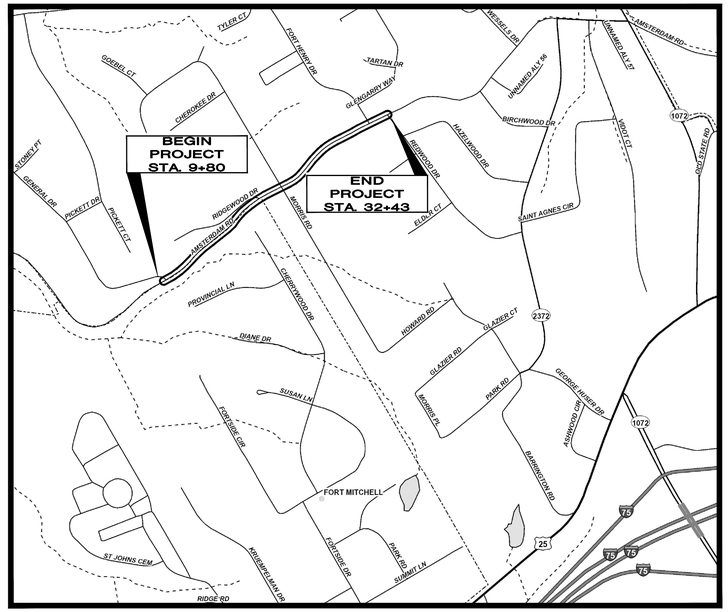

VICINITY MAP

K.T.C SPECIFICATIONS

THE LATEST STANDARD SPECIFICATIONS OF THE KENTUCKY TRANSPORTATION CABINET, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS THERETO AND CITY OF FORT WRIGHT ENGINEERING DEPARTMENT REQUIREMENTS SHALL GOVERN THIS IMPROVEMENT.

SOURCE OF BOUNDARY INFORMATION

THE BOUNDARY INFORMATION SHOWN ON THESE PLANS IS BASED UPON A COMBINATION OF A FIELD SURVEY BY CT CONSULTANTS, INC. INTEGRATED WITH NORTHERN KENTUCKY AREA PLANNING COMMISSION G.I.S. MAPPING

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GENERAL NOTES

1. *ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS, THE LATEST EDITION OF THE KENTON COUNTY SUBDIVISION REGULATIONS AND THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.*
2. *EXPANSION MATERIAL SHALL BE 1" THICK FLEXIBLE FOAM MATERIAL, SUCH AS CERAMAR BY W.R. MEADOWS OR APPROVED EQUAL, INSTALLED IN AREAS OF CONCRETE WALK, DRIVES OR CURB/GUTTER ONLY AT THE FOLLOWING:*
   - *A. AT ALL FIXED OBJECTS (I.E. UTILITY COVERS, VALVES, MANHOLES, ETC.)*
   - *B. AT ALL RIGID STRUCTURES (I.E. DRIVES, CURBS, STEPS, ETC.) PAYMENT FOR THIS ITEM AND ZIP STRIPS INCLUDED IN THE PERTINENT CONCRETE PAVEMENT UNIT PRICE.*
   - *C. AT ALL STREET INTERSECTIONS AT THE POINT OF CURVATURE OF THE TURNING RADII ENTERING THE INTERSECTION.*
   - *D. NO CONCRETE SHALL BE LEFT ABOVE THE EXPANSION MATERIAL OR ACROSS THE JOINT AT ANY POINT. ANY CONCRETE SPANNING THE ENDS OF THE JOINT NEXT TO THE FORMS SHALL BE CAREFULLY CUT AWAY AFTER THE FORMS ARE REMOVED. BEFORE THE PAVEMENT IS OPENED TO TRAFFIC, THE GROOVE ABOVE THE EXPANSION JOINT MATERIAL SHALL BE CLEANED AND SEALED WITH JOINT SEALING MATERIAL.*
3. *ROADWAY REPLACEMENT PROJECT MAY NOT BEGIN BEFORE XXXX X, 201X AND SHALL BE SUBSTANTIALLY COMPLETE NO LATER THAN XXXXXX XX, 201X.*
4. *DOWNSPOUT AND UNDERDRAIN CONSTRUCTION SHALL MEET THESE AND THE LATEST SPECIFICATION OF THE KENTON COUNTY SUBDIVISION REGULATIONS, SD–1 REGULATIONS AND STANDARD DRAWINGS, AND DETAILS SHOWN ON THIS PLAN. BEDDING, BACKFILLING, JOINTS, EXCAVATION AND INSTALLATION SHALL BE INCLUDED IN THE COST PER FOOT OF PIPE. STORM SEWER, DOWNSPOUT AND UNDERDRAIN PIPE MATERIAL SHALL HAVE A MANNING'S "N" VALUE OF 0.013 OR LESS (UNLESS OTHERWISE SHOWN) AND BE RIGID / SMOOTH INTERIOR WALLED PVC SDR–35 PIPE, RIBBED PVC PIPE, A–2000 PVC PIPE, UNLESS OTHERWISE SHOWN.*
5. *ALL DISTURBED AREAS ARE TO BE RESTORED (SEEDED AND MULCHED) BY THE CONTRACTOR AND SHALL PROCEED WITH JOB PROGRESSION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVING ANY EXCESS MATERIALS AT THE SITE AND MAINTAINING ALL SEEDED AND MULCHED AREAS UNTIL PROJECT COMPLETION AND FINAL INSPECTION PER KDOT SPEC. 212. A RESIDENTIAL YARD SHALL BE RESTORED WITHIN TWENTY –ONE (21) DAYS AFTER CONSTRUCTION.*
6. *ALL APPLICABLE RECOMMENDATIONS IN KENTUCKY'S BEST MANAGEMENT PRACTICES MANUAL SHALL BE FOLLOWED BY THE CONTRACTOR, INCLUDING SEEDING OF DISTURBED GROUND.*
7. *RIGHT–OF–WAY AND PROPERTY LINES SHOWN ARE PLOTTED FROM DEEDS AND PLATS OF RECORD.*
8. *THE CONTRACTOR SHALL LIMIT THEIR WORK AREA TO THE EASEMENTS AND RIGHTS–OF–WAY SHOWN ON THESE PLANS UNLESS WRITTEN PERMISSION IS GIVEN BY THE PROPERTY OWNER AND APPROVED BY THE **CITY OF FORT WRIGHT.***
9. *ALL OSHA, STATE AND LOCAL SAFETY REGULATIONS SHALL BE FOLLOWED DURING CONSTRUCTION.*
10. *THIS PLAN SHOWS THE APPROXIMATE LOCATION OF UNDERGROUND UTILITIES (GAS, WATER, STORM SEWER, SANITARY SEWER, TELEPHONE, ELECTRIC, ETC.). THE PREPARER DOES NOT GUARANTEE THEIR ACCURACY OR CORRECTNESS. THE INFORMATION PROVIDED SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE UTILITY AS WELL AS THE SERVICE LATERALS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL PRACTICE CARE DURING THE GRADING AND TRENCH EXCAVATION AND SHALL BE RESPONSIBLE FOR REPLACING ANY SERVICES THAT ARE DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.*
11. *RELOCATION OR REINSTALLATION OF EXISTING MAIL BOXES, FENCES, PRIVATE LANDSCAPE LIGHTS, PRIVATE SIGNS, STREET SIGNS, RESTORATION OF LANDSCAPING AND TREATMENT OF EXISTING WALLS WHERE A PORTION HAS BEEN REMOVED SHALL BE INCIDENTAL TO CLEARING AND GRUBBING.*
12. *FORTY–EIGHT (48) HOURS BEFORE EXCAVATION IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: THE KENTUCKY UTILITY PROTECTION SERVICE AND ALL OTHER UTILITIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON–MEMBERS OF KENTUCKY UNDERGROUND PROTECTION.*
13. *NO CONSTRUCTION SHALL COMMENCE UNTIL ALL KENTON COUNTY AND THE CITY OF FORT WRIGHT PERMITS HAVE BEEN ISSUED AS REQUIRED.*
14. *THE CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAY WITH THE CITY OF FORT WRIGHT. LOCAL TRAFFIC MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE NOTED IN THESE PLANS.*
15. *CONTRACTOR SHALL BE REQUIRED TO MAINTAIN SANITARY SEWER AND STORM SEWER FLOW THROUGH THE PROJECT, FOR THE DURATION OF CONSTRUCTION. ALL COST FOR THE ABOVE SHALL BE INCIDENTAL TO THE CONTRACT.*
16. *LIMITS OF DRIVEWAY APRON & SIDEWALK REPLACEMENT TO BE MARKED IN THE FIELD BY THE ENGINEER. ADDITIONAL DRIVEWAY & SIDEWALK REPLACEMENTS, NOT SHOWN ON THE PLANS MAY BE REQUIRED BY THE ENGINEER.*

MAINTENANCE OF TRAFFIC NOTES

1. *ALL MAINTENANCE OF TRAFFIC PROCEDURES SHALL MEET THE REQUIREMENT OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND SECTION 112 OF KTC STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOCAL TRAFFIC (ACCESS TO RESIDENCES WITHIN CONSTRUCTION LIMITS) AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT SIGN, WARNING LIGHTS, BARRICADES, OR OTHER NECESSARY DEVICES MAKE THE SITE SAFE TO THE TRAVELING PUBLIC.*
2. *IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT TO THE ENGINEER AND THE OWNER A TRAFFIC CONTROL PLAN FOR THIS PROJECT.*
3. *PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF FT WRIGHT AND THE FT WRIGHT POLICE DEPARTMENT. AT ALL TIMES, EMERGENCY VEHICLES SHALL BE GIVEN ACCESS.*
4. *RESIDENTS OF THE PROJECT AREA SHALL BE ALLOWED ACCESS TO THEIR PROPERTY AT ALL TIMES.*
5. *EACH DRIVEWAY SHALL BE ACCESSIBLE WHENEVER POSSIBLE. WHEN PORTLAND CEMENT CONCRETE CONSTRUCTION AFFECTS A DRIVEWAY, THE CONTRACTOR SHALL NOTIFY THE AFFECTED OWNERS 24 HOURS IN ADVANCE AND ADVISE THEM TO FIND ALTERNATIVE PARKING FOR A PERIOD OF AT LEAST 10 CALENDAR DAYS AFTER THE POUR. ALTERNATIVE PARKING SHALL INCLUDE "ON STREET" PARKING WITH ACCESS TO THE PROPERTY. TEMPORARY SIDEWALKS, ETC. WILL BE NECESSARY TO PREVENT PERSONS FROM WALKING IN MUD IN ORDER TO ENTER THEIR PROPERTY. TEMPORARY BRIDGES, RAILINGS ETC. WILL BECOME NECESSARY IN ORDER TO CROSS FORMED CURB LINES, EXCAVATED AREAS BEHIND CURB LINES AND WALKWAYS, ETC.*

STORM SEWER NOTES

1. *TOPS OF EXISTING AND PROPOSED CASTING ELEVATIONS ARE SUBJECT TO FINAL ADJUSTMENTS AS APPROVED BY THE ENGINEER AND REQUIREMENTS OF UTILITY OWNER. THIS WORK WILL BE INCIDENTAL TO THE CONTRACT.*
2. *36" AND SMALLER STORM SEWER PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) SMOOTH WALL PIPE PER ASTM D3034, POLYVINYL CHLORIDE (PVC) PROFILE WALL PER ASTM F794 OR F949, OR HIGH DENSITY POLYETHYLENE (HDPE) PER AASHTO M294. JOINTS FOR PVC PIPE SHALL BE GASKET, BELL AND SPIGOT, PUSH ON TYPES PER ASTM D3212; HDPE PIPE SHALL BE JOINED USING AN INLINE BELL AND SPIGOT JOINT PER AASHTO M252, AASHTO M294 OR ASTM F2306. ALL JOINTS SHALL BE SOIL TIGHT. ALL GASKETS SHALL MEET ASTM F477.*
3. *ALL PROPOSED STORM SEWERS TO BE PUBLICLY DEDICATED TO SD1 UPON COMPLETION OF THE PROJECT. CONTRACTOR TO COORDINATE INSPECTIONS WITH SD1*
4. *EXTENDED DETENTION BASIN AT 133 MORRIS ROAD TO BE OWNED AND MAINTAINED BY THE CITY OF FORT WRIGHT.*

LEGEND

- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING GUY ANCHOR
- EXISTING MAILBOX
- EXISTING WATER VALVE/MAIN
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- EXISTING GAS VALVE
- EXISTING TREE OR SHRUB OR LANDSCAPING
- EXISTING STORM (CATCHBASIN – MANHOLE)
- EXISTING & ABANDONED WATER MAINS — WAT —
- EXISTING WATER SERVICES — WS — WS — WS —
- EXISTING GAS MAIN — GAS —
- EXISTING GAS SERVICES — GS — GS — GS —
- EXISTING STORM SEWER — " STM —
- EXISTING SANITARY SEWER — SAN —
- EXISTING RIGHT OF WAY — EX. R/W —
- EXISTING SANITARY MANHOLE
- TREE TO BE REMOVED
- PROPOSED STORM SEWER STRUCTURE
- PROPOSED STORM SEWER — " STM —
- PROPOSED UNDERDRAIN — UD — UD —
- PROPOSED TEMPORARY EASEMENT — TEMP. EASE. —
- PROPOSED PERMANENT EASEMENT — PERM. EASE. —

EROSION CONTROL LEGEND

- IP — *INLET PROTECTION – SEE DETAIL ON SHEET 4/40 (DT–3)*
- SB — *SAND BAG CHECK DAM – SEE DETAIL ON SHEET 4/40 (DT–3)*
- SF — *SILT FENCE – SEE DETAIL ON SHEET 4/40 (DT–3)*

HATCH LEGEND

- *PROPOSED PAVEMENT REPLACEMENT – SEE TYPICAL SECTIONS*
- *6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET*
- *ASPHALT DRIVEWAY REPLACEMENT – SEE DETAIL SHEET*
- *4" CONCRETE SIDEWALK REPLACEMENT – SEE DETAIL SHEET*

MARTIN P. HELLMANN P.E. #27046

your trusted advisor consultants engineers architects planners

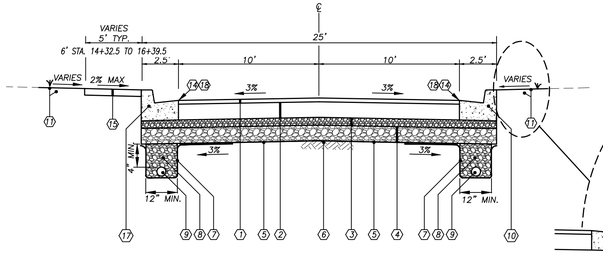
NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

TITLE SHEET

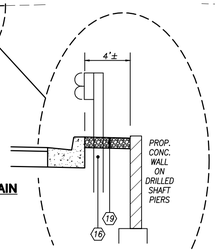
ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: TTL
SHEET 1 OF 40



PROPOSED PAVEMENT REPLACEMENT BOX CURB SECTION WITH EDGE DRAIN

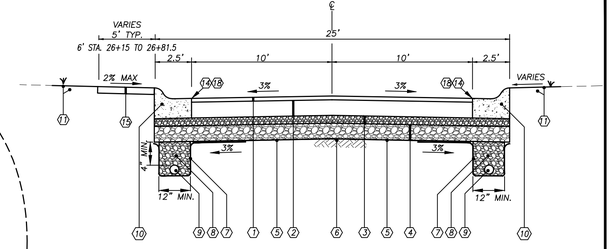
N.T.S.

STA. 10+75 TO MORRIS ROAD



TYPICAL PIER WALL W/ GUARDRAIL

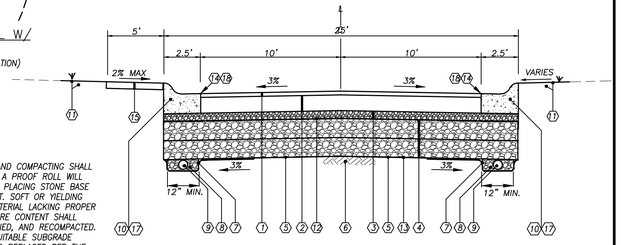
(SEE PLAN SHTS. FOR LOCATION)



PROPOSED PAVEMENT REPLACEMENT ROLLED CURB SECTION WITH EDGE DRAIN

N.T.S.

MORRIS ROAD TO STA. 32+46



GEOGRID REINFORCEMENT AND GRAVEL BASE FOR SUBGRADE REPAIR CONTINGENCY ITEMS TO BE USED ONLY AS DIRECTED BY THE ENGINEER

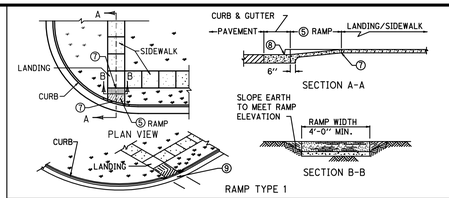
N.T.S.

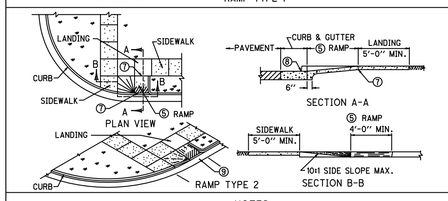
**NOTE:*

SUBGRADE RESHAPING AND COMPACTING SHALL BE PER KTC ITEM 207. A PROOF ROLL WILL BE REQUIRED PRIOR TO PLACING STONE BASE OR CONCRETE PAVEMENT. SOFT OR YIELDING SUITABLE SUBGRADE MATERIAL LACKING PROPER COMPACTION OR MOISTURE CONTENT SHALL SCARIFIED, AERATED, DRIED, AND RECOMPACTED. SOFT OR YIELDING UNSUITABLE SUBGRADE SHALL BE REMOVED AND REPLACED PER THE "PAVEMENT REPLACEMENT W/ EDGE DRAIN AND GEOGRID REINFORCEMENT" DETAIL, AS DIRECTED BY THE ENGINEER.

*** – CONTINGENCY ITEM TO BE USED ONLY AS DIRECTED BY THE ENGINEER*

1. ITEM 402/403 – 1.5" ASPHALT CONCRETE SURFACE COURSE
2. ITEM 402/403 – 7.75" ASPHALT CONCRETE BASE
3. ITEM 302 – 4" CRUSHED STONE BASE, (LESS THAN 7% FINES) COMPACTED TO 100% (ASTM D698).
4. ITEM 302 – 8" NO. 2 CRUSHED LIMESTONE, COMPACTED. ADDITIONAL (THICKER) NO. 2 CRUSHED STONE TO BE USED AT ENGINEER'S DISCRETION TO REPLACE DEEPER POOR SUBGRADE SOILS. (8" TYP. – 16" MAX.) (MAX. LIFT = 4")
5. ITEM 214 – WOVEN TEXTILE, MIRAFI® 600X OR EQUIVALENT, ALL OVERLAPS TO BE 18" MIN.
6. *ITEM 207 – SUBGRADE RESHAPING AND COMPACTION OF EXISTING CLAY SUBGRADE – TRIMMED AND ROLLED SMOOTH FOR DRAINAGE SO THAT THE GEOTEXTILE CAN BE SPREAD SMOOTH, TAUT AND EVEN BEFORE NO. 2 STONE IS PLACED. (INCLUDES SCARIFICATION AND RECOMPACTION OF TOP 8" OF UNDISTURBED SUBGRADE PER GEOTECHNICAL REPORT)*
7. ITEM SPL – MIRAFI® 140N OR EQUIVALENT NONWOVEN GEOTEXTILE, COVERING DRAINAGE BACKFILL, LAPPED 12" INCHES ONTO CLAY EACH SIDE, AND 4" INCHES ONTO BACK OF CURB WHERE APPLICABLE. (COST SHALL BE INCIDENTAL TO ITEM 704 – 6" DIA. RIGID PVC PERFORATED PIPE UNDERDRAIN).
8. ITEM 302 – CLEAN NO. 57 CRUSHED STONE (LESS THAN 3% FINES), COMPACTED IN 6" TO 8" LIFTS TO 80% RELATIVE DENSITY (ASTM D4253, D4254) W/A VIBRATORY COMPACTOR. (COST SHALL BE INCIDENTAL TO ITEM 704 – 6" DIA. RIGID PVC PERFORATED PIPE UNDERDRAIN)
9. ITEM 704 – 4" DIA. RIGID PVC PERFORATED PIPE UNDERDRAIN.
10. ITEM SPL – 4" ROLLED CONCRETE CURB AND GUTTER (T=9"), PER KENTON COUNTY SUBDIVISION REGULATIONS
11. ITEM 212 – 6" TOPSOIL, SEED AND MULCH FOR YARD RESTORATION.
12. ITEM SPL – ** GEOGRID (TENSAR BX 1200 OR EQUIVALENT) – AS DIRECTED BY ENGINEER FOR SUBGRADE REPAIR
13. ITEM SPL – ** GEOGRID (TENSAR BX 1300 OR EQUIVALENT) – AS DIRECTED BY ENGINEER FOR SUBGRADE REPAIR
14. ITEM SPL – APPLY ASPHALT SEALER AT INTERFACE BETWEEN ASPHALT AND CONCRETE (INCIDENTAL TO ITEM 402/403)
15. ITEM 505 – 4" CONCRETE SIDEWALK
16. ITEM 719 – GUARDRAIL (W-BEAM)
17. ITEM SPL – 6" CONCRETE BOX CURB AND GUTTER (T=9")
18. ASPHALT PAVEMENT TO FINISH 1/4" ABOVE GUTTER
19. ITEM 302 – 4" CLEAN NO. 57 CRUSHED STONE (LESS THAN 3% FINES)

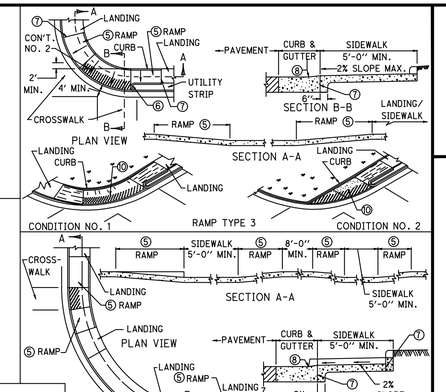


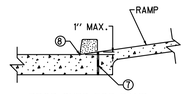


÷ NOTES ÷

BID ITEMS AND UNIT TO BID	
SIDEWALK-4 IN CONCRETE	SQYD
DETECTABLE WARNINGS	SQFT

1. THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.
2. RAMPS SHALL BE PAID PER SQ. YD. OF 4" CONCRETE SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, CURB BEHIND RAMP AND LANDING, AND INCIDENTALS NECESSARY FOR CONSTRUCTION.
3. THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.
4. RAMP TYPE 3 SHOULD BE USED PRIMARILY IN A RETROFIT TYPE CONDITION.
5. CURB RAMP GRADE SHALL NOT EXCEED 12:1, CROSS SLOPE SHALL NOT EXCEED 2% ON RETROFIT CURB RAMPS, GRADES OF 12.5% for 2'-0" OR 10% FOR 5'-0" ARE PERMISSABLE.
6. CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4' OR GREATER. FOR UTILITY STRIPS LESS THAN 4', THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.
7. ½" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.
8. NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT. RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.
9. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 5% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.
10. LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 2% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.





DROP CURB FOR RAMP

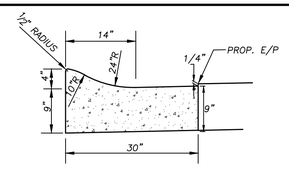
KENTUCKY DEPARTMENT OF HIGHWAYS

SIDEWALK RAMPS

STANDARD DRAWING NO. RPM-170-09

SUBMITTED: DIRECTOR DIVISION OF DESIGN — DATE:

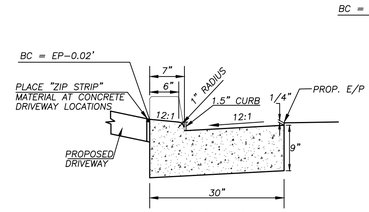
APPROVED: STATE HIGHWAY ENGINEER — DATE:



4" ROLLED CURB AND GUTTER DETAIL

N.T.S.

NOTE: ¾" DIAMETER DOWELS–18" LONG, 18" O.C. TYPE 1 OR TYPE 3 AND SHALL BE PLACED AT EXPANSION AND CONSTRUCTION JOINTS. THE PLACEMENT OF THE JOINTS SHALL BE AS PER APPENDIX "A" ITEM 10.0 OF THE KENTON COUNTY PLANNING COMMISSION STANDARD SPECIFICATIONS.



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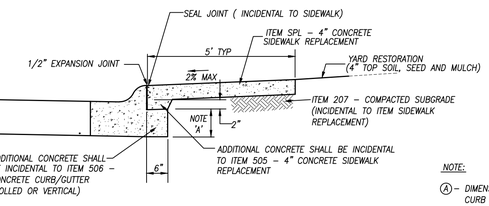
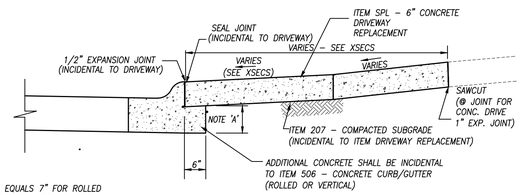
6" CONCRETE BOX CURB AND GUTTER DETAILS

N.T.S.

- SEE CURB & GUTTER SHELF DETAIL THIS SHEET -



SECTION AT SIDEWALK



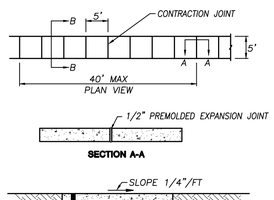
SECTION AT DRIVEWAYS

NOTE:

(A) – DIMENSION EQUALS 7" FOR ROLLED CURB & GUTTER –OR– 5" FOR VERTICAL CURB & GUTTER

CURB/GUTTER SHELF DETAIL FOR SIDEWALK AND DRIVE APRON

N.T.S.



CONCRETE SIDEWALK DETAIL

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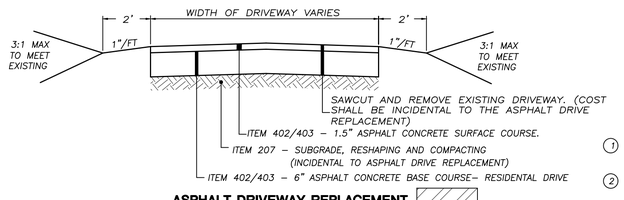
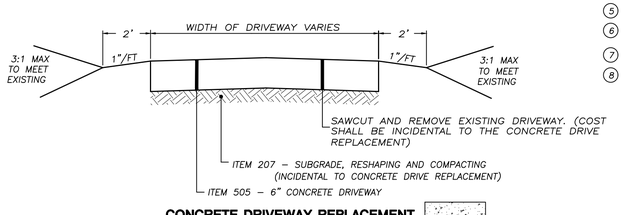


ASPHALT DRIVEWAY REPLACEMENT

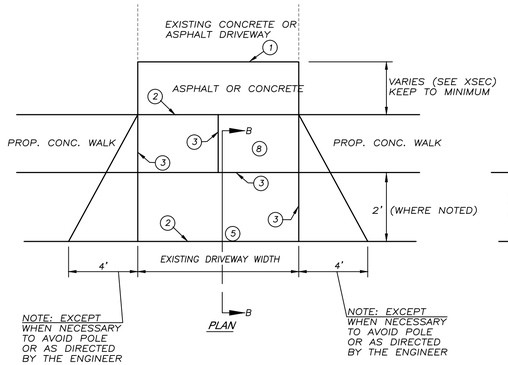
N.T.S.



CONCRETE DRIVEWAY REPLACEMENT

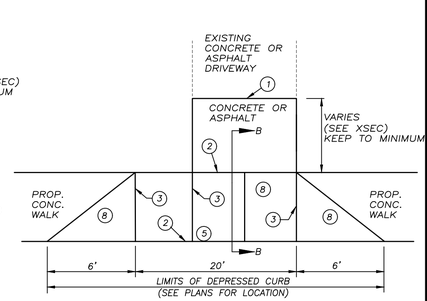
N.T.S.

1. SAWCUT AND REMOVE EXISTING DRIVEWAY AND APRON PAVEMENT (COST SHALL BE INCIDENTAL TO ROADWAY EXCAVATION)
2. 1" PREFORMED EXPANSION JOINT MATERIAL. ZIP CAP OR APPROVED EQUAL ON TOP OF FULL DEPTH 3/4 " EXPANSION MATERIAL.
3. TOOLED JOINT
4. ITEM 207 – COMPACTED SUBGRADE (INCIDENTAL TO ITEM 505)
5. PROPOSED CURB. SEE DETAIL THIS SHEET.
6. TRANSITION FROM FULL HEIGHT CURB TO DEPRESSED CURB OVER 24".
7. CONCRETE OR ASPHALT DRIVEWAY REPLACEMENT (SEE DETAILS).
8. ITEM 505 – 6" PORTLAND CEMENT CONCRETE – RESIDENTIAL APRON



DRIVEWAY APRON REPLACEMENT

N.T.S.



DRIVEWAY APRON REPLACEMENT

(FOR #1731, #1733, #1735, #1737 & #1739)

engineers
architects
planners
your trusted advisor
consultants

DATE

REVISION

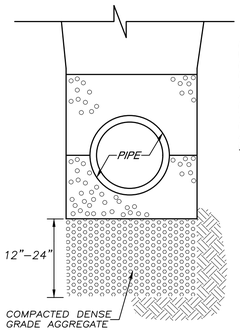
NO

SCALE:	AS SHOWN
DATE:	2/13/2020
DESIGNED BY:	MHEL
DRAWN BY:	JCOR
CHECKED BY:	MHEL

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

DETAIL SHEET

ITEM NO:	6-438
PROJECT NO:	160777
DRAWING NAME	DT-1
SHEET	OF
2	40

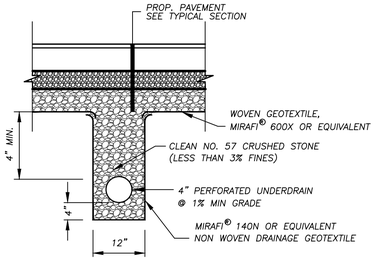


NOTE:
WHERE UNDERCUTTING OF THE TRENCH BOTTOM IS DEEMED NECESSARY IN THE FIELD DUE TO SOFT, UNSTABLE SOILS, THE TRENCH BOTTOM SHALL BE DEEPENED AN ADDITIONAL 12 TO 24 INCHES AS DIRECTED BY THE PROJECT ENGINEER. THE OVER EXCAVATED SOILS SHALL BE REPLACED WITH COMPACTED DENSE GRADE AGGREGATE, AS APPLICABLE FOR THE FIELD CONDITIONS.

TRENCH DETAIL - UNDERCUT•

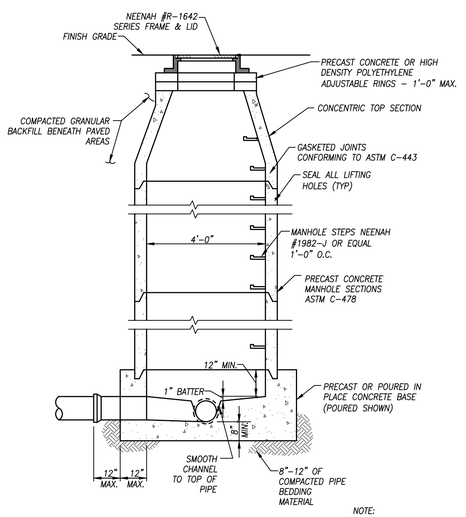
N.T.S.

• CONTINGENCY ITEM TO BE USED AT ENGINEER'S DIRECTION



NOTE: ALL COST FOR CONSTRUCTING THE UNDERDRAIN PER DETAIL SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 705 – 4" UNDERDRAIN

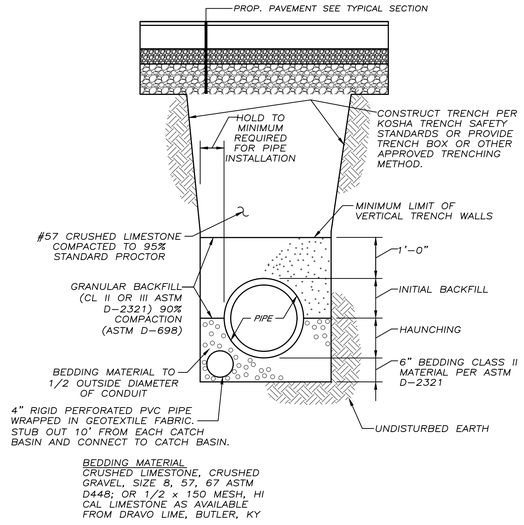
TRANSVERSE UNDERDRAIN DETAIL



NOTE:
SEE DETAIL SD1 DETAIL 113–A FOR PRECAST BASE

STANDARD MANHOLE

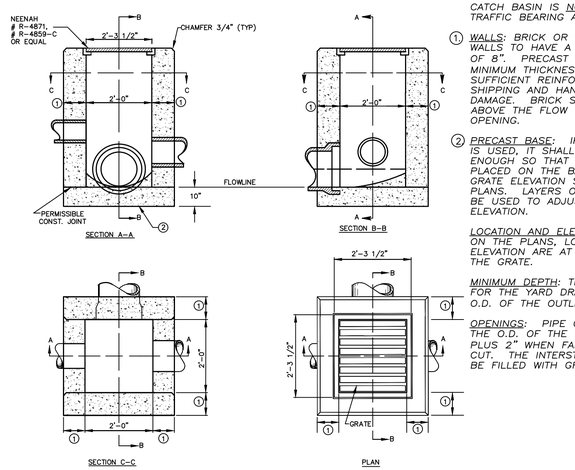
N.T.S.



BEDDING MATERIAL
CRUSHED LIMESTONE, CRUSHED GRAVEL, SIZE 8, 57, 67 ASTM D448; OR 1/2 x 150 MESH, HI CAL LIMESTONE AS AVAILABLE FROM DRAVO LIME, BUTLER, KY

STORM SEWER TRENCH DETAIL - STREET AREA

N.T.S.



NOTES:

CATCH BASIN IS NOT INTENDED FOR TRAFFIC BEARING APPLICATIONS

1. WALLS: BRICK OR CAST IN PLACE WALLS TO HAVE A NOMINAL THICKNESS OF 8". PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" WITH SUFFICIENT REINFORCEMENT TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. BRICK SHALL NOT BE USED ABOVE THE FLOW LINE OF THE SIDE OPENING.
2. PRECAST BASE: IF A PRECAST BASE IS USED, IT SHALL BE SET DEEP ENOUGH SO THAT THE TOP CAN BE PLACED ON THE BASE TO PROVIDE THE GRATE ELEVATION SPECIFIED IN THE PLANS. LAYERS OF BRICK SHALL NOT BE USED TO ADJUST THE TOP ELEVATION.

LOCATION AND ELEVATION: WHEN GIVEN ON THE PLANS, LOCATION AND ELEVATION ARE AT THE TOP CENTER OF THE GRATE.

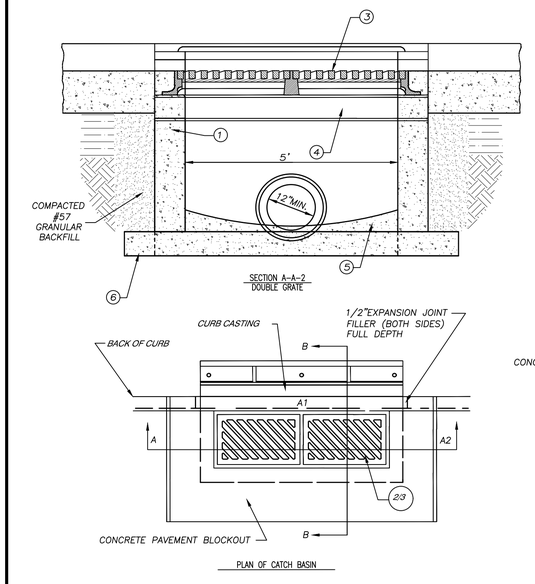
MINIMUM DEPTH: THE MINIMUM DEPTH FOR THE YARD DRAIN SHALL BE THE O.D. OF THE OUTLET PIPE PLUS 4".

OPENINGS: PIPE OPENINGS SHALL BE THE O.D. OF THE PIPE BEING SUPPLIED PLUS 2" WHEN FABRICATED OR FIELD CUT. THE INTERSTITIAL SPACE SHALL BE FILLED WITH GROUT.

STANDARD YARD DRAIN (12"-21" OUTLET PIPE)

N.T.S.

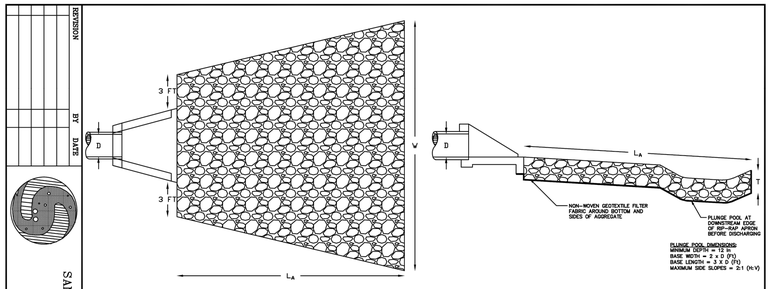
(REFERENCE -ODOT CB 1.1 12-25I AND KENTON COUNTY SUB. DETAIL C-22 12-2-20)



STANDARD CURB INLET

REFER TO SD1 SPEC. 02630 FOR ADDITIONAL DETAILS

1. CONCRETE BRICK OR SLAB BLOCK MAY BE USED IN PLACE OF PRECAST OR CAST IN PLACE CONCRETE. BLOCK OR BRICK SIDEWALLS SHALL BE 8" NOMINAL THICKNESS W/ HORIZONTAL REINFORCEMENT EVERY 16 INCHES. PARGE WITH 1/2" MORTAR, INSIDE AND OUT.
2. SINGLE INLET: FRAME, GRATE AND CURB PLATE – NEENAH R–3289–HV OR APPROVED EQUAL.
3. DOUBLE INLET: FRAME, GRATE AND CURB PLATE – NEENAH R–3288–HV2 OR APPROVED EQUAL.
4. 5–6 X 12.5 X 6' STEEL BEAM (USE WITH SEPERATE OR BOLTED INLETS).
5. 4" MIN. DEPTH 4000 PSI AE CONCRETE WITH SCRIBED INVERT.
6. 6" MIN. DEPTH 4000 PSI AE CONCRETE EXTENDED MIN. 8" BEYOND EXTERIOR OF BOX.
7. 12" MINIMUM DIAMETER PIPE.
8. SEAL ALL LIFTING HOLES AND JOINTS (INSIDE & OUT).



L_A (Ft) = REFER TO TABLE
W (Ft) = L_A + D (Ft)
T (In) = 2.0 x D_{50} (In)

NOTES:

1. FLOW RATES LISTED IN THE TABLE SHALL BE BASED ON THE 10–YEAR 24–HOUR DESIGN STORM PEAK FLOW RATE.
2. OUTLET EROSION PROTECTION IN THE FORM OF A RIP–RAP APRON SHALL REMAIN STRAIGHT THROUGHOUT ITS ENTIRE LENGTH.
3. ENSURE THAT RIP–RAP CONSISTS OF A WELL–GRADED MIXTURE OF STONE, LARGER STONE SHOULD BE PREDOMINATE, WITH SUFFICIENT SMALLER SIZES TO FILL THE VOIDS BETWEEN THE STONES. RIP–RAP SHALL BE ANGULAR IN SHAPE, NOT ROUNDED.
4. THE DIAMETER OF THE LARGEST STONE SIZE SHALL BE NO GREATER THAN 1.5 TIMES THE D_{50} SIZE.
5. THE MINIMUM THICKNESS OF RIP–RAP SHALL BE 2.0 TIMES THE D_{50} SIZE.
6. A NON–WOVEN GEOTEXTILE FILTER FABRIC SHALL BE INSTALLED AROUND THE BOTTOM AND SIDES OF THE RIP–RAP TO PREVENT EROSION.

Rip–Rap Apron Dimensions

D, Pipe Diameter (in)	Lowest Values			Intermediate Values to Interpolate From						Highest Value		
	Q cfs	L_A Ft	D_{50} In	Q cfs	L_A Ft	D_{50} In	Q cfs	L_A Ft	D_{50} In	Q cfs	L_A Ft	D_{50} In
12	4	7	6	6	10	6	9	13	6	12	16	7
15	6.5	8	6	10	12	6	15	16	7	20	18	10
18	10	9	6	15	14	6	20	17	7	30	22	11
21	15	11	6	25	18	7	35	22	10	45	28	13
24	21	13	6	35	20	8.5	50	26	12	65	30	16
27	27	14	6	50	24	9.5	70	29	14	90	34	18
30	36	16	6	60	25	9.5	90	33	15.5	120	38	20
36	56	20	7	100	32	13	140	40	18	180	45	23
42	82	22	8.5	120	32	12	160	39	17	200	45	20
48	120	28	10	170	37	14	220	46	19	270	54	23
										280	52	28
										320	64	37

OUTLET EROSION PROTECTION (STM–21)

N.T.S.

REVISION	BY	DATE

SANITATION DISTRICT NO. 1
1045 Eaton Drive
FT. Wright, Kentucky 41017
Ph: (859) 578–7460
Fax: (859) 331–2436

DRAWING NO: STM–21
DATE: July 2019

your trusted advisor
consultants engineers architects planners

NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

DETAIL SHEET

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: DT-2
SHEET 3 OF 40

SEDIMENT BASINS

DEFINITION
A TEMPORARY BARRIER OR DAM CONSTRUCTED ACROSS A WATERCOURSE OR AT OTHER SUITABLE LOCATION TO RETAIN SEDIMENT AND OTHER WATERBORNE DEBRIS.

SCOPE
THIS STANDARD ESTABLISHES MINIMUM ACCEPTABLE QUALITY FOR THE DESIGN AND CONSTRUCTION OF TEMPORARY SEDIMENT BASINS FORMED BY AN EMBANKMENT, EXCAVATION OR A COMBINATION OF EMBANKMENT AND EXCAVATION. THE STANDARD IS LIMITED TO SITES WHERE:

1. FAILURE OF THE STRUCTURE WOULD NOT RESULT IN LOSS OF LIFE; DAMAGE TO HOMES; COMMERCIAL OR INDUSTRIAL BUILDINGS; DAMAGE TO HIGHWAYS OR RAILROADS OR INTERRUPTION OF USE OR SERVICE OF PRIVATE UTILITIES.
2. THE HEIGHT OF DAM IS 25 FEET OR LESS, AS MEASURED FROM THE NATURAL STREAMBED AT THE CENTERLINE OF DAM TO THE TOP OF DAM.
3. THE TOTAL VOLUME OF STORAGE IS 150 ACRE-FEET OR LESS.
4. THE DRAINAGE AREA IS 100 ACRES OR LESS.
5. THE BASIN WILL BE REMOVED WITHIN A THREE-YEAR PERIOD AFTER CONSTRUCTION.

PURPOSE
TEMPORARY SEDIMENT BASINS ARE USED AS A MEANS OF TRAPPING AND STORING SEDIMENT FROM ERODING AREAS IN ORDER TO PROTECT DOWNSTREAM AREAS FROM DAMAGE RESULTING FROM SEDIMENTATION AND WATERBORNE DEBRIS.

CONDITIONS WHERE PRACTICE APPLIES
TEMPORARY SEDIMENT BASINS APPLY WHERE PHYSICAL SITE CONDITIONS OR OTHER RESTRICTIONS PRECLUDE THE INSTALLATION OF EROSION CONTROL MEASURES TO ADEQUATELY CONTROL EROSION AND SEDIMENTATION. IT MAY BE USED DOWNSLOPE FROM CONSTRUCTION OPERATIONS WHICH EXPOSE AREAS TO EROSION. TEMPORARY SEDIMENT BASINS WILL BE REMOVED AFTER THE EXPOSED AREAS ARE ADEQUATELY PROTECTED AGAINST EROSION BY VEGETATIVE OR MECHANICAL MEANS.

COMPLIANCE WITH LAWS AND REGULATIONS
DESIGN AND CONSTRUCTION SHALL COMPLY WITH ALL LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS.

LOCATION
TO IMPROVE THE EFFECTIVENESS OF THE BASIN, IT SHOULD BE LOCATED SO AS TO INTERCEPT THE LARGEST POSSIBLE AMOUNT OF RUNOFF FROM THE DISTURBED AREA. THE BEST LOCATIONS ARE GENERALLY LOW AREAS AND NATURAL DRAINAGEWAYS BELOW DISTURBED AREAS. DRAINAGE INTO THE BASIN CAN BE IMPROVED BY THE USE OF DIVERSION DIKES AND DITCHES. THE BASIN MUST NOT BE LOCATED IN A LIVE STREAM BUT SHOULD BE LOCATED TO TRAP SEDIMENT-LADEN RUNOFF BEFORE IT ENTERS THE STREAM. THE BASIN SHOULD NOT BE LOCATED WHERE ITS FAILURE WOULD RESULT IN THE LOSS OF LIFE OR IN INTERRUPTION OF THE USE OR SERVICE OF PUBLIC UTILITIES OR ROADS.

MULTIPLE USE
SEDIMENT BASINS MAY BE DESIGNED AS PERMANENT STRUCTURES TO REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETED. SITE CONDITIONS MAY MAKE THE USE OF THESE STRUCTURES DESIRABLE FOR STORMWATER DETENTION PURPOSES. WHEREVER THESE STRUCTURES ARE TO BECOME PERMANENT, OR IF THEY EXCEED THE SIZE LIMITATIONS OF THE DESIGN CRITERIA, THEY MUST BE DESIGNED AS PERMANENT PONDS BY A QUALIFIED PROFESSIONAL ENGINEER. PERMANENT PONDS ARE BEYOND THE SCOPE OF THESE STANDARDS AND SPECIFICATIONS. THE PERMANENT STRUCTURES MUST BE SUBMITTED WITH CONSTRUCTION DRAWINGS FOR REVIEW AND ACCEPTANCE BY THE CITY ENGINEER.

MAINTENANCE BASINS SHALL BE CHECKED WEEKLY AND CLEANED WHEN NO LONGER EFFECTIVE.

STORM DRAIN INLET PROTECTION
DEFINITION
A SEDIMENT FILTER INSTALLED AROUND A STORM DRAIN INLET OR CURB INLET TO REDUCE SEDIMENT DISCHARGE.

PURPOSE
TO PREVENT SEDIMENT FROM ENTERING THE STORM DISCHARGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED DRAINAGE AREA. DIFFERENT TYPES OF STRUCTURES ARE APPLICABLE TO DIFFERENT CONDITIONS.

STORM WATER POLLUTION PREVENTION NOTES

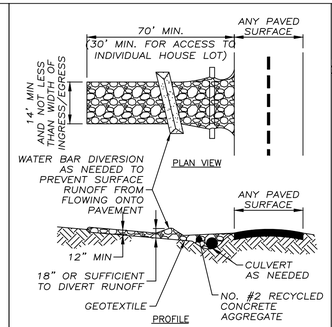
1. SANITATION DISTRICT NO. 1 IS TO BE CONTACTED 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY AT 859-578-6892
2. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED AS SHOWN ON THE PLANS, AND SHALL BE IN COMPLIANCE WITH THE LATEST CONSTRUCTION ACTIVITY " NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" RULES AND REGULATIONS.
3. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND A COPY OF THE "NOTICE OF INTENT" (NOI) SHALL BE KEPT ON SITE.
4. AN AMENDMENT OF THE SWPPP IS REQUIRED WHENEVER A CHANGE IN DESIGN, CONSTRUCTION, AND OPERATION OR MAINTENANCE HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS, OR IF THE SWPPP PROVES TO BE INEFFECTIVE IN ACHIEVING THE GENERAL OBJECTIVES OF THE SWPPP.
5. THE CONTRACTOR SHALL ALSO MAINTAIN THE FOLLOWING RECORDS ON SITE:
   A. GENERAL CONTRACTOR AND/OR SUBCONTRACTOR SWPPP CERTIFICATIONS
   B. THE DATE, TIME, AND EXACT LOCATION OF THE INSPECTION, AND THE NAME OF THE INSPECTOR
   C. AN ASSESSMENT OF THE CONDITION OF THE EROSION CONTROLS
   D. A DESCRIPTION OF ANY EROSION CONTROL IMPLEMENTATION AND MAINTENANCE PERFORMED
   E. A DESCRIPTION OF THE PRESENT PHASE OF CONSTRUCTION AT THE SITE
6. CONSTRUCTION SEQUENCE
   - ALL PERIMETER SILT FENCE, INLET PROTECTION AND OTHER EROSION CONTROLS SHALL BE IN PLACE BEFORE ANY OTHER EARTH MOVING ACTIVITIES BEGIN.
   - THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THE AREAS PLANNED FOR EARTH MOVING.
   - REMOVE TOPSOIL, STOCKPILE IT, AND INSTALL SILT FENCE AROUND PERIMETER.
   - SEED SOIL STOCKPILE WITH PERENNIAL RYE GRASS AND MULCH WITH STRAW IF NO TO BE DISTURBED FOR MORE THAN 21 DAYS.
   - CONSTRUCT DETENTION BASIN AND CONTROL STRUCTURE. DETENTION BASIN SHALL BE USED AS A SEDIMENT BASIN UNTIL THE SITE IS STABILIZED.
   - INSTALL STORM SEWER SYSTEM AND SURFACE STORM INLET AND MANHOLE PROTECTION.
   - ESTABLISH A TEMPORARY SEEDING ON ALL BARE AREAS THAT ARE TO REMAIN UNDISTURBED FOR MORE THAN 21 DAYS. SEED WITH PERENNIAL RYE GRASS MULCH WITH STRAW.
   - IMMEDIATE AFTER TOPSOIL HAS BEEN PLACED, STABILIZE THE SAME SURFACE AREA WITH FINAL SEED AND MULCH 7 DAYS AFTER REACHING FINAL GRADE.
   - AFTER THE VEGETATION HAS BECOME WELL ESTABLISHED, REMOVE TEMPORARY EROSION OR SEDIMENT CONTROL PRACTICES.
7. EROSION CONTROLS MUST BE INSPECTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF 0.5" OR GREATER RAINFALL. REMOVE ACCUMULATED SEDIMENT FROM EROSION CONTROLS.
8. TEMPORARY SEEDING SHALL BE PERENNIAL RYE GRASS (40 LB / ACRED) AND MULCH AT 3 BALES OF STRAW PER 1000 S.F.
9. CONTRACTOR IS RESPONSIBLE FOR OBTAINING BORROW MATERIAL ONSITE AND / OR DISPOSING OF EXCESS MATERIAL OFF SITE AS REQUIRED TO MEET INDICATED DESIGN ELEVATIONS.
10. DEBRIS SHALL BE COLLECTED WITHIN PROPERTY LIMITS WEEKLY OR AS NEEDED FOR PUBLIC SAFETY. SURROUNDING STREETS AFFECTED BY THE CONSTRUCTION SHALL BE CLEANED DAILY OR AS NEEDED FOR PUBLIC SAFETY. SEE CONSTRUCTION ENTRANCE DETAIL IN SWPPP DETAILS SHEET.
11. THE CONSTRUCTION OF BMPs SHALL BE REVISED OR ADDED IF DEEMED NECESSARY PER SECTION 1000 OF THE SANITATION DISTRICT 1 REGULATIONS.
12. CONTACT SANITATION DISTRICT NO. 1 72 HOURS PRIOR TO INSTALLATION OF THE WATER QUALITY FEATURE.

NOTES:
1) SUBSOILING SHALL OCCUR WHEN SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING IS NOT PERMITTED ON SLIP-PRONE AREAS.
2) THE SITE SHALL BE GRADED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3) TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.
4) THE SEEDBED SHALL BE PREPARED BY APPLYING AGRICULTURAL GROUND LIMESTONE OR FERTILIZER AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY LIME AT 2 TONS/AC. OR FERTILIZER AT 500 LB/AC. OF 10-10-10 OR 12-12-12 ANALYSIS. LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL TO A DEPTH OF 3".
5) APPLY SEED UNIFORMLY ON FIRM, MOIST SEED BED.
6) SEEDING SHOULD BE APPLIED FROM MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THESE DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHALL OCCUR WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND.
7) SEEDING SHOULD NOT BE APPLIED FROM OCTOBER 1 TO NOVEMBER 20 BECAUSE SEEDS MAY GERMINATE, BUT WILL NOT SURVIVE THE WINTER. USE THE FOLLOWING METHODS FOR DORMANT SEEDING:
   - FROM OCTOBER 1 TO NOVEMBER 20, INCREASE THE SEEDING RATE BY 50%, PREPARE THE SEED BED, ADD LIME AND FERTILIZER, MULCH AND ANCHOR.
   - FROM NOVEMBER 20 TO MARCH 15, ONLY IF SOIL CONDITIONS PERMIT, INCREASE THE SEEDING RATE BY 50%, PREPARE THE SEED BED, ADD LIME AND FERTILIZER, APPLY THE SEED MIXTURE, MULCH AND ANCHOR.
8) APPLY MULCH MATERIAL IMMEDIATELY AFTER SEEDING.
9) PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED, AVOID EXCESSIVE IRRIGATION AND MONITOR TO PREVENT EROSION AND DAMAGE FROM RUNOFF.
10) PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING. DURING THIS PERIOD, INSPECT FOR SOIL EROSION OR PLANT LOSS AND REPAIR BARE OR SPARSE AREAS, FILL GULLIES, RE-FERTILIZE, RE-SEED OR RE-MULCH AS NEEDED.
11) A MINIMUM OF 70% GROWTH DENSITY, BASED ON A VISUAL INSPECTION, MUST EXIST FOR AN ADEQUATE PERMANENT VEGETATIVE PLANTING.

PERMANENT SEEDING FERTILIZATION AND MOWING CHART				
MIXTURE	FORMULA	LB/ AC.	TIME	MOW
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	10-10-10	500	FALL, YEARLY, OR AS NEEDED	≥3"
TALL FESCUE	10-10-10	500		≥4"
TURF-TYPE FESCUE	10-10-10	500		
CROWN VETCH FESCUE	0-20-20	400	SPRING, AND YEARLY AFTER ESTABLISHED	DO NOT MOW
FLAT PEA FESCUE	0-20-20	400		

PERMANENT SEEDING SPECIES SELECTION		
SEED MIX	SEED RATE LB/AC.	NOTES:
GENERAL USE		
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20 - 40 10 - 20 20 - 40	FOR CLOSE MOWING AND WATERWAYS WITH ≤2.0 FT./SEC. VELOCITY
TALL FESCUE	40 - 50	
TURF-TYPE FESCUE	90	
STEEP BANKS OR CUT SLOPES		
TALL FESCUE	40 - 50	
CROWN VETCH TALL FESCUE	10 - 20 20 - 30	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20 - 25 20 - 30	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES		
TALL FESCUE	40 - 50	
TURF-TYPE FESCUE KENTUCKY BLUEGRASS	90 5	
LAWN		
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100 - 120 100 - 120	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100 - 120 100 - 120	FOR SHADED AREAS

PERMANENT SEEDING DETAIL
SCALE: NONE



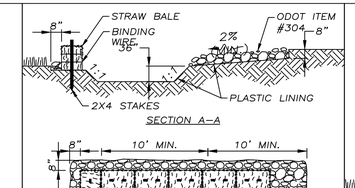
NOTES:
1) PLACE GEOTEXTILE OVER THE ENTIRE AREA PRIOR TO PLACING STONE MEETING THE MIN. SPECIFICATIONS:
   A. TENSILE STRENGTH = 200 LBS.
   B. PUNCTURE STRENGTH = 80 PSI
   C. TEAR STRENGTH = 50 LBS.
   D. BURST STRENGTH = 320 PSI
   E. ELONGATION = 20%
   F. EQUIVALENT OPENING SIZE ≤ 0.6 MM
   G. PERMITTIVITY = 0.001 CM/SEC
2) APPLY ADDITIONAL STONE AS CONDITIONS DEMAND AND REPLENISH STONE WHEN THE DEPTH IS LESS THAN 6". REMOVE AND REPLACE IF STONES BECOMES MUD-LADEN.
3) IMMEDIATELY REMOVE MUD DROPPED, WASHED OR TRACKED ONTO ROADS OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS BY SCRAPING OR SWEEPING.
4) CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES OR TO PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

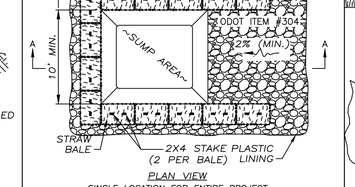
CONSTRUCTION ENTRANCE
SCALE: NONE

NOTES:
1) THE SEED BED SHALL BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
2) SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH ADEQUATE VEGETATION. PERFORM SOIL TESTS ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
3) APPLY SEED UNIFORMLY. COVER BROADCASTED SEED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPING INTO PLACE.
4) APPLY MULCHING IMMEDIATELY AFTER SEEDING.
5) SEEDING SHALL BE INSPECTED FOR BARE SPOTS AND WASHOUTS, AND RESEEDED AS NECESSARY.

TEMPORARY SEEDING SPECIES SELECTION			
DATES	SPECIES	LB/1,000 SF	LB/AC.
MARCH 1 TO AUGUST 15	OATS TALL FESCUE PERENNIAL RYEGRASS	3 1 1	128 40 40
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40
AUGUST 16 TO NOVEMBER 1	RYE TALL FESCUE PERENNIAL RYEGRASS	3 1 1	112 40 40
	WHEAT TALL FESCUE PERENNIAL RYEGRASS	3 1 1	120 40 40
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40
NOVEMBER 1 TO ONLY MULCH OR DORMANT SEEDING. SPRING			

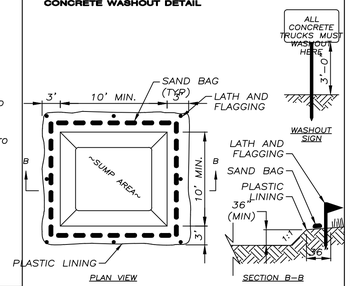
TEMPORARY SEEDING DETAIL
SCALE: NONE





SINGLE LOCATION FOR ENTIRE PROJECT

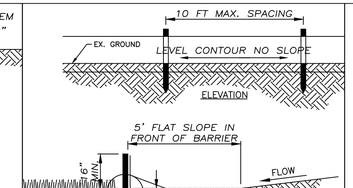
CONCRETE WASHOUT DETAIL



TEMPORARY LOCATION FOR MULTIPLE PHASE PROJECT

NOTES:
1. WASHOUT PIT SHALL BE LOCATED 100' MINIMUM FROM INLETS, STREAMS, WETLANDS AND ANY OTHER SURFACE WATERS.
2. ALL EXCESS CONCRETE AND CONCRETE WASHOUT, INCLUDING FROM HAND MIXERS AND LIGHT EQUIPMENT, SHALL BE DISPOSED OF IN THE CONCRETE WASHOUT AREA. DISPOSAL OF EXCESS CONCRETE OR CONCRETE WASHOUT ON THE GROUND, OR IN STORM DRAINS, DITCHES OR WATER BODIES, IS PROHIBITED.
3. CONCRETE WASHOUT AREA SHALL BE SUFFICIENT SIZE TO CONTAIN CONCRETE WASTE GENERATED. FOR LARGER SITES, MULTIPLE CONCRETE WASHOUT AREAS MAY BE REQUIRED.
4. IF CONCRETE WASHOUT AREA IS LOCATED AWAY FROM A PAVED SURFACE, CONSTRUCT A GRAVEL ACCESS ROUTE EQUAL IN COMPOSITION TO THE CONSTRUCTION ENTRANCE.
5. PLASTIC LINING SHALL BE DOUBLE-LINED, CONTINUOUS 10-MIL POLYETHYLENE SHEETING FREE OF HOLES, TEARS OR OTHER DEFECTS, AND INSTALLED ON A SMOOTH, LEVEL SURFACE, FREE OF ROCKS OR DEBRIS.
6. CONCRETE WASHOUT SIGNAGE SHALL BE CLEARLY VISIBLE AND LOCATED WITHIN 30 FEET OF EACH WASHOUT AREA.
7. CONCRETE WASHOUT AREAS SHALL BE COVERED DURING INCLEMENT WEATHER TO PREVENT OVERFLOWS.
8. PREFABRICATED, PORTABLE AND RE-USABLE CONCRETE WASHOUT CONTAINERS ARE ACCEPTABLE, BUT MUST BE SPECIFICALLY DESIGNED FOR CONCRETE WASHOUT USE.
9. CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY TO CHECK FOR DAMAGE AND TO DETERMINE IF IT NEEDS CLEANED OR REPLACED. ANY DAMAGE TO THE SIDEWALLS OR POLYETHYLENE SHEETING SHALL BE REPAIRED IMMEDIATELY. THE CONCRETE WASHOUT AREA SHALL BE CLEANED OR REPLACED WHEN IT IS 75% FULL. THE POLYETHYLENE SHEETING SHALL BE REPLACED AFTER EACH CLEANING.
10. SAW CUT CONCRETE, RESIDUE FROM SAW CUT, AND GRINDINGS SHALL BE DISPOSED OF IN THE WASHOUT PIT.

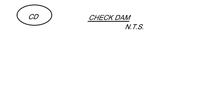
SCALE: NONE

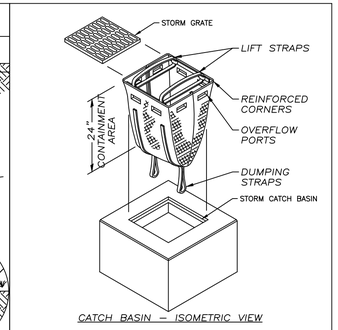


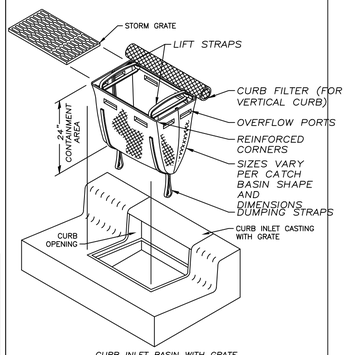
NOTES:
1. PRESERVE VEGETATION FOR 5 FEET, OR AS MUCH AS POSSIBLE, UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RE-ESTABLISHED WITHIN 7 DAYS FROM SILT FENCE INSTALLATION.
2. SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. PERFORM ONE OF THE FOLLOWING IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW:
   - CHANGE THE LAYOUT OF THE SILT FENCE.
   - REMOVE ACCUMULATED SEDIMENT.
   - INSTALL OTHER PRACTICES.

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MIN	ASTM D-1682
MULLEN BURST STRENGTH	190 PSI MIN	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL./MIN./S.F. MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MIN	ASTM-G-26

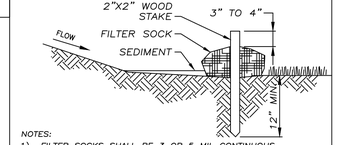
SILT FENCE (SF-)
SCALE: NONE







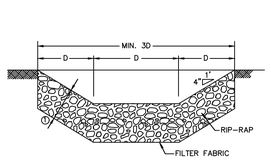
STORM DRAIN INLET PROTECTION DETAIL (IP-)
SCALE: NONE



NOTES:
1) FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST.
2) COMPOST SHALL BE WEED, PATHOGEN AND INSECT FREE, FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH, BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".
3) FILTER SOCKS SHALL BE PLACED ON A LEVEL LINE ACROSS SLOPES PARALLEL TO THE BASE OF THE SLOPE.
4) FILTER SOCKS SHALL BE PLACED AT LEAST 5' FROM THE TOE OF SLOPE FOR SEDIMENT DEPOSIT.
5) BUILT UP SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED 1/3 THE FILTER SOCK HEIGHT.
6) WHEN A FILTER SOCK IS NO LONGER REQUIRED, IT SHALL BE DISPERSED ON-SITE.
7) THE MAXIMUM DRAINAGE AREA PER 100 FEET OF FILTER SOCK IS 1/2 ACRE AND IS DEPENDENT ON THE SLOPE:

MAX. SLOPE LENGTH ABOVE FILTER SOCK					
SLOPE	RATIO (H:V)	8"	12"	18"	24"
0% - 2%	0 - 50:1	125'	250'	300'	350'
2% - 10%	50:1 - 10:1	100'	125'	200'	250'
10% - 20%	10:1 - 5:1	75'	100'	150'	200'

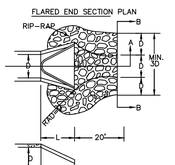
FILTER SOCK DETAIL
SCALE: NONE



① 24" MIN. CLASS IV CHANNEL LINING (RIP RAP)
D=INSIDE PIPE DIAMETER

RCD ROCK CHANNEL PROTECTION
N.T.S.

(REFERENCE ARMY CORP OF ENGINEERS DETAIL NO. G104401X & KYTC RDD-040)



NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

your trusted advisor
consultants engineers architects planners

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

EROSION AND SEDIMENT CONTROL

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: DT-3
SHEET 4 OF 40

RIGHT OF WAY SUMMARY

PARCEL NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				SOURCE OF TITLE	REMARKS*
						PERMANENT	TEMPORARY	LEFT		RIGHT														
		ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.		YES	NO	C	R	F	S		
1	ADAM D. FEINAUER, ADAM W. FEINAUER & KEITH G. FEINAUER	1.63	71,003	0.018	768		624							1.612		P		X					VOL. C6041, PG 122	PN 027-40-01-019.00
2	CB PROPERTY HOLDINGS	0.22	9,583	0.003	127		296							0.217		P		X					VOL. C5854, PG 242	PN 027-40-01-004.00
3	CB PROPERTY HOLDINGS	0.15	6,534	0.001	44		221							0.149		P		X					VOL. C6015, PG 109	PN 027-40-01-003.00
4	CB PROPERTY HOLDINGS	0.14	6,098		0		152							0.14		P		X					VOL. C4065, PG 241	PN 027-40-01-002.00
5	STEPHEN A. SIMPSON	0.13	5,663		0		130							0.13		P		X					VOL. C6105, PG 277	PN 027-30-00-241.00
6	JOSEPH A. CIARAMITARO, JR.	0.21	9,148		0		116							0.21		P		X					VOL. C4559, PG 109	PN 027-30-00-249.00
7	RAYMOND C. AND ANN P. BOWMAN	0.11			0		0																	NO TAKE NEEDED
8	MARY E. JOHNSON	0.05	2,178		0		284							0.05		P		X					VOL. C2222, PG 222	PN 027-30-00-246.00
9	JEFFREY P. SNYDER AND AMY E. SOLOMON	0.23			0		0																	NO TAKE NEEDED
10	WILLIAM T. AND AMY J. SPEARS	0.03			0		0																	NO TAKE NEEDED
11	JODY N. BONAR	0.21	9,148		0		94							0.21		P		X					VOL. C5700, PG 230	PN 027-30-00-240.01
12	DARLENE THOMPSON GIBBS	0.69			0		0																	NO TAKE NEEDED
13	DALE E. AND CAROL A. VOELKER	0.18			0		0																	NO TAKE NEEDED
14	GREGORY PARKER & JENNA L. HOERLEIN	0.19	8,276		0		173							0.19		P		X					VOL. C6516, PG 60	PN 027-30-00-212.00
15	EDWARD P. AND KAREN M. STETTER	0.28	12,197		0		52							0.28		P		X					VOL. 879, PG 217	PN 027-30-00-211.00
16	GREGORY J. AND LINDA M. WERBRICH	0.57	24,829		0		129							0.57		P		X					D.B 1213, PG 343 VOL. C2819, PG 332	PN 027-30-04-037.06
17	JASPER HATTER AND PENNY HATTER	0.25			0		0																	NO TAKE NEEDED
18	JEFFREY D. HAGEDORN	0.17			0		0																	NO TAKE NEEDED
19	RICK D. McKENNEY	0.21			0		0																	NO TAKE NEEDED
20	DONALD R. AND KAREN ELKINS	0.20	8,712		0		30							0.20		P		X					VOL. 1187, PG 110	PN 027-30-00-256.00
21	RACHEL R. WILSON	0.21	9,148		0		84							0.21		P		X					VOL. C4293, PG 241	PN 027-30-00-254.00
22	CRAIG AND YOLANDA BAKER	0.19	8,276		0		64							0.19		P		X					VOL. C2222, PG 222	PN 027-30-00-252.00

NOTE: PERMANENT R/W ACQUIRED + AREA SEVERED = TOTAL AREA OF TRACT.

TYPE SEWER SYSTEM
1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

BUILDINGS ACQUIRED CODE
C - COMMERICAL
R - RESIDENTIAL
F - FARM
S - STORAGE

*INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)

your trusted advisor consultants engineers architects planners

DATE
REVISION
NO

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD
RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

RIGHT OF WAY SUMMARY

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: RW-1
SHEET 5 OF 40

CONSTRUCTION PHASING

EXISTING UTILITIES HAVE BEEN RELOCATED PRIOR TO START OF CONSTRUCTION

PHASE ONE

- WEST PROJECT LIMIT TO MORRIS ROAD

  A. PROJECT DETOUR PLAN IN PLACE
  B. AMSTERDAM ROAD CLOSED FROM WEST OF GENERAL DRIVE TO JUST WEST OF MORRIS ROAD.
  C. GENERAL DRIVE INTERSECTION CLOSED. SEE LOCAL DETOUR PLAN 'A' (PHASE 1).
  D. CONSTRUCT PIER WALL, STORM SEWER, PAVEMENT, WALK AND DRIVES.
     1. STORM SEWER TO BE CONSTRUCTED UP THROUGH MANHOLE STM-13
     2. NORTH LEG OF MORRIS ROAD INTERSECTION TO BE CONSTRUCTED HALF WIDTH TO MAINTAIN ACCESS
     3. SOUTH LEG OF MORRIS ROAD CLOSED PRIOR TO WORK IN INTERSECTION. ACCESS FROM HOWARD RD./ BARRINGTON RD./PARK RD.
  E. PROPERTY ACCESS MAINTAINED THROUGHOUT CONSTRUCTION.

PHASE TWO

- MORRIS ROAD TO REDWOOD DRIVE

  A. PROJECT DETOUR PLAN IN PLACE
  B. AMSTERDAM ROAD CLOSED FROM EAST OF MORRIS RD THROUGH REDWOOD DR INTERSECTION
     1. FT. HENRY DRIVE INTERSECTION CLOSED. SEE LOCAL DETOUR PLAN 'A' (PHASE 2).
     2. REDWOOD DRIVE INTERSECTION CLOSED. SEE LOCAL DETOUR PLAN 'B' (PHASE 2).
  B. CONSTRUCT STORM SEWER, PAVEMENT, WALK AND DRIVES.
  C. PROPERTY ACCESS MAINTAINED THROUGHOUT CONSTRUCTION.

PHASE THREE

- FINAL SURFACE COURSE, FINAL GRADING AND SEEDING

MAINTENANCE OF TRAFFIC NOTES:

ALL MAINTENANCE OF TRAFFIC PROCEDURES SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND SECTION 112 OF THE LATEST EDITION OF THE KENTUCKY TRANSPORTATION CABINET STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOCAL TRAFFIC (ACCESS TO RESIDENCES WITHIN THE CONSTRUCTION LIMITS) AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT SIGNS, DRUMS, WARNING LIGHTS, BARRICADES OR OTHER NECESSARY DEVICES TO MAKE THE SITE SAFE TO THE TRAVELING PUBLIC.

PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALT NOTIFY THE CITY OF FORT WRIGHT, FORT WRIGHT FIRE DEPARTMENT AND THE FORT WRIGHT POLICE DEPARTMENT. AT ALL TIMES, EMERGENCY VEHICLES SHALL BE GIVEN ACCESS.

RESIDENTS OF THE PROJECT AREA SHALL BE ALLOWED ACCESS TO THEIR PROPERTY AT ALL TIMES.

EACH DRIVEWAY SHALL BE ACCESSIBLE WHENEVER POSSIBLE. WHEN PORTLAND CEMENT CONCRETE CONSTRUCTION AFFECTS A DRIVEWAY, THE CONTRACTOR SHALL NOTIFY THE AFFECTED OWNERS 24 HOURS IN ADVANCE AND ADVISE THEM TO FIND ALTERNATIVE PARKING FOR A PERIOD OF AT LEAST 10 CALENDAR DAYS AFTER THE POUR. ALTERNATIVE PARKING SHALL INCLUDE "ON STREET" PARKING WITH ACCESS TO THE PROPERTY. TEMPORARY SIDEWALKS, ETC. WILL BE NECESSARY TO PREVENT PERSONS FROM WALKING IN MUD IN ORDER TO ENTER THEIR PROPERTY. TEMPORARY BRIDGES, RAILINGS ETC. WILL BECOME NECESSARY IN ORDER TO CROSS FORMED CURB LINES, EXCAVATED AREAS BEHIND CURB LINES AND WALKWAYS, ETC.

PAVEMENT EDGE DROP-OFFS

- DIFFERENCE IN ELEVATION FOR TRAVEL LANES

  A PAVEMENT EDGE THAT TRAFFIC IS EXPECTED TO CROSS IN A LANE CHANGE SITUATION SHOULD NOT HAVE AN ELEVATION DIFFERENCE GREATER THAN ONE AND ONE-HALF INCHES. THIS MAY BE INCREASED TO TWO INCHES FOR LOW SPEED SITUATIONS. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

- PAVEMENT DROP OFF

PAVEMENT EDGES THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

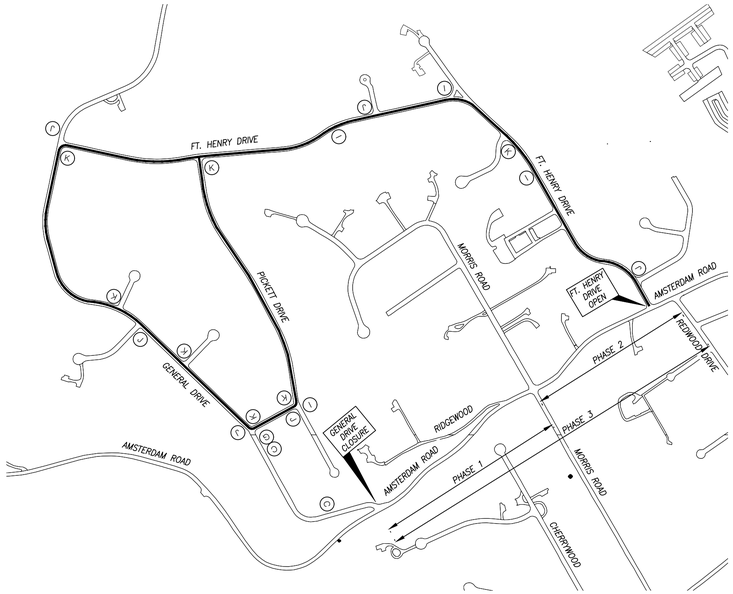
LESS THAN TWO INCHES – NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

TWO TO FOUR INCHES – PLACE PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE LATEST EDITION OF "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

GREATER THAN FOUR INCHES – POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT FEET OR MORE DISTANCE BETWEEN THE EDGE OF PAVEMENT AND DROP-OFF THEN DRUMS, PANELS OR BARRICADES MAY BE USED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PAQNELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW VOLUME LOCAL STREETS. PAYMENT WILL BE ALLOWED FOR THE CRUSHED STONE BASE MATERIAL USED FOR WEDGING.

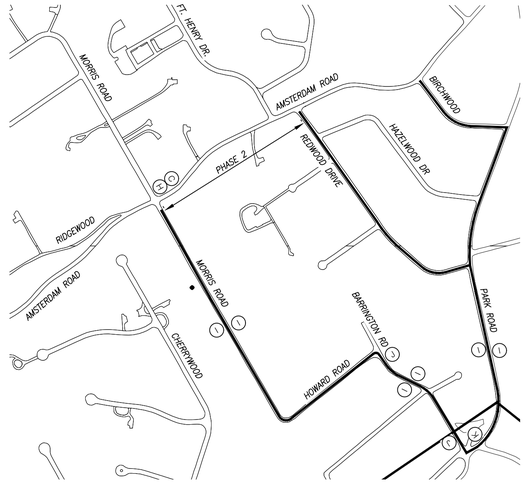


LOCAL DETOUR PLAN - A (AMSTERDAM ROAD)

0' 400' 800'

SCALE: 1" = 400' HORIZ

PHASE 1

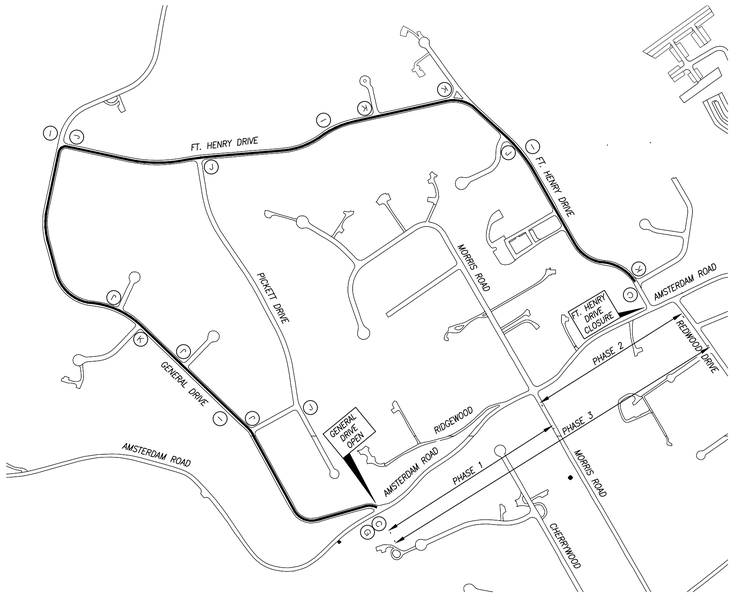


LOCAL DETOUR PLAN - B (MORRIS RD. & REDWOOD DR.)

0' 400' 800'

SCALE: 1" = 400' HORIZ

PHASE 2

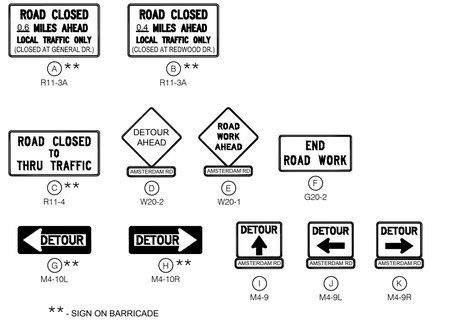


LOCAL DETOUR PLAN - A (AMSTERDAM ROAD)

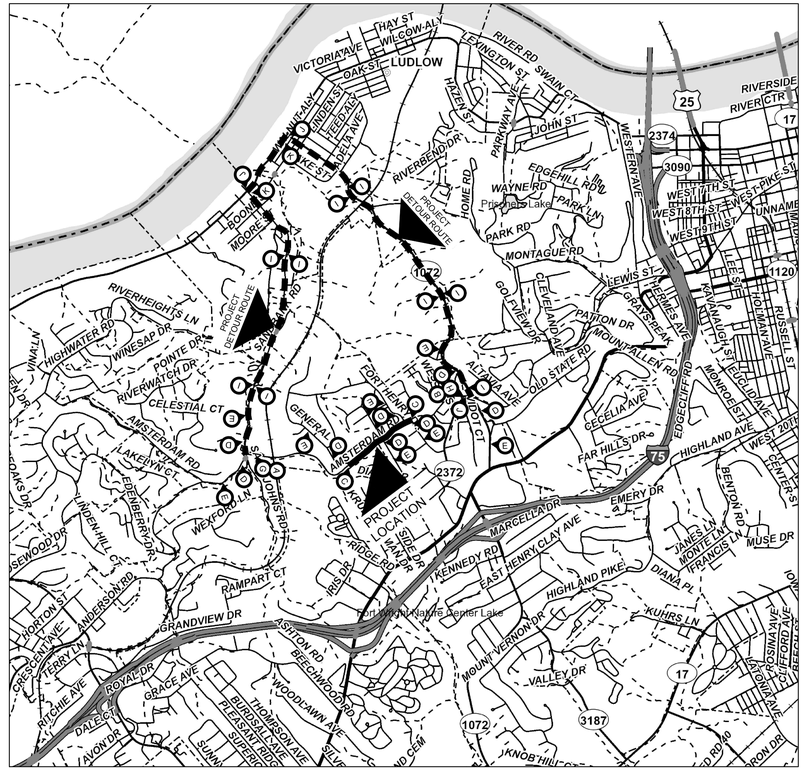
0' 400' 800'

SCALE: 1" = 400' HORIZ

PHASE 2



** - SIGN ON BARRICADE



PROJECT DETOUR PLAN

(IN PLACE THROUGHOUT CONSTRUCTION)

your trusted advisor consultants engineers architects planners

NO	REVISION	DATE

SCALE: AS SHOWN	DATE: 2/13/2020	DESIGNED BY: MHEL	DRAWN BY: JCOR	CHECKED BY: MHEL

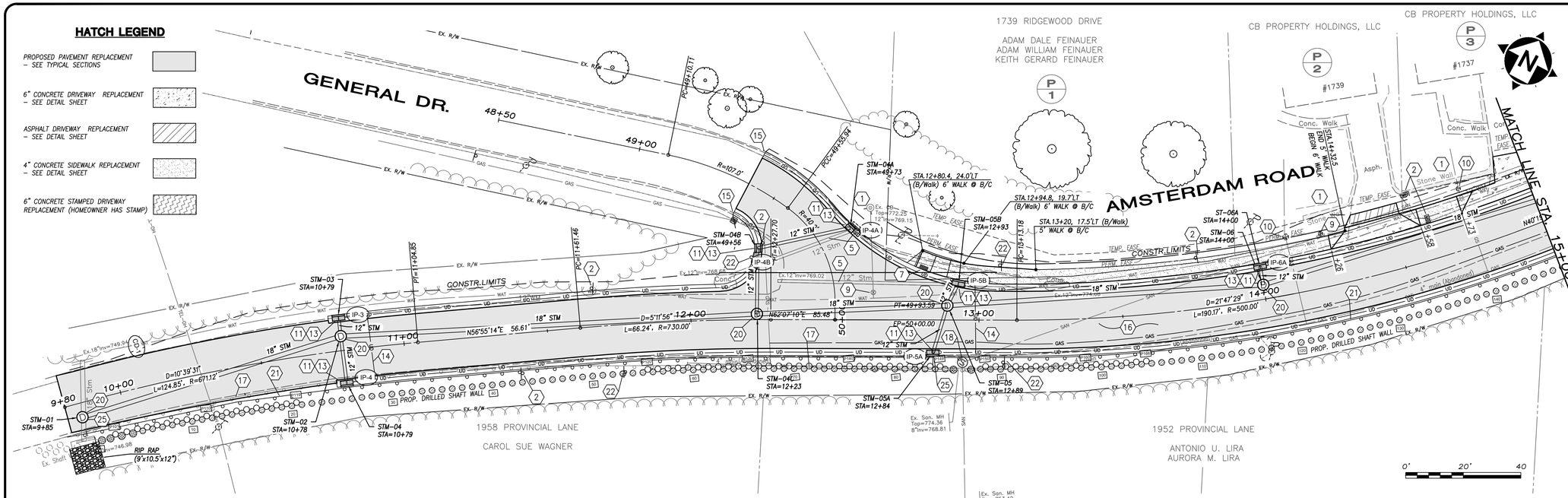
AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

DETOUR PLAN

ITEM NO:	
6-438	
PROJECT NO:	
160777	
DRAWING NAME	
MT-1	
SHEET	OF
6	40

HATCH LEGEND

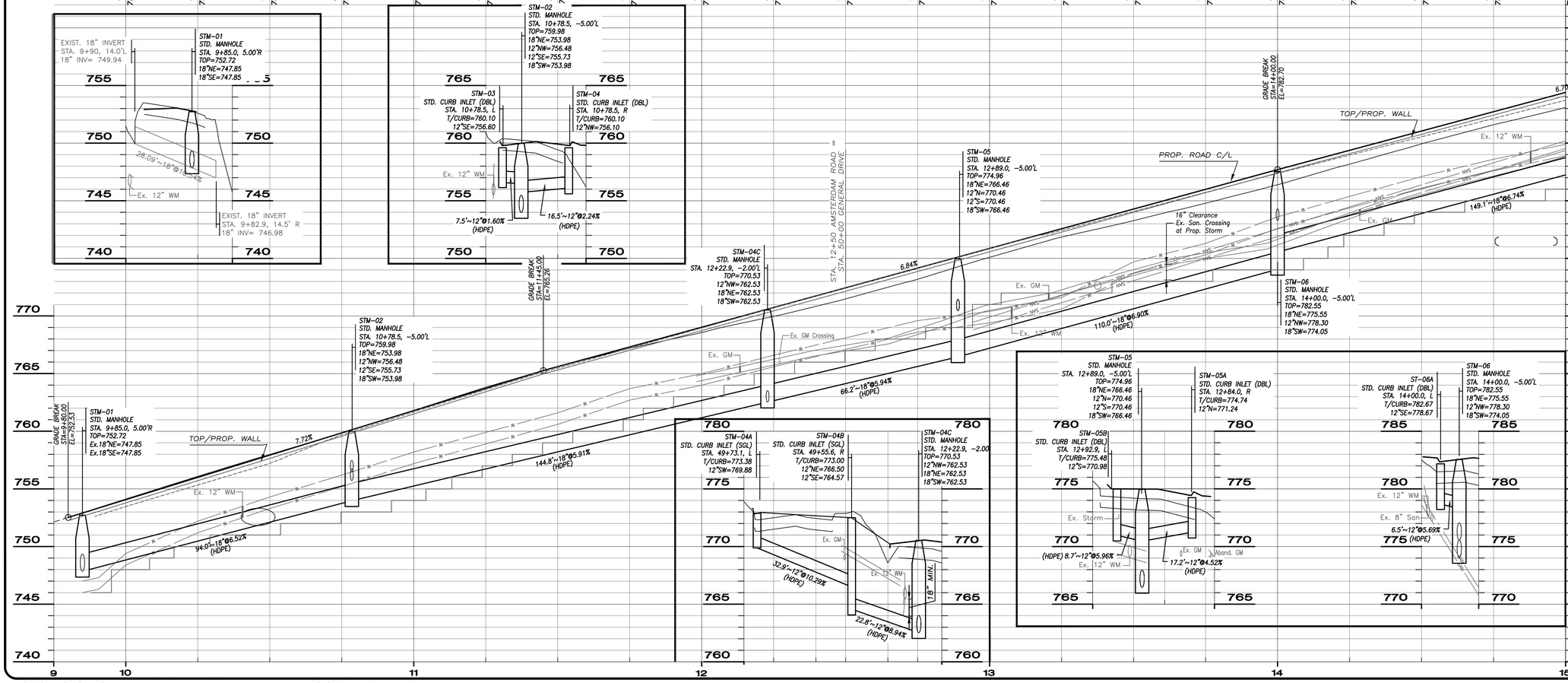
- PROPOSED PAVEMENT REPLACEMENT – SEE TYPICAL SECTIONS
- 6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- ASPHALT DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- 4" CONCRETE SIDEWALK REPLACEMENT – SEE DETAIL SHEET
- 6" CONCRETE STAMPED DRIVEWAY REPLACEMENT (HOMEOWNER HAS STAMP)



CONSTRUCTION NOTES

1. DO NOT DISTURB
2. REMOVE, SALVAGE, & REINSTALL/RELOCATE EXIST. SIGN OR MAILBOX (INCIDENTAL TO ITEM 202 – CLEARING AND GRUBBING)
3. REMOVE EXISTING STONE STRUCTURE
4. RELOCATE EXISTING GAS MAIN STRUCTURE
5. REMOVE EXISTING STORM SEWER PIPE/STRUCTURE, BACKFILL VOIDS W/ FLOWABLE FILL (INCIDENTAL TO PIPE OR CATCH BASIN REMOVED)
6. RECONNECT EXIST. STORM PIPE TO PROP. STORM STRUCTURE (INCIDENTAL TO STORM STRUCTURE)
7. PROPOSED CURB RAMP (PER DETAIL SHEET)
8. ADJUST STORM STRUCTURE TO GRADE PER SD1 SPEC'S.
9. ADJUST WV OR WM TO GRADE PER NKWD REQ'S
10. ADJUST GV OR GB TO GRADE PER DUKE REQ'S
11. INSTALL STANDARD CURB INLET/CATCH BASIN PER DETAIL SEE STORM SEWER PROFILE.
12. CONTRACTOR TO EXPOSE UTILITY PRIOR TO CONSTRUCTION TO DETERMINE ACTUAL LOCATION. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS.
13. CONNECT PROP. UNDERDRAIN TO STORM STRUCTURE
14. INSTALL TRANSVERSE UNDERDRAIN (DETAIL SHT 2). CONNECT TO PROP. UNDERDRAIN
15. TRANSITION FROM PROP'D CURB/GUTTER TO EX. CURB OVER 5'
16. REMOVE EXISTING ASPH AND CONC PAVEMENT
17. REMOVE EXISTING GUARDRAIL
18. ADJUST SANITARY MANHOLE TO GRADE PER SD1 REQUIREMENTS
19. REMOVE, RELOCATE & RECONSTRUCT STONE STRUCTURE
20. INSTALL STORM SEWER MANHOLE PER DETAIL. SEE STORM SEWER PROFILE.
21. INSTALL PROPOSED GUARDRAIL ("W" BEAM)
22. EXISTING SPECIAL ROAD SIGN TO BE REMOVED/RE-ERECTED.
23. UTILITY RELOCATED BY OTHERS
24. REMOVE PIPE UNDER ROADWAY, PLUG/ABANDON PIPE OUTSIDE ROADWAY (INCIDENTAL TO PIPE REMOVAL)
25. CONNECT PIER WALL UD TO PROP. STORM STRUCTURE

SCALE: 1" = 20' HORZ
1" = 05' VERT



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NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

AMSTERDAM ROAD
STA. 10+00 TO STA. 15+00

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PNP-1
SHEET 7 OF 40

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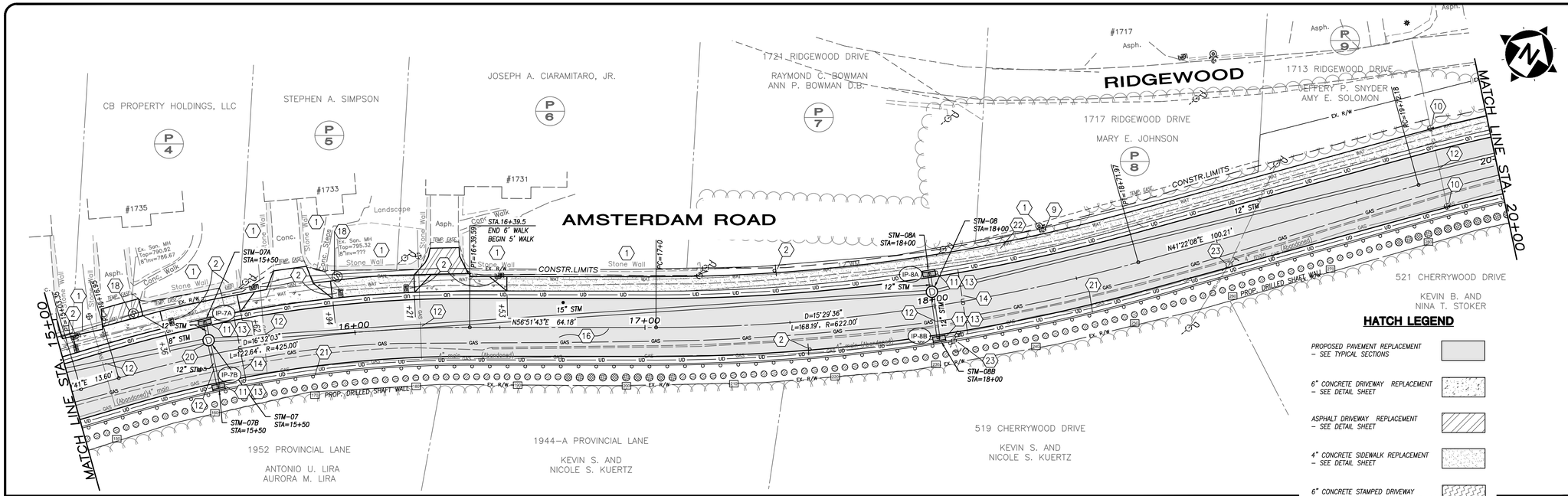

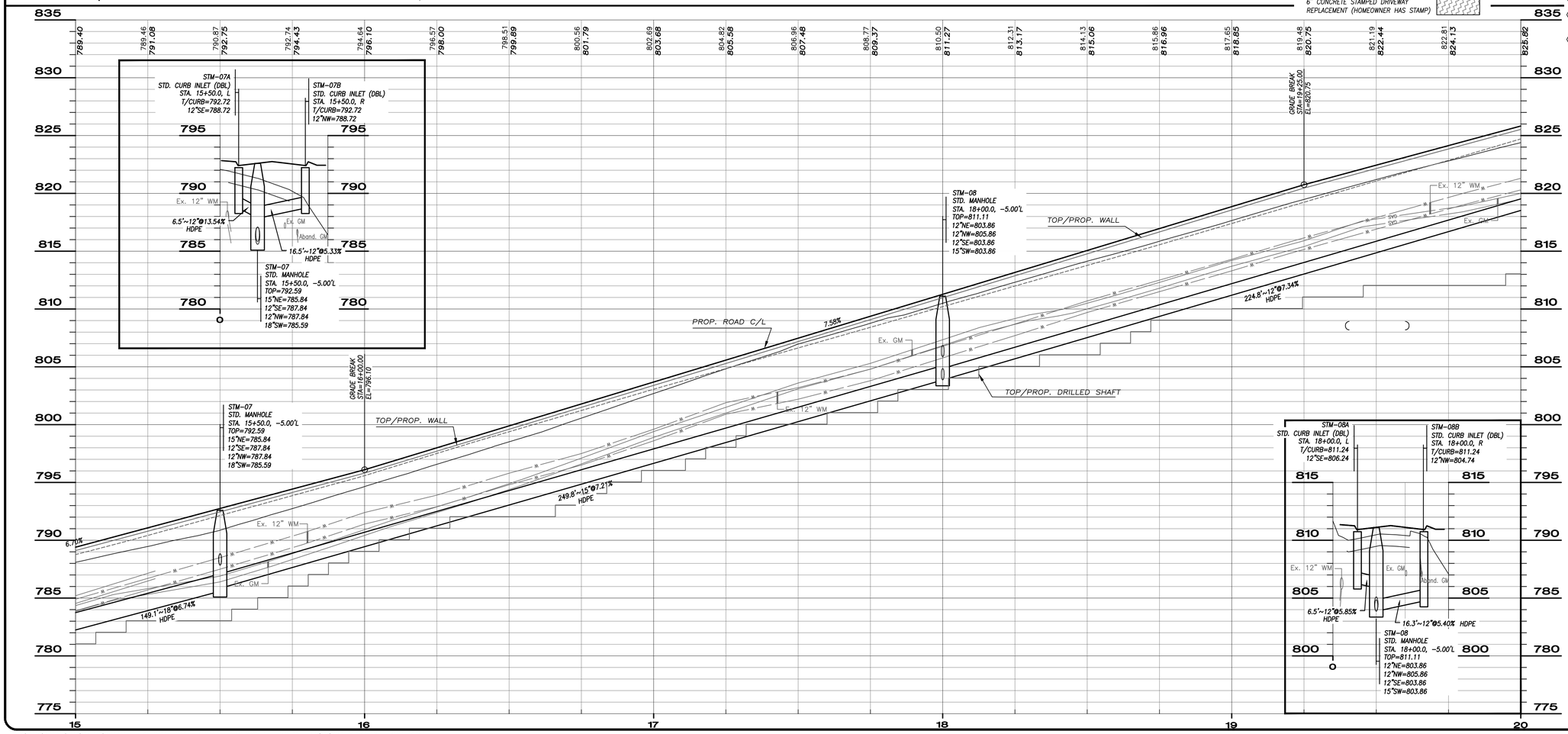

CONSTRUCTION NOTES

1. DO NOT DISTURB
2. REMOVE, SALVAGE, & REINSTALL/RELOCATE EXIST. SIGN OR MAILBOX (INCIDENTAL TO ITEM 202 - CLEARING AND GRUBBING)
3. REMOVE EXISTING STONE STRUCTURE
4. RELOCATE EXISTING GAS MAIN STRUCTURE
5. REMOVE EXISTING STORM SEWER PIPE/STRUCTURE, BACKFILL VOIDS W/ FLOWABLE FILL (INCIDENTAL TO PIPE OR CATCH BASIN REMOVED)
6. RECONNECT EXIST. STORM PIPE TO PROP. STORM STRUCTURE (INCIDENTAL TO STORM STRUCTURE)
7. PROPOSED CURB RAMP (PER DETAIL SHEET)
8. ADJUST STORM STRUCTURE TO GRADE PER SD1 SPEC'S.
9. ADJUST WV OR WM TO GRADE PER NKWD REQ'S
10. ADJUST GV OR GB TO GRADE PER DUKE REQ'S
11. INSTALL STANDARD CURB INLET/CATCH BASIN PER DETAIL. SEE STORM SEWER PROFILE.
12. CONTRACTOR TO EXPOSE UTILITY PRIOR TO CONSTRUCTION TO DETERMINE ACTUAL LOCATION. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS.
13. CONNECT PROP. UNDERDRAIN TO STORM STRUCTURE
14. INSTALL TRANSVERSE UNDERDRAIN (DETAIL SHT 2). CONNECT TO PROP. UNDERDRAIN
15. TRANSITION FROM PROP'D CURB/GUTTER TO EX. CURB OVER 5'
16. REMOVE EXISTING ASPH AND CONC PAVEMENT
17. REMOVE EXISTING GUARDRAIL
18. ADJUST SANITARY MANHOLE TO GRADE PER SD1 REQUIREMENTS
19. REMOVE, RELOCATE & RECONSTRUCT STONE STRUCTURE
20. INSTALL STORM SEWER MANHOLE PER DETAIL. SEE STORM SEWER PROFILE.
21. INSTALL PROPOSED GUARDRAIL ("W" BEAM)
22. EXISTING SPECIAL ROAD SIGN TO BE REMOVED/RE-ERECTED.
23. UTILITY RELOCATED BY OTHERS
24. REMOVE PIPE UNDER ROADWAY, PLUG/ABANDON PIPE OUTSIDE ROADWAY (INCIDENTAL TO PIPE REMOVAL)
25. CONNECT PIER WALL UD TO PROP. STORM STRUCTURE

HATCH LEGEND

- PROPOSED PAVEMENT REPLACEMENT – SEE TYPICAL SECTIONS
- 6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- ASPHALT DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- 4" CONCRETE SIDEWALK REPLACEMENT – SEE DETAIL SHEET
- 6" CONCRETE STAMPED DRIVEWAY REPLACEMENT (HOMEOWNER HAS STAMP)

0' 20' 40

SCALE: 1" = 20' HORZ
1" = 05' VERT

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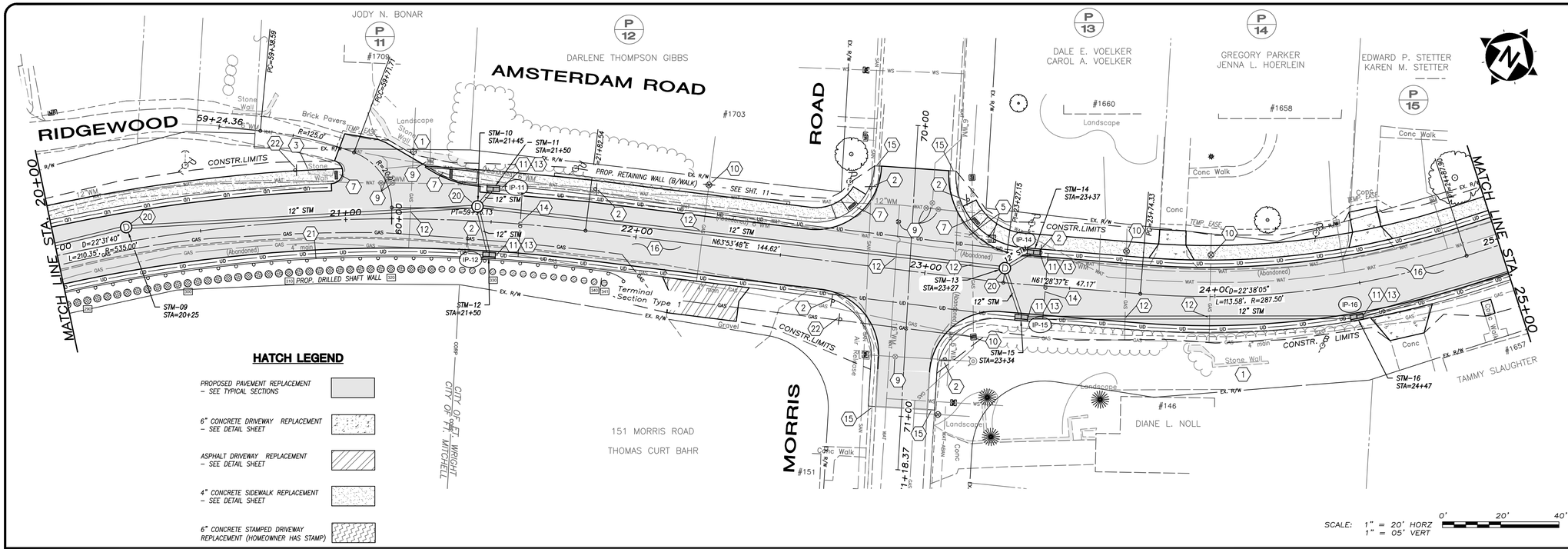
REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD
RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

AMSTERDAM ROAD
STA. 15+00 TO STA. 20+00

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PNP-2
SHEET 8 OF 40



HATCH LEGEND

- PROPOSED PAVEMENT REPLACEMENT – SEE TYPICAL SECTIONS
- 6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- ASPHALT DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- 4" CONCRETE SIDEWALK REPLACEMENT – SEE DETAIL SHEET
- 6" CONCRETE STAMPED DRIVEWAY REPLACEMENT (HOMEOWNER HAS STAMP)

SCALE: 1" = 20' HORZ, 1" = 05' VERT (0', 20', 40')

CONSTRUCTION NOTES

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2. REMOVE, SALVAGE, & REINSTALL/RELOCATE EXIST. SIGN OR MAILBOX (INCIDENTAL TO ITEM 202 – CLEARING AND GRUBBING)
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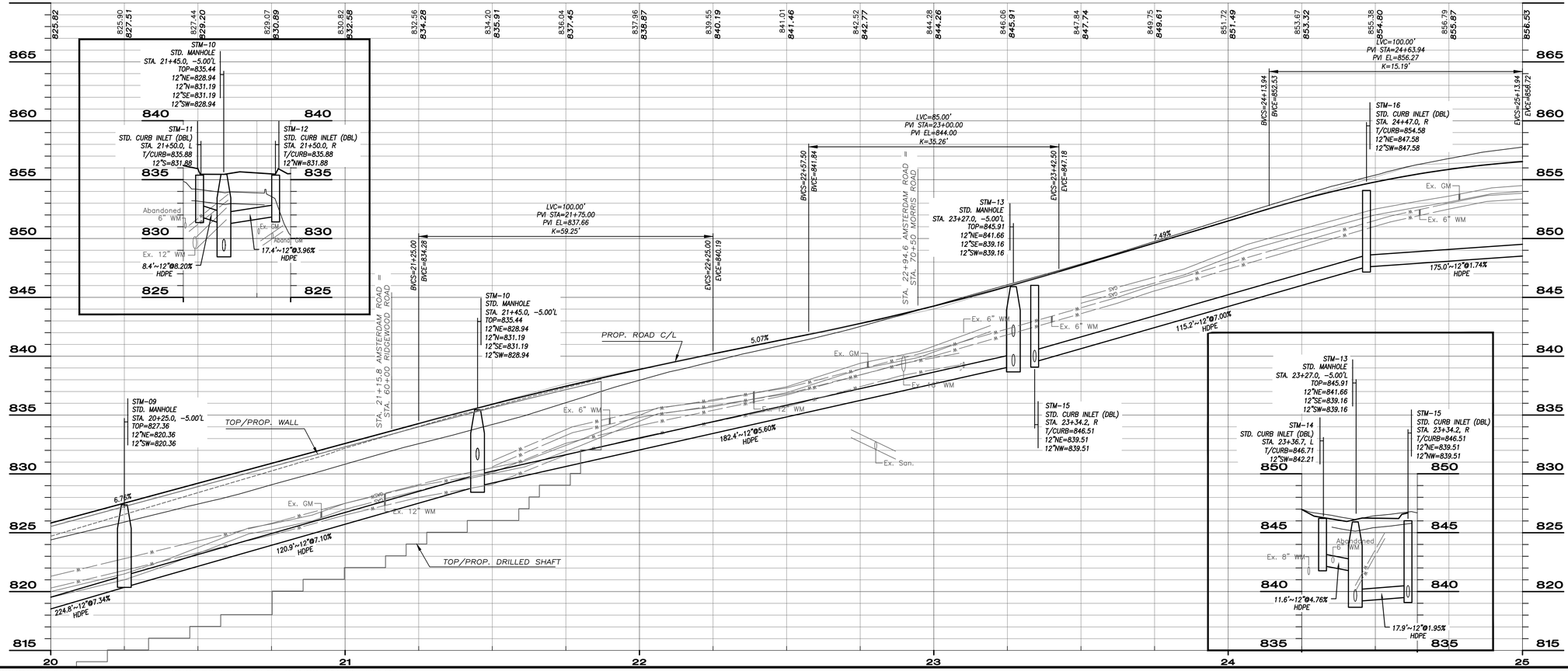

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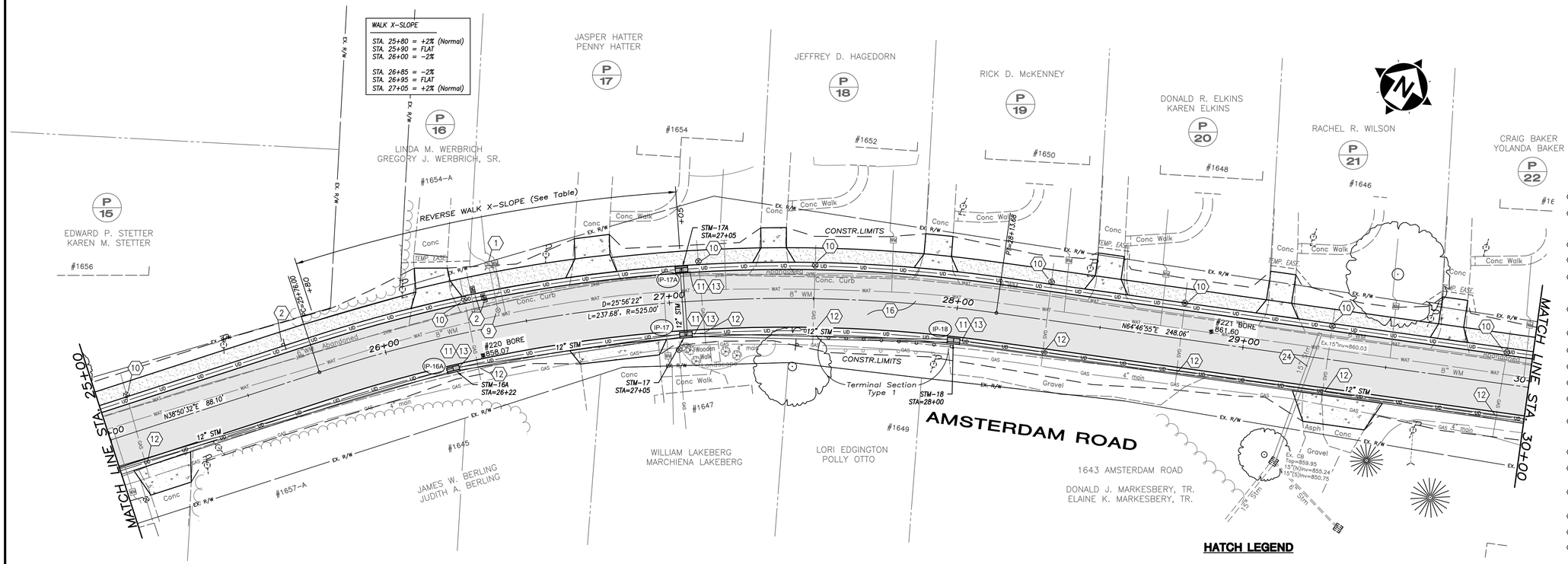
NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD
RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

AMSTERDAM ROAD
STA. 20+00 TO STA. 25+00

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PNP-3
SHEET 9 OF 40



HATCH LEGEND

- PROPOSED PAVEMENT REPLACEMENT – SEE TYPICAL SECTIONS
- 6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- ASPHALT DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
- 4" CONCRETE SIDEWALK REPLACEMENT – SEE DETAIL SHEET
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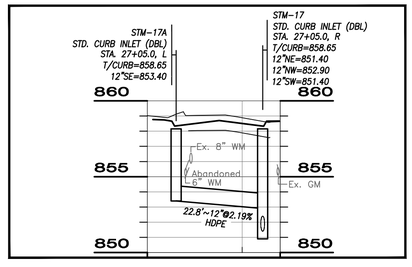

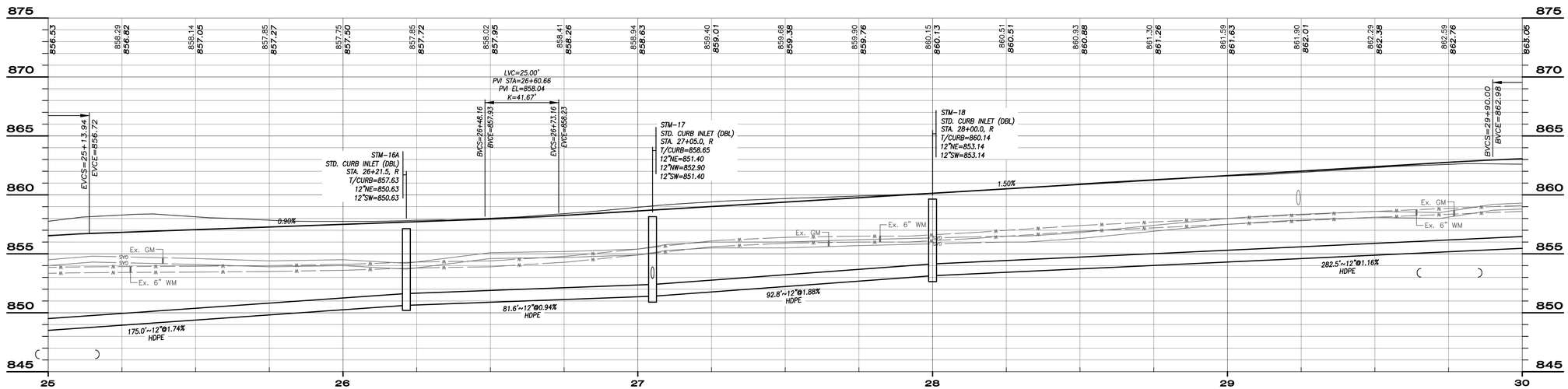

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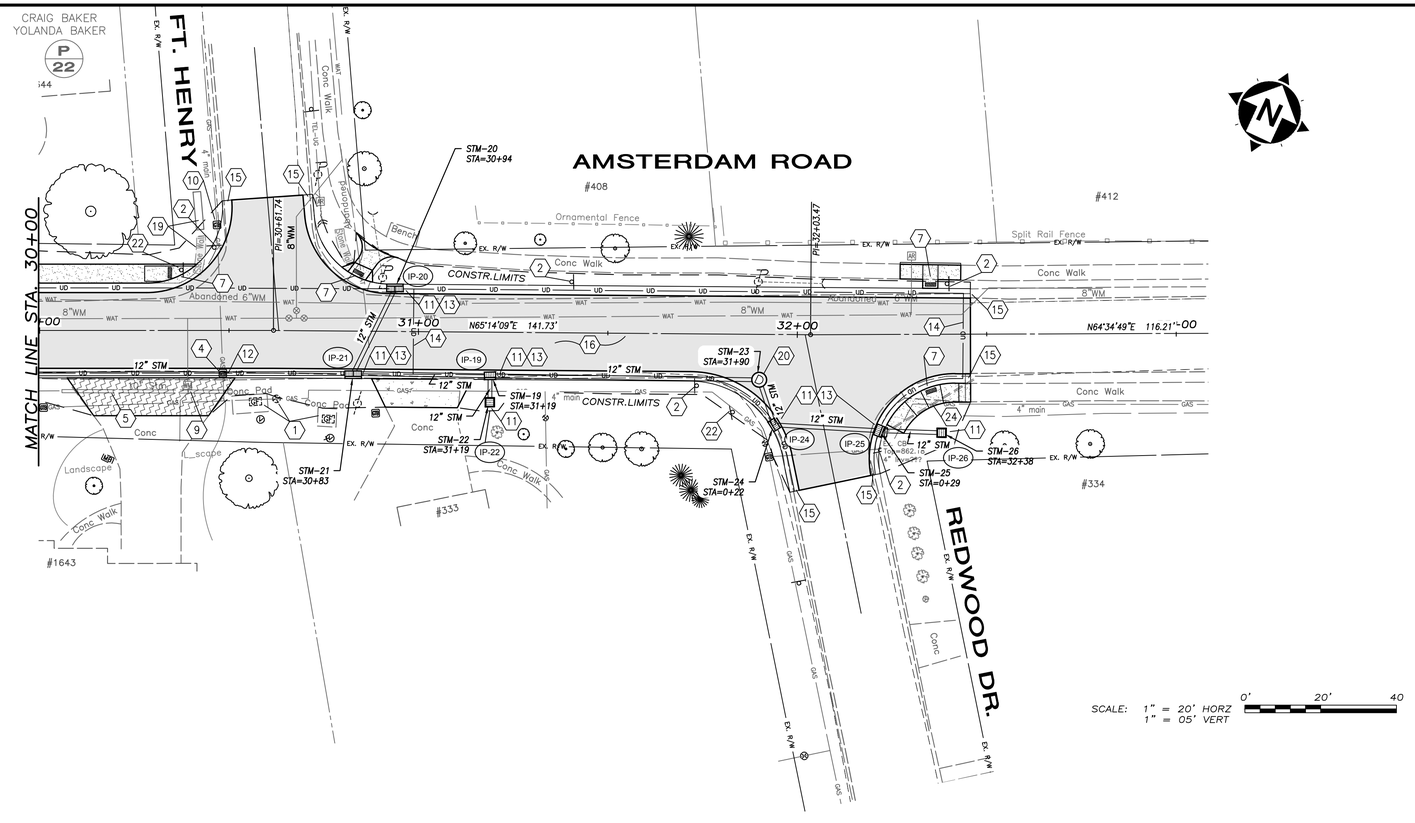
NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD
RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

AMSTERDAM ROAD
STA. 25+00 TO STA. 30+00

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PNP-4
SHEET: 10 OF: 40



SCALE: 1" = 20' HORZ, 1" = 05' VERT — 0' 20' 40

HATCH LEGEND

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- 6" CONCRETE DRIVEWAY REPLACEMENT – SEE DETAIL SHEET
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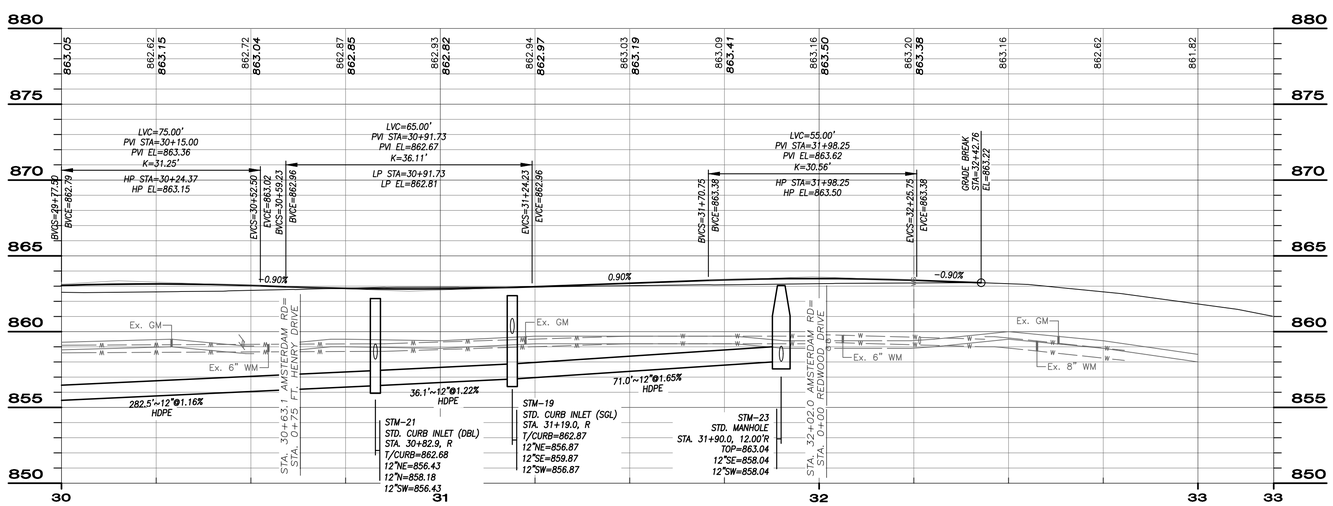

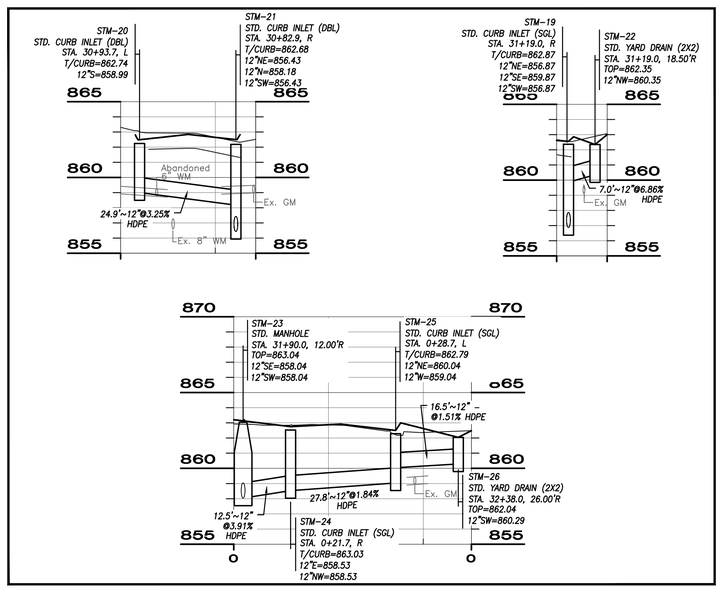

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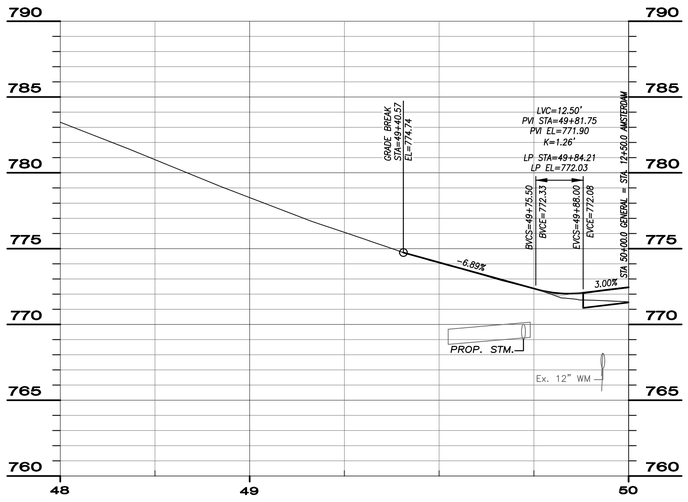
NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

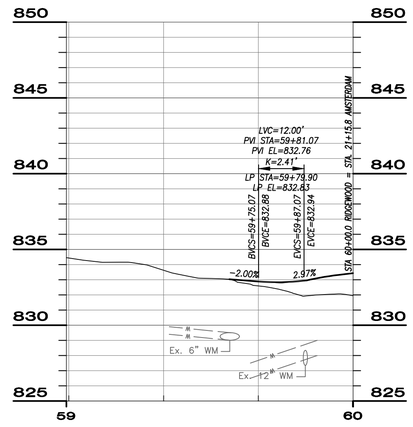
AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

AMSTERDAM ROAD
STA. 30+00 TO STA. 32+43

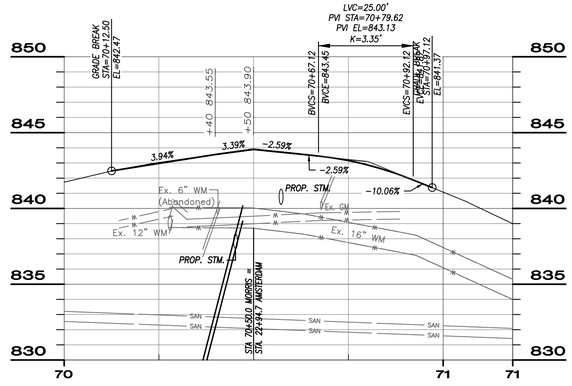
ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PNP-5
SHEET: 11 OF 40



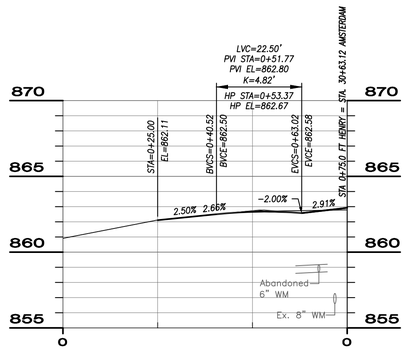
GENERAL DRIVE



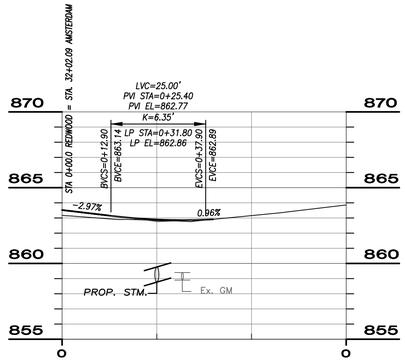
RIDGEWOOD DRIVE



MORRIS ROAD



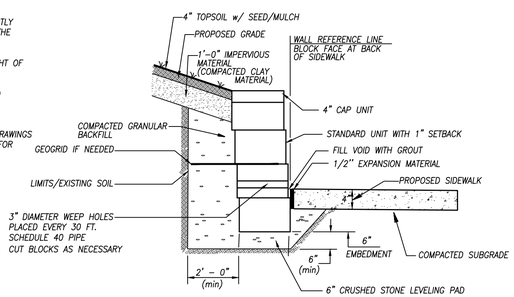
FORT HENRY DRIVE



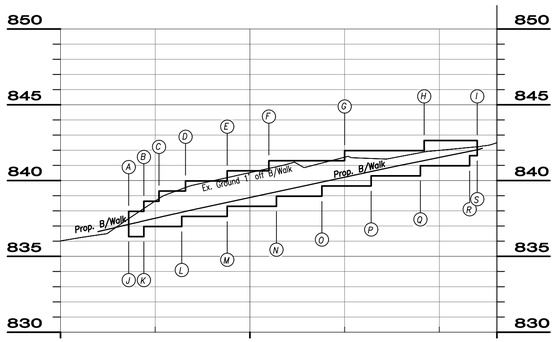
REDWOOD DRIVE

NOTES:

1. CONSTRUCTION OF THE WALL SYSTEM SHALL STRICTLY FOLLOW THE GUIDELINES AND REQUIREMENTS OF THE MANUFACTURE.
2. SEE PLAN AND CROSS SECTIONS FOR LIMITS/HEIGHT OF WALL.
3. THE BID QUANTITY IS MEASURED ON THE EXPOSED SQUARE FOOTAGE OF THE VERTICAL FACE.
4. THE WALL MUST BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF KENTUCKY. SHOP DRAWINGS OF THE WALL MUST BE SUBMITTED TO ENGINEER FOR REVIEW.



MODULAR BLOCK WALL DETAIL
N.T.S.



RETAINING WALL @ B/WALK
(STA. 21+68 TO 22+60 - 17.5' LT)

	A	B	C	D	E	F	G	H	I
STATION	21+68	21+72	21+76	21+83	21+94	22+05	22+25	22+46	22+60
TOP/WALL	837.97	838.64	839.31	839.97	840.64	841.31	841.97	842.64	842.64
BACK/WALK	837.11	837.35	837.57	837.97	838.56	839.15	840.23	841.32	842.04

	J	K	L	M	N	O	P	Q	R	S
STATION	21+68	21+72	21+82	21+94	22+07	22+19	22+32	22+45	22+58	22+60
BOT/WALL	836.31	836.31	836.97	837.64	838.31	838.97	839.64	840.31	840.97	841.64

0' 20' 40

SCALE: 1" = 20' HORZ
1" = 05' VERT

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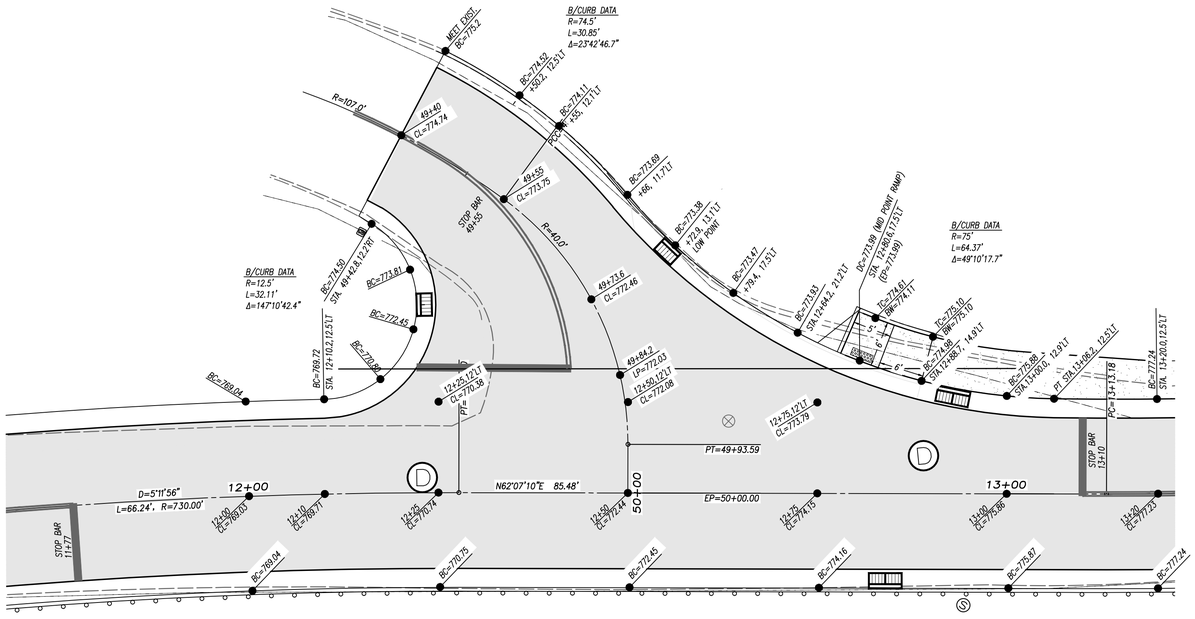
NO	REVISION	DATE

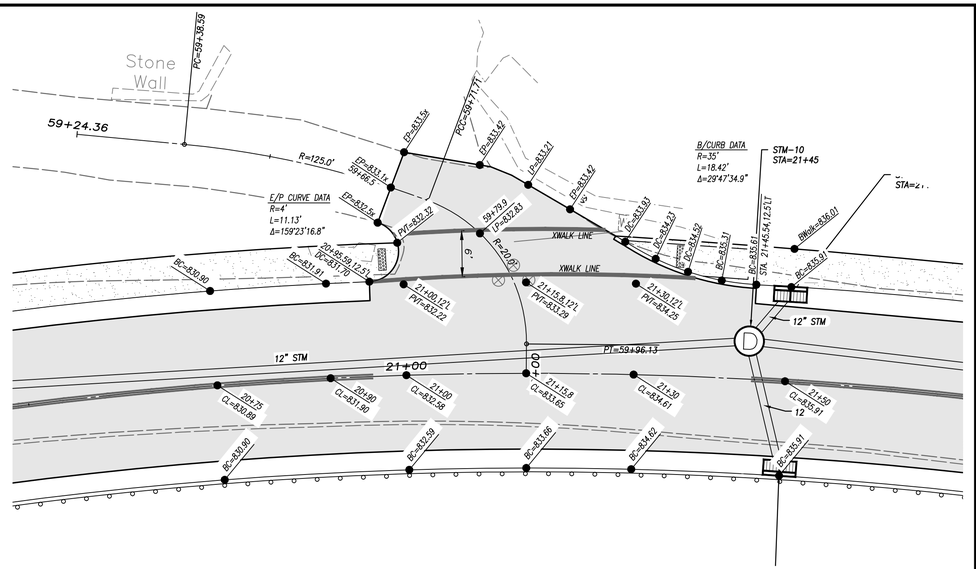
SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

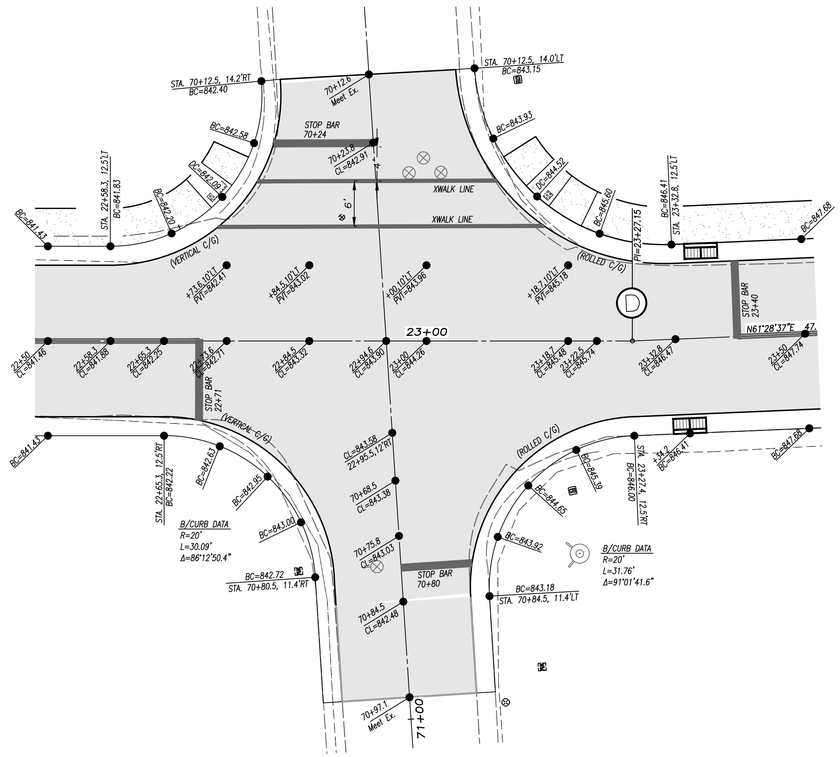
AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

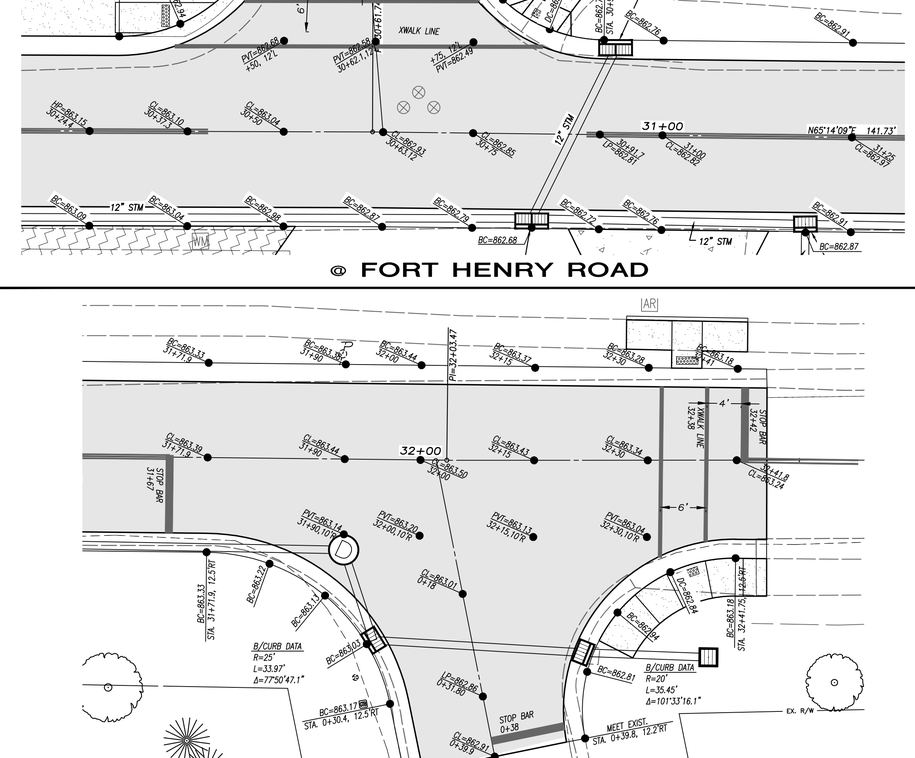
SIDE STREET PROFILES AND MODULAR WALL DETAIL

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: PRF
SHEET: 12 OF: 40









LEGEND
BC = BACK OF FULL HT. CURB
DC = BACK OF DROP CURB (@ CURB RAMP)
CL = CENTERLINE ELEV
HP = HIGH POINT
LP = LOW POINT
PVT = PAVEMENT SPOT ELEV

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NO	REVISION	DATE

SCALE: AS SHOWN
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CHECKED BY: MHEL

AMSTERDAM ROAD RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

INTERSECTION DETAILS

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: INT
SHEET 13 OF 40

GRATING – THE DESIGN SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THE ONE SHOWN HEREON.
MINIMUM WEIGHT 120 POUNDS

CONCRETE – CAST–IN–PLACE, TO BE CLASS C. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE AND BE MARKED WITH THE CATCH BASIN NUMBER.

REINFORCING – No. 4 BARS 6" CENTER TO CENTER. FOR STANDARD No. 2–3 USE 8 BARS.

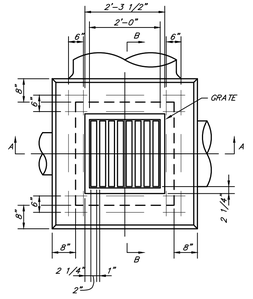
OPENINGS – FOR PIPES SHALL BE O.D. +2" WHEN PREFABRICATED OR FIELD CUT.

LOCATION – AND ELEVATION WHEN GIVEN ON THE PLANS IS TOP CENTER OF THE GRATE.

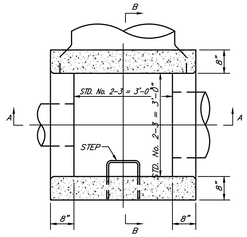
SIDE INLETS – SHALL BE PROVIDED ONLY WHEN SPECIFIED ON THE PLANS.

STEPS – SHALL BE PROVIDED WHERE THE DEPTH EXCEEDS 72" AND SHALL MEET THE REQUIREMENTS OF ODOT MH–3.

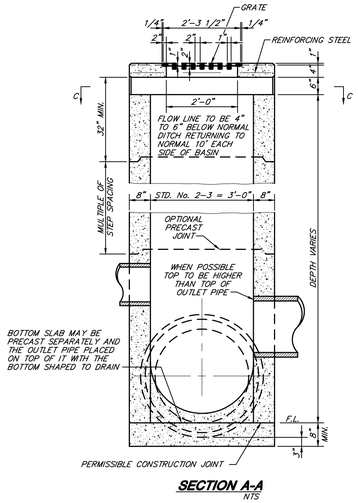
INLETS OVER 12' IN DEPTH – SHALL BE PRECAST OR CAST–IN–PLACE CONCRETE; REINFORCED WITH No. 4 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONTALLY WITH 2" CLEARANCE FROM INSIDE WALL FACE.



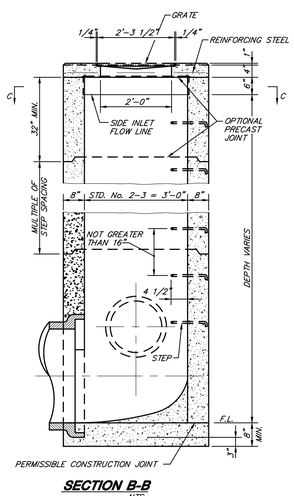
PLAN
NTS



SECTION C–C
NTS



SECTION A–A
NTS



SECTION B–B
NTS

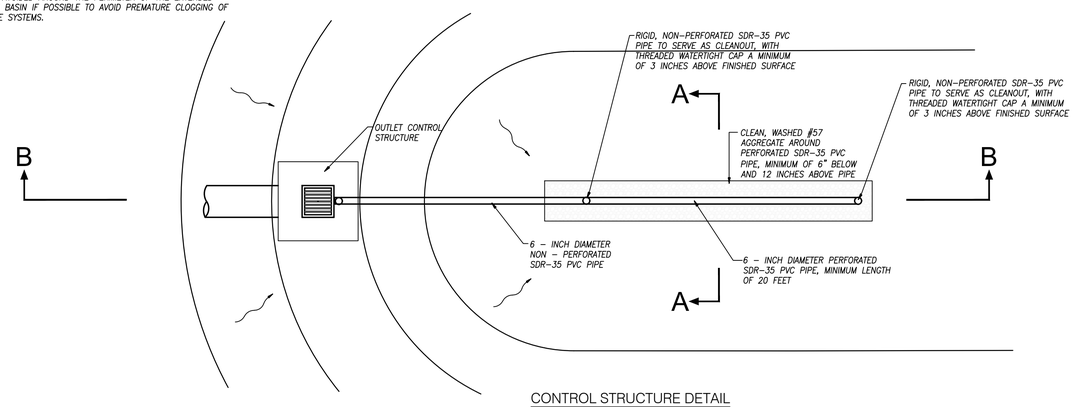
ODOT CB 2–3

NOTES:

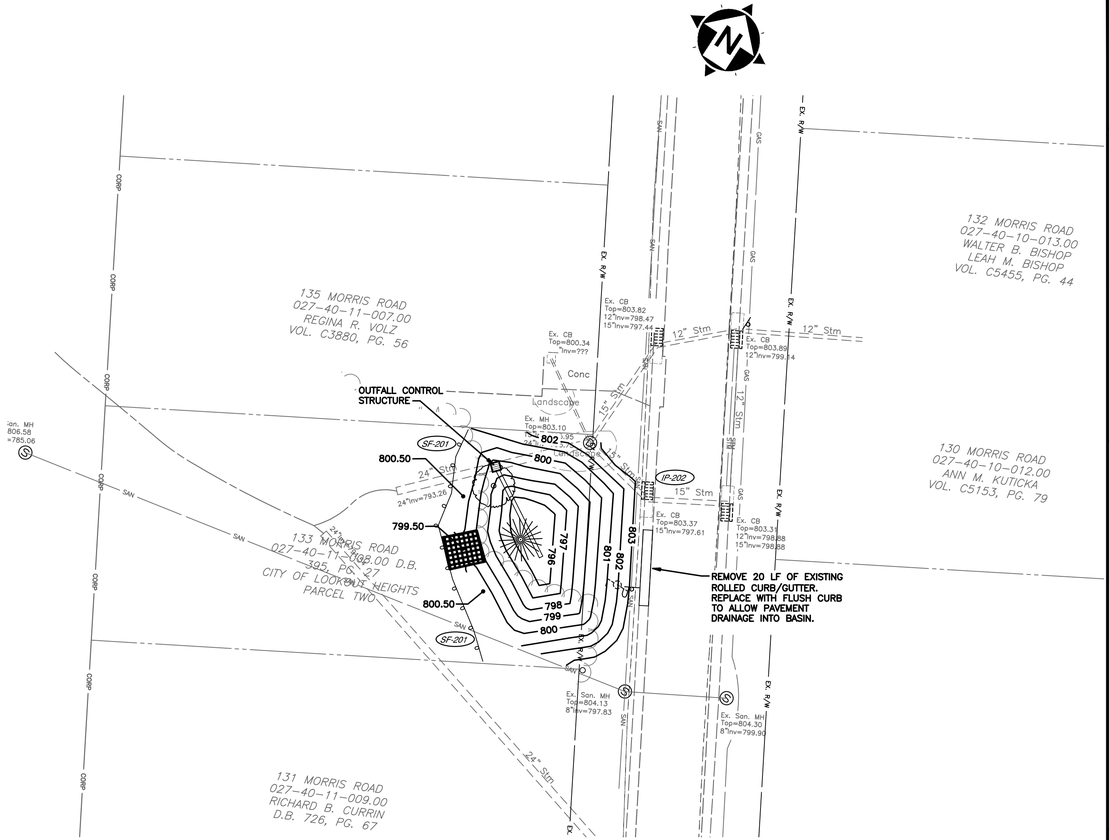
APPLICABILITY: THIS DETAIL SHALL BE APPLICABLE FOR ALL DETENTION BASINS THAT INCLUDE ORIFICES LESS THAN OR EQUAL TO 6" IN DIAMETER. FOR DRAINAGE AREAS THAT EXCEED 100 ACRES, OR FOR ORIFICES GREATER THAN 6 INCHES IN DIAMETER, CONSULT WITH SANITATION DISTRICT NO. 1 PLAN REVEW STAFF.

UNDERDRAIN: PERFORATED UNDERDRAIN SHALL BE SDR–35 PVC PIPE WITH A MINIMUM OF THREE ROWS OF PRE–DRILLED PERFORATIONS. THE TOTAL OPENING OF ALL PERFORATIONS COMBINED SHALL BE SUFFICIENT TO ALLOW THE UNDERDRAIN PIPE TO DISCHARGE AT FULL CAPACITY, AS WOULD OCCUR IF THERE WAS NO ORIFICE RESTRICTION. THE SIZE OF THE PERFORATIONS SHALL BE SMALL ENOUGH TO PREVENT SURROUNDING AGGREGATE MATERIAL FROM TRAVELING THROUGH THE PERFORATIONS.

VEGETATION: INSTALLATION OF TREES OR OTHER LEAFY VEGETATION SHALL BE AVOIDED AROUND THE PERIMETER OF THE EXTENDED DETENTION BASIN IF POSSIBLE TO AVOID PREMATURE CLOGGING OF AGGREGATE SYSTEMS.



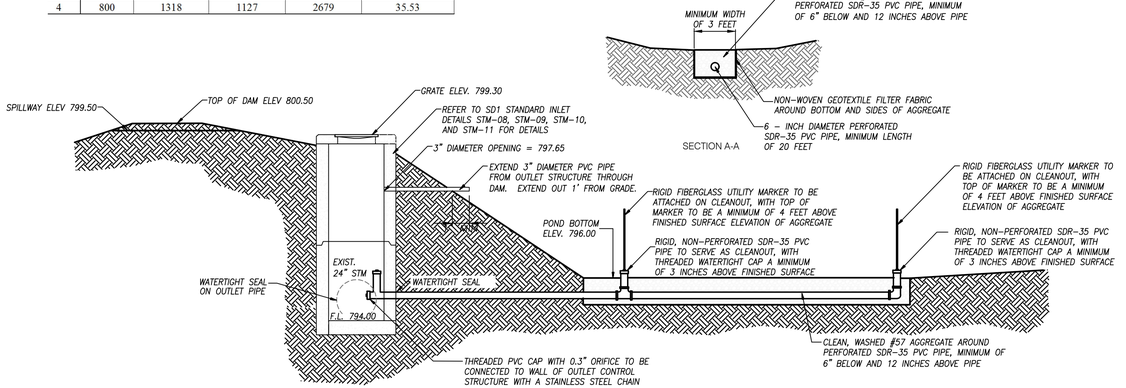
CONTROL STRUCTURE DETAIL
PLAN



TURF REINFORCING MAT – TRM C350 BY NORTH AMERICAN GREEN, OR APPROVED EQUAL

Table 4: Detention Basin Stage-Storage Table

Stage	Elevation	Contour Area (SF)	Incremental Storage (CF)	Total Storage (CF)	Total Discharge (CFS)
0	796	179	0	0	0
1	797	375	271	271	0.002
2	798	631	497	768	0.115
3	799	947	784	1552	0.266
4	800	1318	1127	2679	35.53



CONTROL STRUCTURE DETAIL
SECTION B-B

SECTION A-A

SCALE: 1" = 20' HORZ

0' 20' 40

your trusted advisor consultants engineers architects planners

NO	REVISION	DATE

SCALE: AS SHOWN
DATE: 2/13/2020
DESIGNED BY: MHEL
DRAWN BY: JCOR
CHECKED BY: MHEL

AMSTERDAM ROAD
RECONSTRUCTION
CITY OF FORT WRIGHT, KY.

DETENTION BASIN
#133 MORRIS ROAD

ITEM NO: 6-438
PROJECT NO: 160777
DRAWING NAME: DTN
SHEET: 14 OF: 40

H:\2016\160777\DWG\SHEETS\160777 – PLAN PROFILE.DWG – 160777 – PLAN PROFILE – DTN – 12/19/2019 7:59:47 AM – JAMES CORNELL