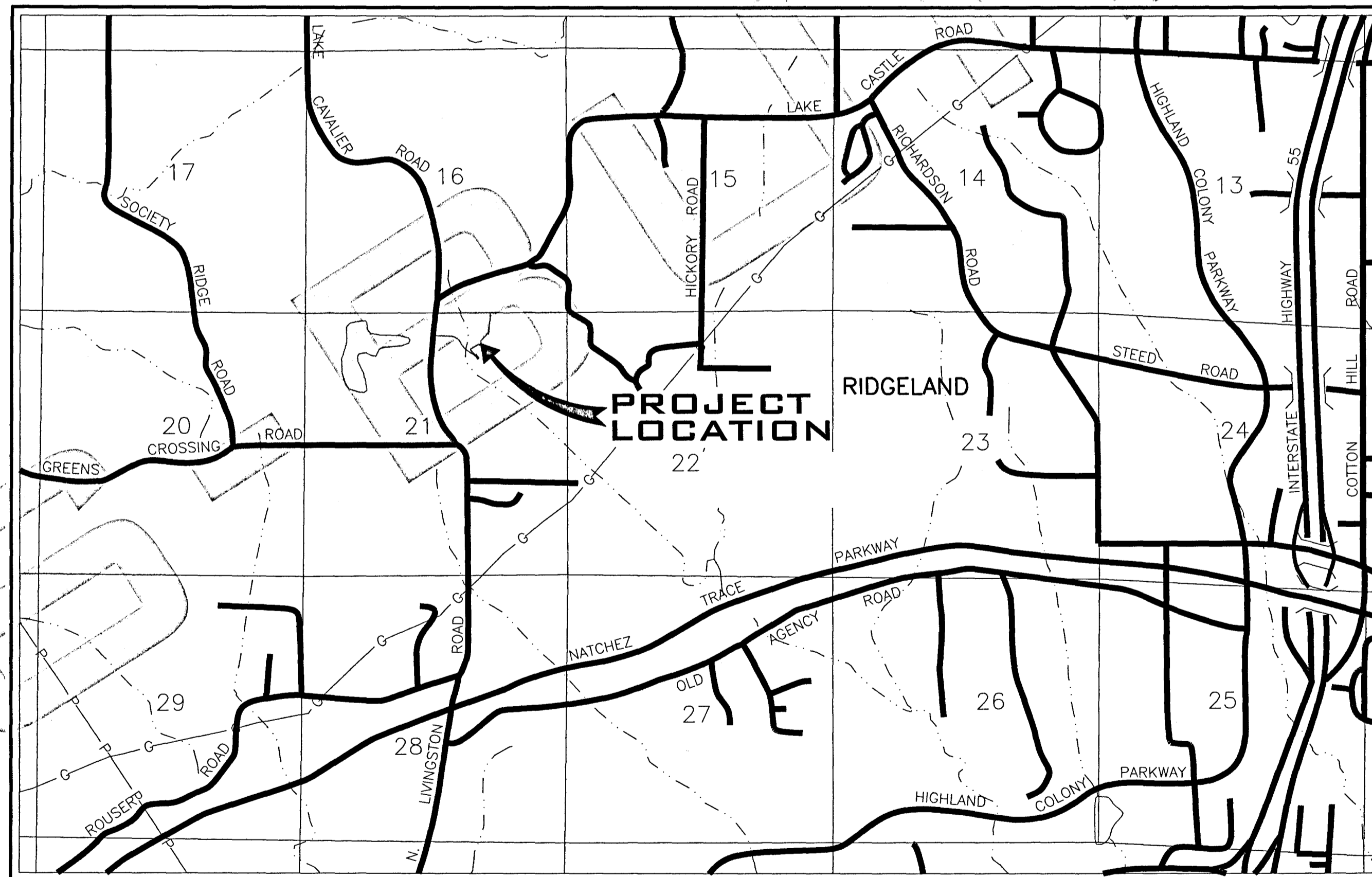
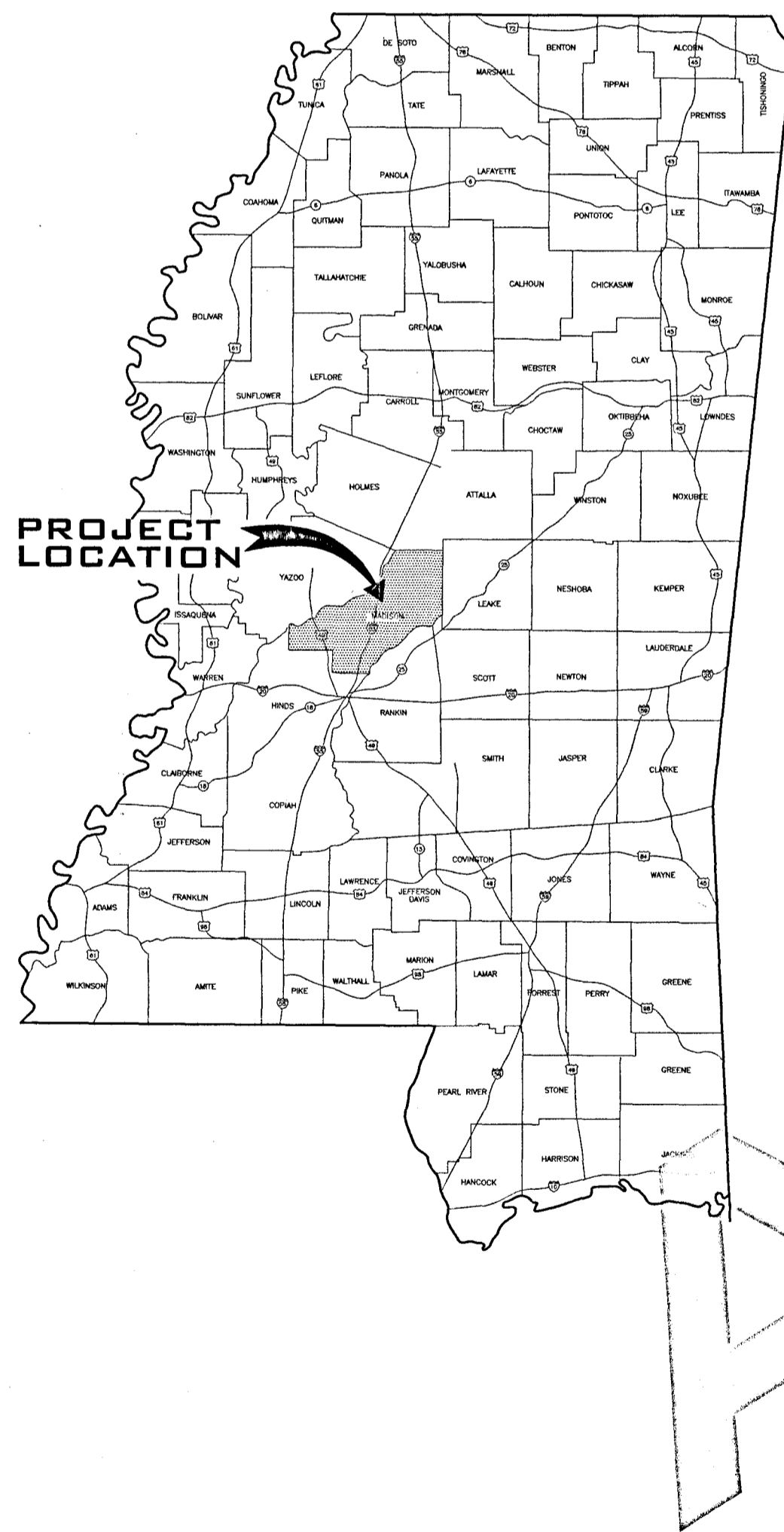


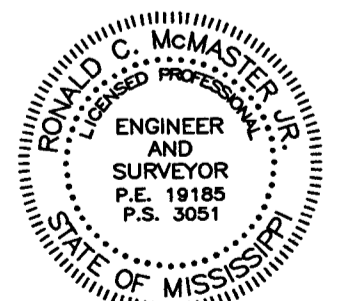
# CONSTRUCTION PLANS FOR BRIDGEWATER 11D

N 1/2 OF SECTION 21, T7N-R1E,  
MADISON COUNTY, MISSISSIPPI

A DEVELOPMENT  
OF  
AUGUSTA 185, LLC  
P.O. BOX 2147  
MADISON, MS 39130

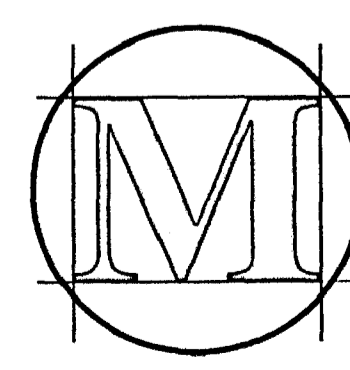


DRAWING INDEX	
TITLE	SHEET NO.
COVER SHEET	1
GENERAL NOTES	2
GEOMETRIC LAYOUT	3
SPOT ELEVATIONS	4
STORM SEWER LAYOUT	5
DETENTION LAYOUT	6
WATER AND SEWER LAYOUT	7
EROSION CONTROL	8
PLAN & PROFILE (HERON'S CIRCLE)	9
PLAN & PROFILE (HERON'S COVE)	10
MISCELLANEOUS DETAILS	11
MISCELLANEOUS DETAILS	12
SEWER DETAILS	13
WATER DETAILS	14



VICINITY MAP  
**PWPP-00239**

**CAUTION**  
The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes to the plans must be in writing and must be approved by the preparer of these plans.



**M/Master & Associates, Inc.**  
CIVIL ENGINEERS & LAND SURVEYORS  
212 WATERFORD SQUARE  
SUITE 300  
MADISON, MS 39110  
601.605.1090

**DEMOLITION NOTES**

- DEMOLITION AND REMOVAL OPERATIONS SHALL COMMENCE ONLY AFTER ALL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND FUNCTIONAL.
- PROVIDE NEAT AND STRAIGHT SAWCUTS OF EXISTING PAVEMENT ALONG ALL LIMITS OF PAVEMENT DEMOLITION.
- ALL DEMOLISHED MATERIALS BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED. DISPOSE OF OFF THE OWNER'S PROPERTY IN A LEGAL MANNER.
- ALL PAVEMENT, BASE COURSE, SIDEWALKS, CURBS, BUILDINGS, FOUNDATIONS, ETC., IN THE AREA TO BE REMOVED SHALL BE REMOVED TO FULL DEPTH. EXISTING BASE COURSE MATERIALS MAY BE WORKED INTO THE NEW PAVEMENT OR BUILDING SUBGRADE PROVIDED THAT THE GRADATION, CONSISTENCY, COMPACTION, SUBGRADE CONDITION, ETC., ARE IN ACCORDANCE WITH THE SPECIFICATIONS. BASE COURSE MATERIALS SHALL NOT BE WORKED INTO THE SUBGRADE OF AREAS TO RECEIVE PLANTING.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK.
- THE CONTRACTOR SHALL USE WATER SPRINKLING AND OTHER SUITABLE METHODS AS NECESSARY TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION WORK.
- ALL ITEMS OF CONSTRUCTION REMAINING AND NOT SPECIFICALLY MENTIONED THAT INTERFERE WITH THE NEW CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
- CONTRACTOR SHALL PROVIDE PROTECTION TO ALL STREETS, FENCES, TREES, UTILITIES AND STRUCTURES THAT ARE TO REMAIN. CONTRACTOR-CAUSED DAMAGE SHALL BE REPAIRED TO MATCH AT NO ADDITIONAL COST TO THE OWNER.
- CAVITIES LEFT BY STRUCTURE REMOVAL SHALL BE BACKFILLED WITH SATISFACTORY MATERIAL AND COMPACTED 98% OF MAXIMUM DENSITY PER ASTM D698 OR PER GEOTECHNICAL RECOMMENDATIONS IN THE DOCUMENTS.
- CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK. COORDINATE WITH LOCAL UTILITY COMPANIES PRIOR TO UTILITY DISCONNECT.
- NOTIFY LOCAL UTILITY LOCATOR SERVICE OF INTENDED DEMOLITION OPERATIONS. SEE GENERAL UTILITY NOTE #4.
- EXISTING INFORMATION/TOPOGRAPHIC SURVEY WAS PREPARED BY McMASTER & ASSOCIATES, INC.
- PAVEMENT MARKINGS TO BE REMOVED SHALL BE PAINTED OVER TO MATCH PAVEMENT OR REMOVED WITH WIRE BRUSHINGS.
- EXCEPT AS SHOWN, NO TREES SHALL BE REMOVED AND/OR VEGETATION DISTURBED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
- TREE PROTECTION SHALL CONSIST OF THE FOLLOWING STEPS:
  - CONTRACTOR SHALL HIRE A LICENSED LANDSCAPE CONTRACTOR TO OVERSEE TREE PROTECTION.
  - PRIOR TO ANY GRADING OPERATIONS, LOCATE TREES TO BE PROTECTED AND NEATLY CUT ROOTS TO A DEPTH OF 30" AT THE DIMENSIONED LIMITS SHOWN USING A UTILITY TRENCHING MACHINE.
  - TREAT EXPOSED ROOTS WITH A HORTICULTURAL TREE PRUNING PROTECTION PRODUCT.
  - PRUNE TREE LIMBS BY THE SAME PROPORTIONAL PERCENTAGE AS TREE ROOTS REMOVED (I.E., 25% OF ROOTS REMOVED SHALL RESULT IN 25% OF TREE LIMBS REMOVED).
  - INSTALL A CONSTRUCTION FENCE TO THE LIMITS SHOWN AT LEAST 4' IN HEIGHT.
  - BEGIN CLEARING AND GRADING OPERATIONS.

**GENERAL UTILITY NOTES**

- WATER AND SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL CODES AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PAY ALL FEES AND OBTAIN ALL PERMITS.
- ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND ARE BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS FROM THE FACILITY. ADDITIONAL UTILITIES MAY BE PRESENT. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS.
- THE CONTRACTOR SHALL NOTIFY THE MISSISSIPPI ONE-CALL SYSTEM, INC. (MOCS) AT 811 AND ANY NON-MOCS MEMBER UTILITY INDIVIDUALLY. AT LEAST 3 WORKING DAYS PRIOR TO ANY EXCAVATION AND/OR DEMOLITION.
- MAINTAIN 10-FOOT HORIZONTAL AND 18-INCH VERTICAL SEPARATION BETWEEN SANITARY SEWER AND WATER SUPPLY LINES.
- CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EXISTING UTILITIES INCLUDING IRRIGATION. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY. RELOCATE IRRIGATION LINES AS NECESSARY FOR CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES AND UNDERGROUND ELECTRIC DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. INSTALL UTILITIES PRIOR TO FINAL PAVEMENT CONSTRUCTION.
- BACKFILL UTILITY TRENCHES UNDER PAVEMENT AREAS AND IN LAWN AREAS WITH SATISFACTORY FILL MATERIAL COMPACTED TO AT LEAST 98% OF MAXIMUM PER ASTM D698.
- ADJUST ALL EXISTING CASTINGS TO MATCH PROPOSED FINISH GRADE.
- EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR OFF OF THE OWNER'S PROPERTY AT NO ADDITIONAL COST IN A LEGAL MANNER.
- ALL SANITARY SEWER PIPE SHALL BE CLASS SDR 26 PVC UNLESS NOTED OTHERWISE.
- FIRE HYDRANT AND WATER MAINS TO BE INSTALLED AND UNDER PRESSURE BEFORE ANY COMBUSTIBLE CONSTRUCTION IS STARTED.
- NEOPRENE COUPLINGS WITH STAINLESS STEEL BAND AND SHEAR RINGS ARE REQUIRED FOR JOINING DIFFERENT TYPES OF SANITARY SEWER PIPES.
- THE CONTRACTOR SHALL EXCAVATE FOR NEW SEWER ELEVATIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION TO PROTECT EXISTING SEWER DURING CONSTRUCTION OPERATIONS. ALL EXCAVATION, SHORING AND BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL EXPLORE AHEAD 200 FEET SO ADJUSTMENTS CAN BE MADE IN THE ALIGNMENT OF THE PIPE IN CASE OF CONFLICTS WITH EXISTING STRUCTURES, UTILITIES AND PIPING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING PIPE FROM FLOATING. IF PIPE FLOATS DURING CONSTRUCTION, THE CONTRACTOR SHALL RELAY PIPE TO GRADE AT HIS EXPENSE.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND INVERT OF SANITARY SEWER FOR CONNECTION TO EXISTING OR PROPOSED SEWER SYSTEM.
- BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED IN WET OR WEAK AREAS. THE CONTRACTOR SHALL HAVE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- ALL FORCE MAIN SHALL BE INSTALLED WITH #12 LOCATE WIRE (SOLID COPPER).
- ALL WATER MAIN SHALL BE C-900 P.V.C. AND INSTALLED WITH #12 LOCATE WIRE (SOLID COPPER). TRACER WIRE TERMINALS SHALL BE PROVIDED AT EACH FIRE HYDRANT AND WATER VALVE.
- ALL WATER SERVICE LINE SHALL BE CL. 200 SERVICE TUBING & INSTALLED WITH #12 LOCATE WIRE (SOLID COPPER). TRACER WIRE TERMINALS SHALL BE PROVIDED AT EACH WATER METER.

**GRADING, DRAINAGE AND EROSION CONTROL NOTES**

- NO TREES SHALL BE REMOVED NOR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY THE ARCHITECT/ENGINEER.
- IT IS THE OWNER'S INTENT TO PRESERVE ALL THE EXISTING SITE VEGETATION OUTSIDE THE LIMITS OF GRADING.
- ALL TREES, INCLUDING YOUNG SAPPLINGS, PINES, AND UNDERSTORY SPECIES ARE TO BE PROTECTED AND SAVED IF THEY FALL OUTSIDE THE LIMITS OF GRADING, EVEN IF THEY ARE NOT LOCATED OR IDENTIFIED ON THE SURVEY.
- SELECTIVE CLEARING BEYOND THE LIMITS OF GRADING SHALL CONSIST OF REMOVAL OF HONEYSUCKLE, HERBACEOUS SHRUBS, POISON IVY, AND NOXIOUS WEEDS. GRASS SHALL BE SOWN ON THE WHOLE SITE AFTER PREPARATION, AS NOTED IN THE SPECIFICATIONS.
- TOPSOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER-GRADED AREAS TO A MINIMUM DEPTH OF 6 INCHES. STOCKPILES SHALL BE FREE DRAINING AND PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES. IMPORTED TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES IS REQUIRED IN ALL AREAS BETWEEN BUILDING AND SIDEWALKS.
- ALL GRADED AREAS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS AFTER GRADING IS COMPLETED.
- CONSTRUCT TEMPORARY EROSION CONTROL AS SHOWN ON THE DRAWING PRIOR TO BEGINNING GRADING OPERATIONS.
- ALL DRAINAGE STRUCTURES, PIPES WITHIN THE LIMITS OF CONSTRUCTION, AND DETENTION PONDS SHALL HAVE SEDIMENT REMOVED PRIOR TO FINAL ACCEPTANCE.
- SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED.
- ALL LOCATIONS OF TEMPORARY EROSION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ARCHITECT/ENGINEER.
- WHEN THE TEMPORARY EROSION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE (IN THE ARCHITECT/ENGINEER'S OPINION), THEY SHALL BE REMOVED.
- REPLACE DAMAGED AND WORN OUT SILT BARRIERS AS DIRECTED BY THE ARCHITECT/ENGINEER.
- THE CONTRACTOR SHALL PROTECT ALL TREES DESIGNATED TO REMAIN. DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE/STORE MATERIALS, WITHIN THE DRIPLINES OF TREES.
- TOP OF GRATE ELEVATIONS FOR CURB INLETS ARE GIVEN TO THE CENTER OF THE INLETS AT THE FACE OF CURB. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADE. ADJUST THE CASTING TO FALL ALONG THE CURB LINE.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, PROTECT UTILITIES TO REMAIN, AND REPAIR CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AT CONTRACTOR'S EXPENSE.
- NOTIFY LOCAL UTILITY LOCATOR SERVICE OF INTENDED EXCAVATION/UTILITY TRENCHING OPERATIONS.
- IN THE EVENT OF ANY DISCREPANCIES FOUND IN THE DRAWINGS OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS.
- SPOT ELEVATIONS AND CONTOURS REPRESENT PROPOSED FINISHED GRADE AND TOP OF DIRT ELEVATIONS UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND INVERTS PRIOR TO BEGINNING WORK.
- EXCESS MATERIAL SHALL BE DISPOSED OFF BY THE CONTRACTOR OFF THE OWNER'S PROPERTY AT NO ADDITIONAL COST IN A LEGAL MANNER.
- CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF A DETAILED ENGINEERING GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THIS INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ARCHITECT/ENGINEER SHALL BE CONTACTED PRIOR TO BEGINNING WORK.
- EXISTING MANHOLE CASTINGS TO REMAIN SHALL BE RESET TO MATCH NEW GRADE.
- ALL CURBS AND SIDEWALKS SHALL BE BACKFILLED WITH TOPSOIL, AND SEEDED AND MULCHED, UNLESS OTHERWISE NOTED.
- ALL PIPES SHALL BE BACKFILLED WITH SATISFACTORY MATERIAL COMPACTED TO 98% OF MAXIMUM PER ASTM D698.
- ALL STORM DRAINAGE PIPE SHALL BE R.C.P UNLESS OTHERWISE NOTED, AND COMPLETELY WRAPPED WITH TYPE V FILTER FABRIC AT ALL JOINTS. FILTER FABRIC SHALL BE 18" WIDE AND OVERLAP 8". LIFT HOLES SHALL BE GROUTED AND SEALED WATER TIGHT AND COVERED WITH FILTER FABRIC. PIPE LENGTHS SHOWN ARE APPROXIMATE.
- ALL CUT AND FILL SLOPES TO BE 3:1 MAXIMUM, UNLESS OTHERWISE NOTED.
- ALL HEADWALLS SHALL HAVE A MINIMUM 10'x20'x1.5' RIP-RAP APRON INSTALLED USING 8" MIN. DIAMETER STONE, UNLESS OTHERWISE SPECIFIED.
- SATISFACTORY TOPSOIL IS DEFINED AS SOIL BEING FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 1 INCH IN DIAMETER, OR CONTAMINANTS.
- AFTER STRIPPING TOPSOIL, PROOFROLL SUBGRADE WITH A LOADED DUMP TRUCK WITH A MINIMUM WEIGHT OF 20 TONS.
- FINISH GRADES TOLERANCES ARE 0.10 FOOT ABOVE OR BELOW DESIGN ELEVATIONS
- CONSULT GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- PROVIDE TEMPORARY SEEDING ON STOCKPILES AND ALL OTHER AREAS OF THE SITE THAT WILL REMAIN UNDISTURBED FOR 30 DAYS OR MORE.
- PLACEMENT OF EARTHWORK FILL SHALL BE IN MAX. 8" COMPACTED LIFTS WITH DENSITY OF 98% OF MAXIMUM PER ASTM D698.

**LAYOUT & PAVING NOTES**

- THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES, TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, AND REPAIR CONTRACTOR CAUSED DAMAGE ACCORDING TO CURRENT LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE COORDINATES ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL PERMITS, AND PAY ALL FEES PRIOR TO BEGINNING WORK.
- PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF PAVEMENT.
- THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN, IN ACCORDANCE WITH THE SPECIFICATIONS DO NOT OPERATE OR STORE HEAVY EQUIPMENT, NOR HANDLE, NOR STORE MATERIALS WITHIN THE DRIP-LINES OF TREES OR OUTSIDE THE LIMIT OF GRADING.
- CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH. ALL CONCRETE SHALL BE 4,000 P.S.I. UNLESS OTHERWISE NOTED. CURB RAMPS, SIDEWALK SLOPES, AND DRIVEWAY RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CURRENT LOCAL REQUIREMENTS. IF APPLICABLE, THE CONTRACTOR SHALL REQUEST INSPECTION OF SIDEWALK AND RAMP FORMS PRIOR TO PLACEMENT OF CONCRETE.
- ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN WHICH RESULTS FROM NEW CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
- DIMENSIONS ARE TO THE EDGE OF PAVEMENT, EDGE OF CONCRETE, OR TO THE FACE OF BUILDING, UNLESS OTHERWISE NOTED.
- COORDINATES ARE FOR FACE OF BUILDINGS, CENTER LINES OF DRIVEWAYS, CENTER OF SANITARY SEWER MANHOLES, AND CENTER AT FACE OF CURB INLETS, UNLESS OTHERWISE NOTED.
- EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE OWNER/ENGINEER.

**STORMWATER POLLUTION PREVENTION NOTES**

- REFER TO EROSION CONTROL PLAN FOR ADDITIONAL REQUIREMENTS.
- THE OWNER AND THE CONTRACTOR ARE REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) TO DISCHARGE CONSTRUCTION ACTIVITY STORMWATER APPLICATION TO THE LOCAL MISSISSIPPI ENVIRONMENTAL ASSISTANCE CENTER AT LEAST 30 DAYS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR AND OWNER SHALL PROVIDE (WITH THE NOI) FOR THIS PROJECT) EXISTING NPDES PERMIT TRACKING NUMBERS FOR SITES WHERE BORROW MATERIAL MAY BE OBTAINED AND WHERE SPOIL MATERIAL MAY BE PLACED SHOULD PERMITS NOT EXIST FOR BORROW AND SPOIL SITES. SEPARATE (NOI)'S SHALL BE PROVIDED BY THE OWNER AND CONTRACTOR.
- THE NOTICE OF COVERAGE (NOC) OF THE PERMIT TO DISCHARGE CONSTRUCTION-ACTIVITY STORMWATER SHALL BE POSTED NEAR THE CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL HAVE A SET OF APPROVED EROSION CONTROL PLANS ON SITE DURING ALL CONSTRUCTION.
- THE CONSTRUCTION ACTIVITY ANTICIPATED ON THIS PROJECT INCLUDES CLEARING, GRUBBING, GRADING, TOPSOILING, AND SEEDING.
- THE APPROXIMATE TOTAL AREA OF THE SITE IS 14.42 ACRES. THE APPROXIMATE TOTAL AREA OF GRADING PROPOSED IS 14.42 ACRES.
- THE ANTICIPATED FILL MATERIAL WILL CONSIST OF ON-SITE SOIL AND/OR OFF-SITE SOIL BORROW MATERIALS.
- THE RECEIVING WATER/STORM SEWER OPERATOR IS THE CITY OF RIDGELAND, AND THE STATE OF MISSISSIPPI.
- CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE EXPOSURE TIME OF CLEARED SURFACE AREA. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONAL PRIOR TO EARTH MOVING OPERATIONS. ALL CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY, AND AT MAXIMUM 7 CALENDAR DAYS IN DRY PERIODS AND WITHIN 24 HOURS OF ANY RAINFALL EXCEEDING 0.5 INCH PER 24 HOUR PERIOD.
- THE CONTRACTOR SHALL DESIGNATE IN WRITING THE NAME AND PHONE NUMBER OF THE INDIVIDUAL RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS.
- PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE REMOVED MORE THAN 20 CALENDAR DAYS PRIOR TO GRADING. ALL GRADED AREAS EXPECTED TO REMAIN UNFINISHED AND UNWORKED FOR MORE THAN 30 CALENDAR DAYS SHALL BE COVERED WITH TEMPORARY GRASS, SOD, STRAW, MULCH OR FABRIC MATS. PERMANENT SOIL STABILIZATION SHALL BE INSTALLED WITHIN 7 CALENDAR DAYS OF FINAL GRADING.
- THE CONTRACTOR SHALL MAINTAIN RECORDS OF EROSION CONTROL INSPECTIONS AND REPAIRS FOR A MINIMUM OF 3 YEARS AFTER COMPLETION OF CONSTRUCTION.
- TEMPORARY SEEDING FOR MISSISSIPPI PROJECTS INCLUDE THE FOLLOWING:  
 JAN 1- MAY 1 ITALIAN RYE/KOREAN LESPEDEZA/SUMMER OATS  
 MAY 1- JULY 15 SUDAN OT STARR MILLET  
 JULY 15-JAN 1 BALBOA RYE/ITALIAN RYE
- MULCHING SHALL CONSIST OF LOOSE HAY OR STRAW APPLIED AT THE RATE OF 2 TONS/ACRE.
- THE CONTRACTOR SHALL REMOVE SEDIMENT FROM TRAPS, SILT FENCES, SEDIMENT PONDS, ETC. AS NECESSARY AND WHEN CAPACITY HAS BEEN REDUCED BY 50%.
- STOCKPILES SHALL BE STABILIZED AND PROTECTED FROM EROSION.
- UPON COMPLETION OF SITE STABILIZATION, THE OWNER AND CONTRACTOR SHALL PROVIDE A NOTICE OF TERMINATION (NOT) FOR THE PROJECT TO THE MS DEPARTMENT OF ENVIRONMENTAL QUALITY. A COPY OF THE (NOT) SHALL BE PROVIDED TO THE ENGINEER.

Revisions				
#	Date	Nature	By	Appr.
1	4-1-18	RESPONSE TO COMMENTS		

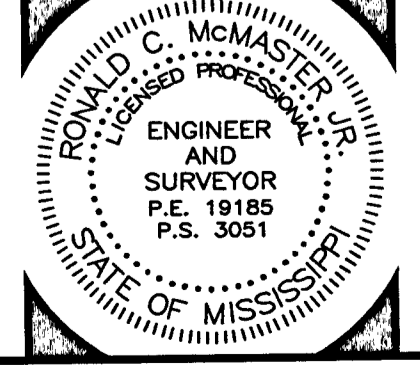
Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

**BRIDGEWATER 11D**

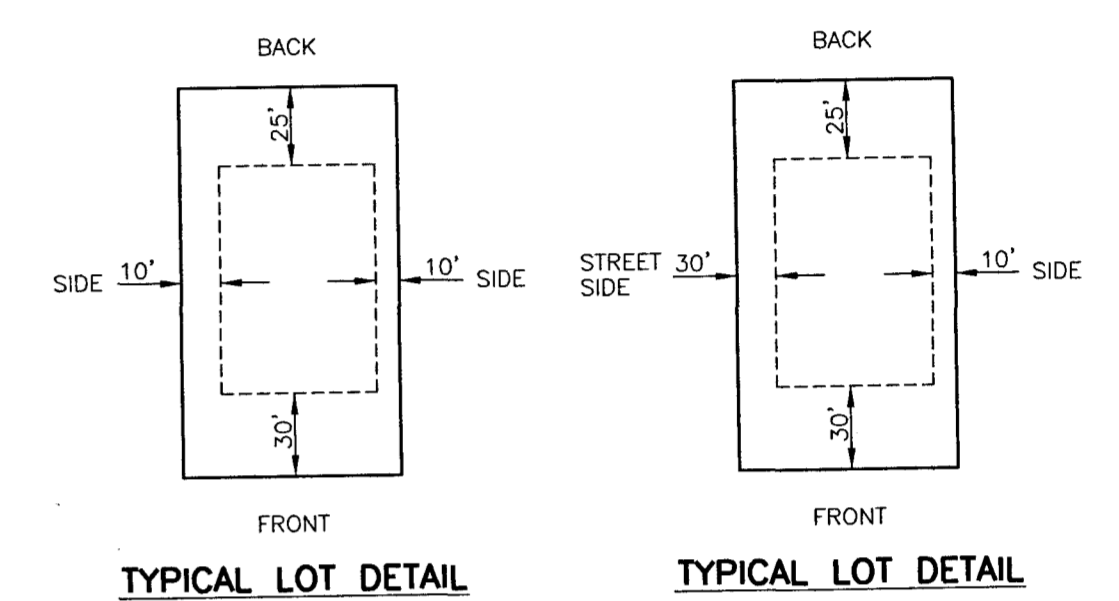
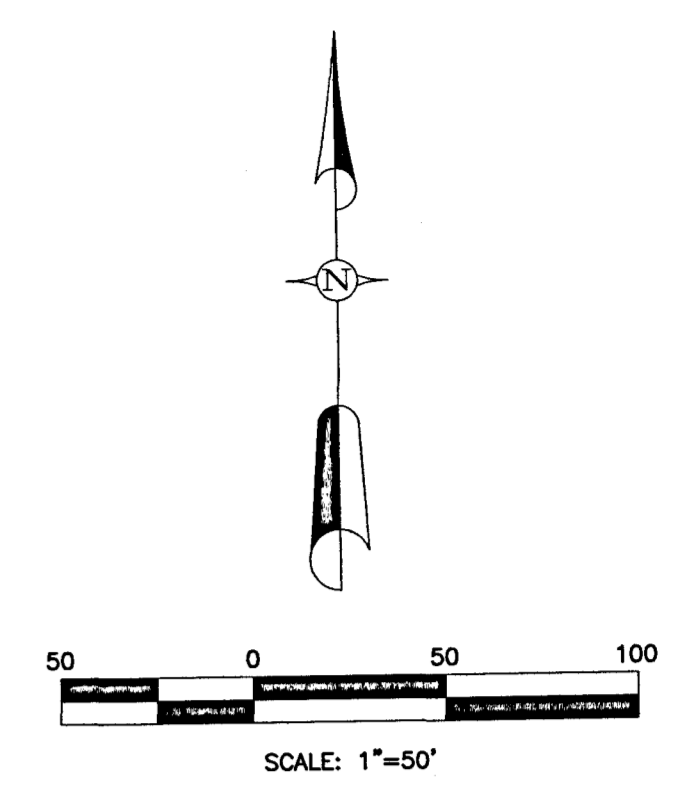
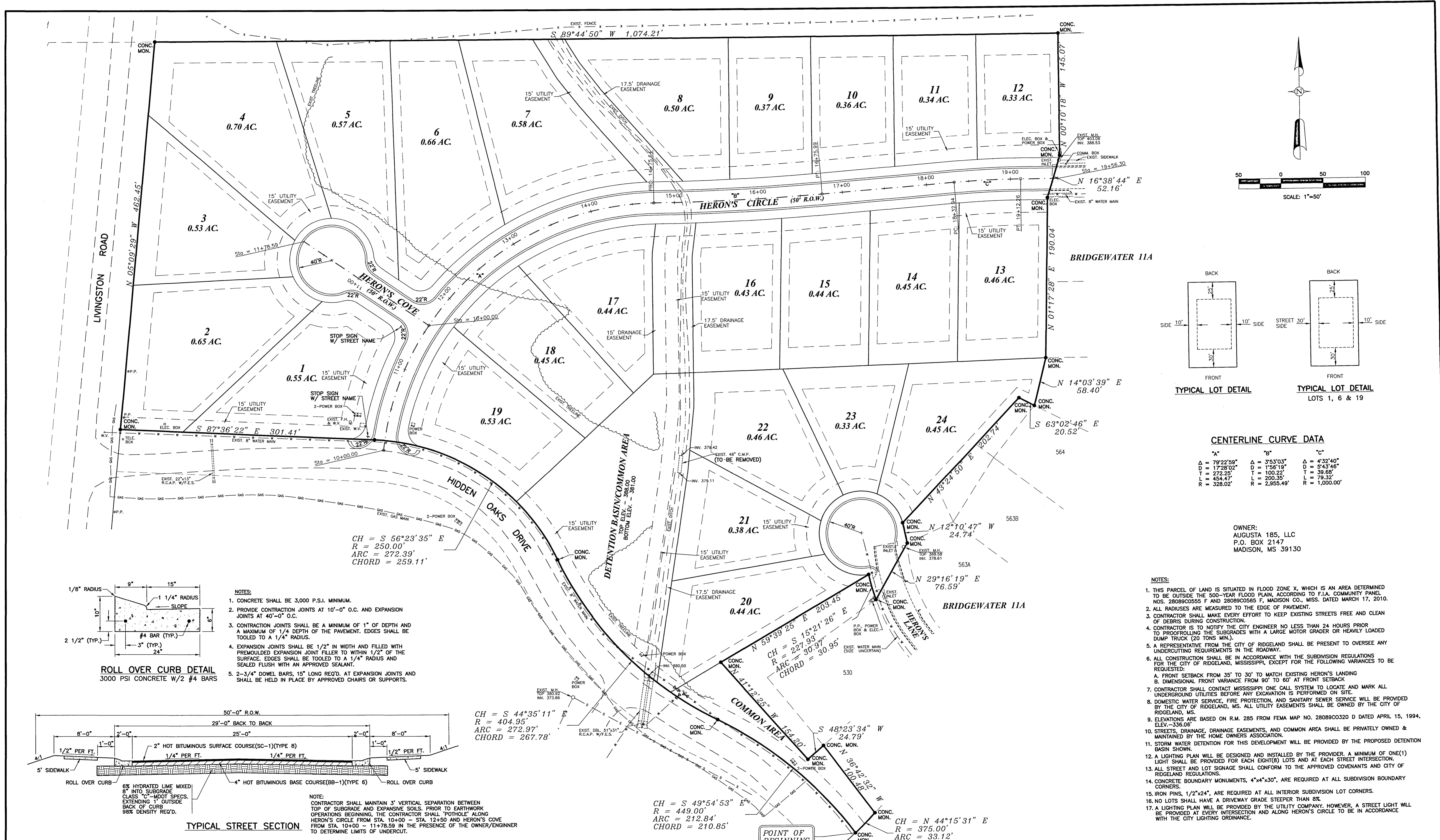


**McMASTER & ASSOCIATES, INC.**  
 CIVIL ENGINEERS & LAND SURVEYORS

212 WATERFORD SQUARE  
 SUITE 300  
 MADISON, MS 39110  
 601.605.1090



GENERAL NOTES
<b>2</b>

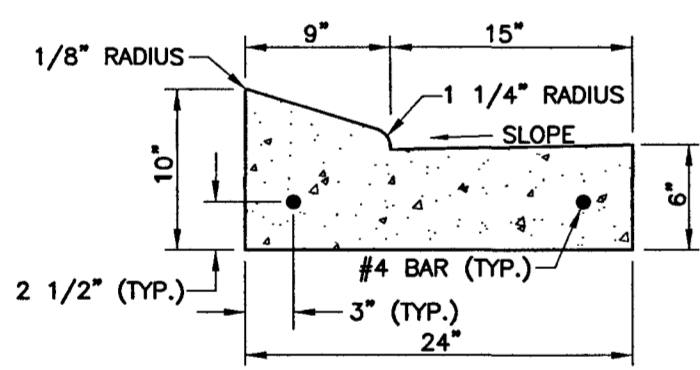


**CENTERLINE CURVE DATA**

"A"	"B"	"C"
$\Delta = 79^{\circ}22'59''$	$\Delta = 3^{\circ}53'03''$	$\Delta = 4^{\circ}35'40''$
$D = 1728'02''$	$D = 1158'19''$	$D = 943'48''$
$T = 272.25'$	$T = 100.22'$	$T = 39.68'$
$L = 454.47'$	$L = 200.35'$	$L = 79.32'$
$R = 328.02'$	$R = 2,955.49'$	$R = 1,000.00'$

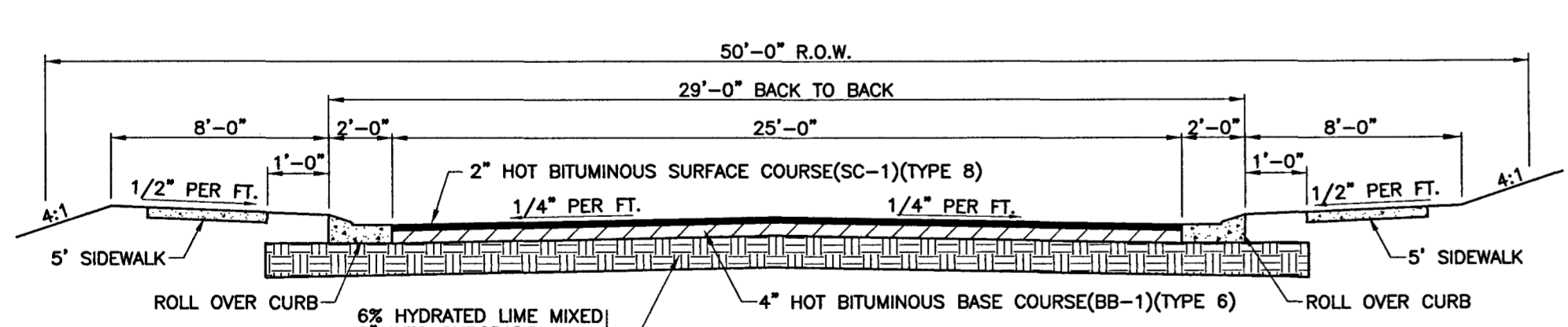
OWNER:  
AUGUSTA 185, LLC  
P.O. BOX 2147  
MADISON, MS 39130

- NOTES:**
- THIS PARCEL OF LAND IS SITUATED IN FLOOD ZONE X, WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN, ACCORDING TO F.I.A. COMMUNITY PANEL NOS. 28089C0555 F AND 28089C0565 F, MADISON CO., MISS. DATED MARCH 17, 2010.
  - ALL RADIIUSES ARE MEASURED TO THE EDGE OF PAVEMENT.
  - CONTRACTOR SHALL MAKE EVERY EFFORT TO KEEP EXISTING STREETS FREE AND CLEAN OF DEBRIS DURING CONSTRUCTION.
  - CONTRACTOR IS TO NOTIFY THE CITY ENGINEER NO LESS THAN 24 HOURS PRIOR TO PROFFROLLING THE SUBGRADES WITH A LARGE MOTOR GRADER OR HEAVILY LOADED DUMP TRUCK (20 TONS MIN).
  - A REPRESENTATIVE FROM THE CITY OF RIDGELAND SHALL BE PRESENT TO OVERSEE ANY UNDERCUTTING REQUIREMENTS IN THE ROADWAY.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS FOR THE CITY OF RIDGELAND, MISSISSIPPI, EXCEPT FOR THE FOLLOWING VARIANCES TO BE REQUESTED:
    - FRONT SETBACK FROM 35' TO 30' TO MATCH EXISTING HERON'S LANDING
    - DIMENSIONAL FRONT VARIANCE FROM 90' TO 60' AT FRONT SETBACK
  - CONTRACTOR SHALL CONTACT MISSISSIPPI ONE CALL SYSTEM TO LOCATE AND MARK ALL UNDERGROUND UTILITIES BEFORE ANY EXCAVATION IS PERFORMED ON SITE.
  - DOMESTIC WATER SERVICE, FIRE PROTECTION, AND SANITARY SEWER SERVICE WILL BE PROVIDED BY THE CITY OF RIDGELAND, MS. ALL UTILITY EASEMENTS SHALL BE OWNED BY THE CITY OF RIDGELAND, MS.
  - ELEVATIONS ARE BASED ON R.M. 285 FROM FEMA MAP NO. 28089C0320 D DATED APRIL 15, 1994, ELEV. -336.00'
  - STREETS, DRAINAGE, DRAINAGE EASEMENTS, AND COMMON AREA SHALL BE PRIVATELY OWNED & MAINTAINED BY THE HOME OWNERS ASSOCIATION.
  - STORM WATER DETENTION FOR THIS DEVELOPMENT WILL BE PROVIDED BY THE PROPOSED DETENTION BASIN SHOWN.
  - A LIGHTING PLAN WILL BE DESIGNED AND INSTALLED BY THE PROVIDER. A MINIMUM OF ONE(1) LIGHT SHALL BE PROVIDED FOR EACH EIGHT(8) LOTS AND AT EACH STREET INTERSECTION.
  - ALL STREET AND LOT SIGNAGE SHALL CONFORM TO THE APPROVED COVENANTS AND CITY OF RIDGELAND REGULATIONS.
  - CONCRETE BOUNDARY MONUMENTS, 4"x4"x30", ARE REQUIRED AT ALL SUBDIVISION BOUNDARY CORNERS.
  - IRON PINS, 1/2"x24", ARE REQUIRED AT ALL INTERIOR SUBDIVISION LOT CORNERS.
  - NO LOTS SHALL HAVE A DRIVEWAY GRADE STEEPER THAN 8%.
  - A LIGHTING PLAN WILL BE PROVIDED BY THE UTILITY COMPANY; HOWEVER, A STREET LIGHT WILL BE PROVIDED AT EVERY INTERSECTION AND ALONG HERON'S CIRCLE TO BE IN ACCORDANCE WITH THE CITY LIGHTING ORDINANCE.



**ROLL OVER CURB DETAIL**  
3000 PSI CONCRETE W/2 #4 BARS

- NOTES:**
- CONCRETE SHALL BE 3,000 P.S.I. MINIMUM.
  - PROVIDE CONTRACTION JOINTS AT 10'-0" O.C. AND EXPANSION JOINTS AT 40'-0" O.C.
  - CONTRACTION JOINTS SHALL BE A MINIMUM OF 1" OF DEPTH AND A MAXIMUM OF 1/4" DEPTH OF THE PAVEMENT. EDGES SHALL BE TOOLED TO A 1/4" RADIUS.
  - EXPANSION JOINTS SHALL BE 1/2" IN WIDTH AND FILLED WITH PREMOULDED EXPANSION JOINT FILLER TO WITHIN 1/2" OF THE SURFACE. EDGES SHALL BE TOOLED TO A 1/4" RADIUS AND SEALED FLUSH WITH AN APPROVED SEALANT.
  - 2-3/4" DOWEL BARS, 15" LONG REQ'D. AT EXPANSION JOINTS AND SHALL BE HELD IN PLACE BY APPROVED CHAIRS OR SUPPORTS.



**TYPICAL STREET SECTION**

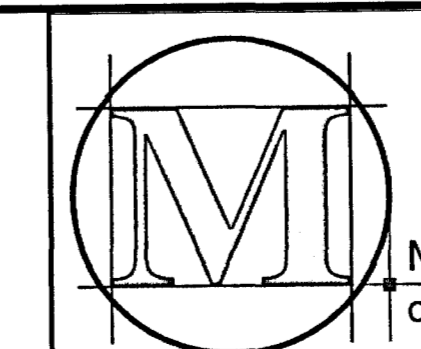
$CH = S 44^{\circ}35'11'' E$   
 $R = 404.95'$   
 $ARC = 272.97'$   
 $CHORD = 267.78'$

$CH = S 49^{\circ}54'53'' E$   
 $R = 449.00'$   
 $ARC = 212.84'$   
 $CHORD = 210.85'$

$CH = N 44^{\circ}15'31'' E$   
 $R = 375.00'$   
 $ARC = 33.12'$   
 $CHORD = 33.11'$

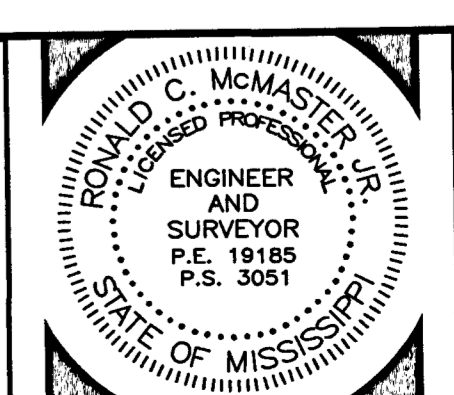
Revisions		Project No.	Designed By
#	Date	M-2350	R.C.M.
1	4-1-16		
		3-18-16	D.P.
		SEE ABOVE	R.C.M.

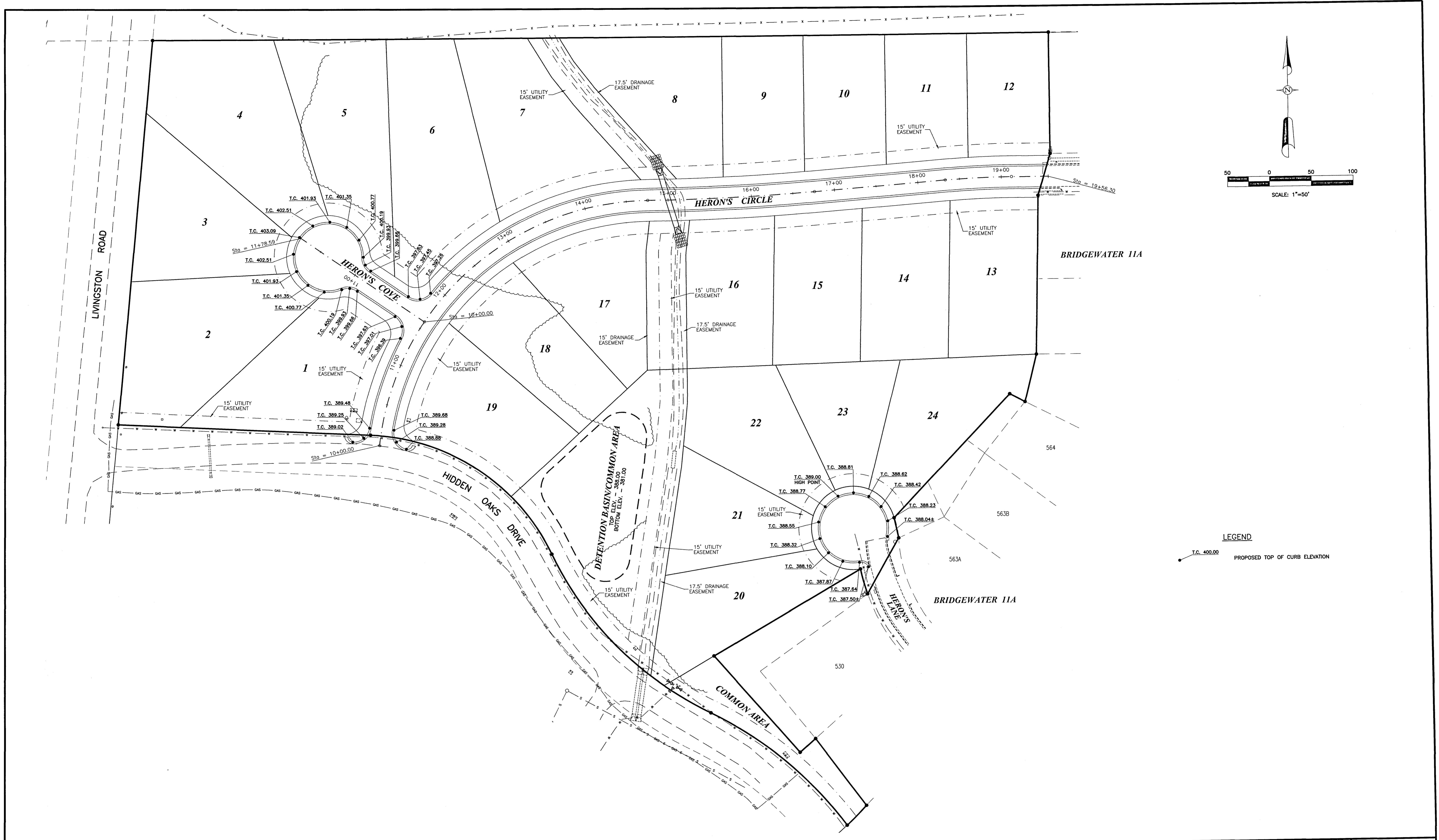
# BRIDGEWATER 11D



**McMASTER & ASSOCIATES, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

212 WATERFORD SQUARE  
SUITE 300  
MADISON, MS 39110  
601.605.1090





Revisions				
#	Date	Nature	By	App'd
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

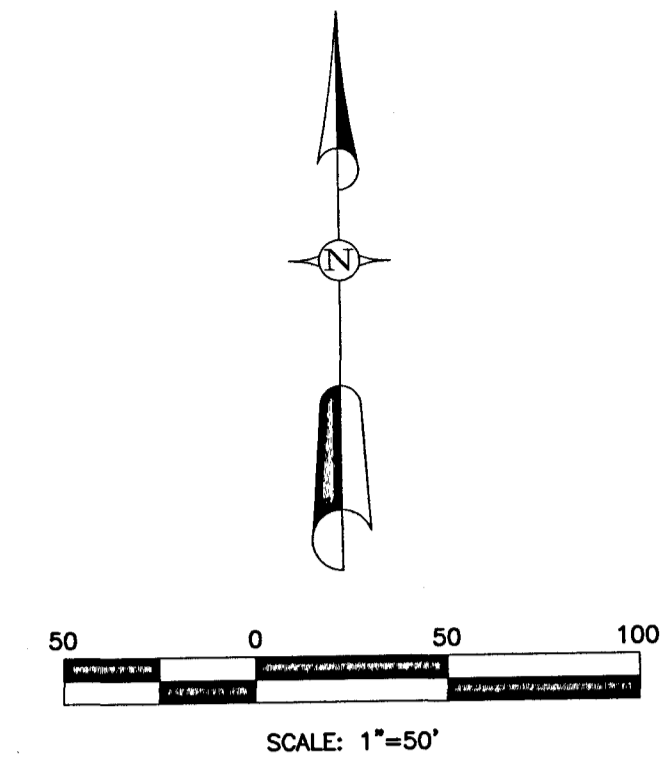
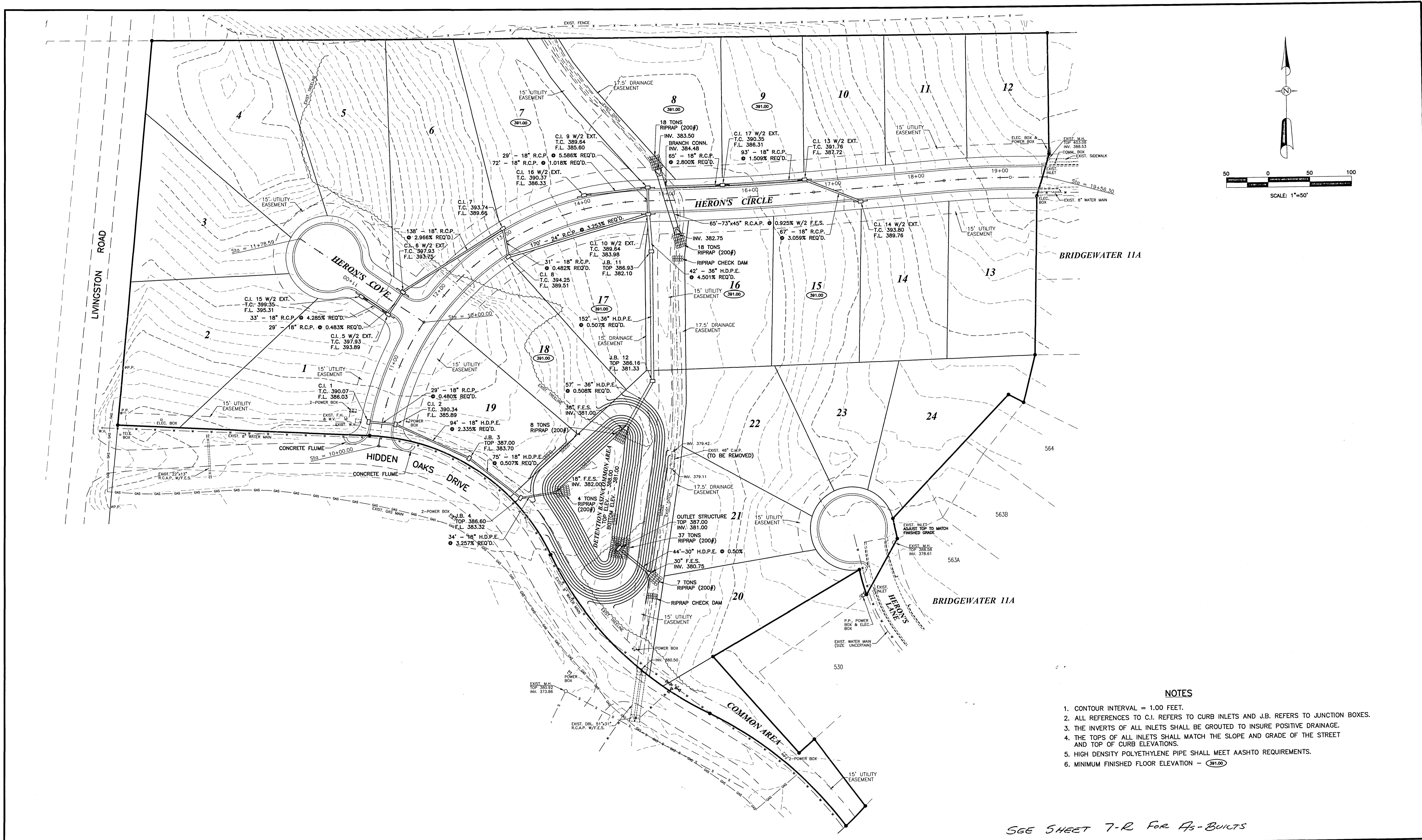
**BRIDGEWATER 11D**

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SPOT ELEVATIONS

4



**NOTES**

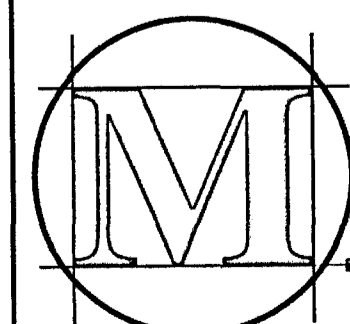
1. CONTOUR INTERVAL = 1.00 FEET.
2. ALL REFERENCES TO C.I. REFERS TO CURB INLETS AND J.B. REFERS TO JUNCTION BOXES.
3. THE INVERTS OF ALL INLETS SHALL BE GROUTED TO INSURE POSITIVE DRAINAGE.
4. THE TOPS OF ALL INLETS SHALL MATCH THE SLOPE AND GRADE OF THE STREET AND TOP OF CURB ELEVATIONS.
5. HIGH DENSITY POLYETHYLENE PIPE SHALL MEET AASHTO REQUIREMENTS.
6. MINIMUM FINISHED FLOOR ELEVATION - (391.00)

SGE SHEET 7-R For A3-BUKTS

Revisions				
#	Date	Nature	By	App'd.
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

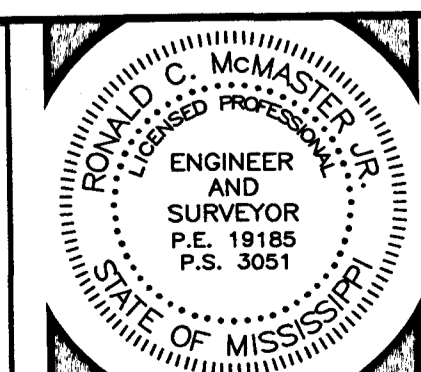
Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

**BRIDGEWATER 11D**

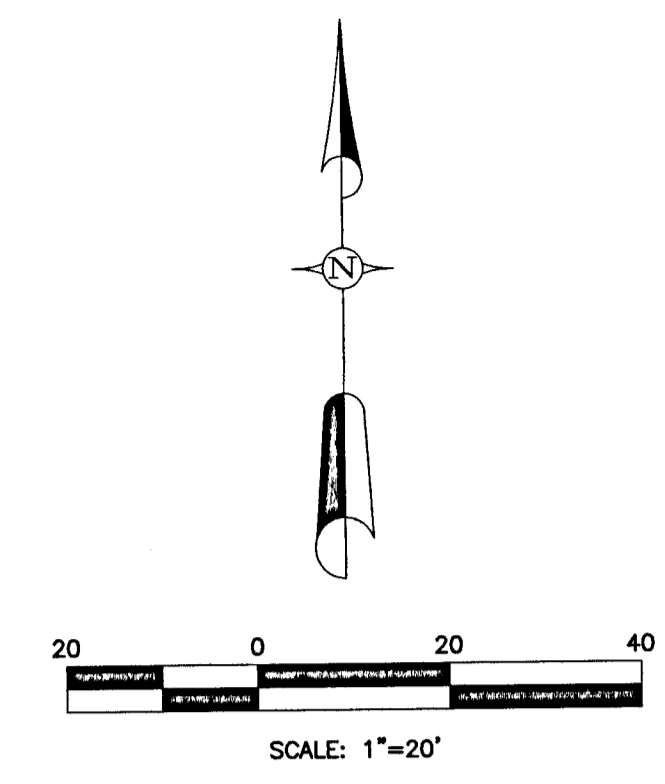
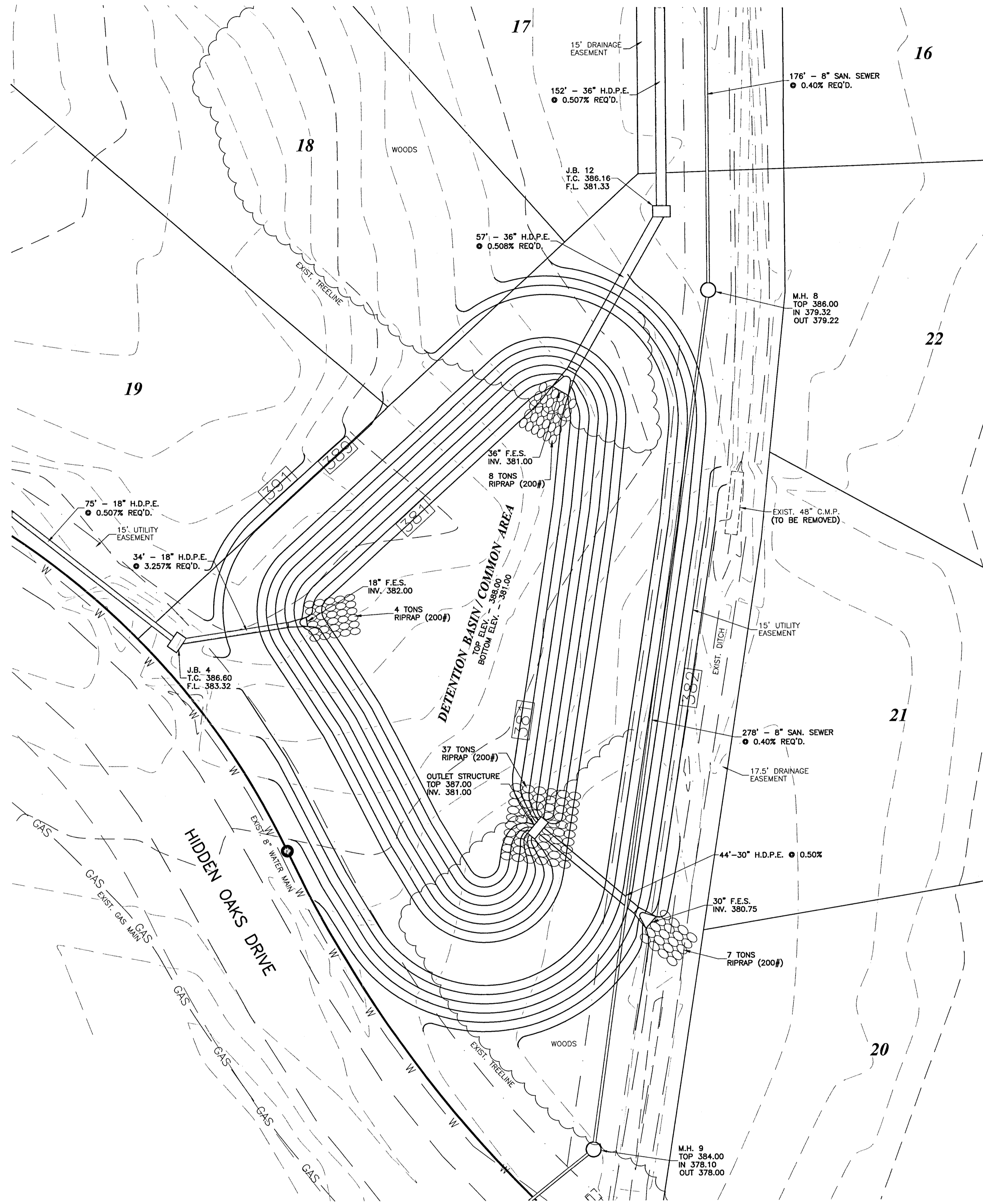


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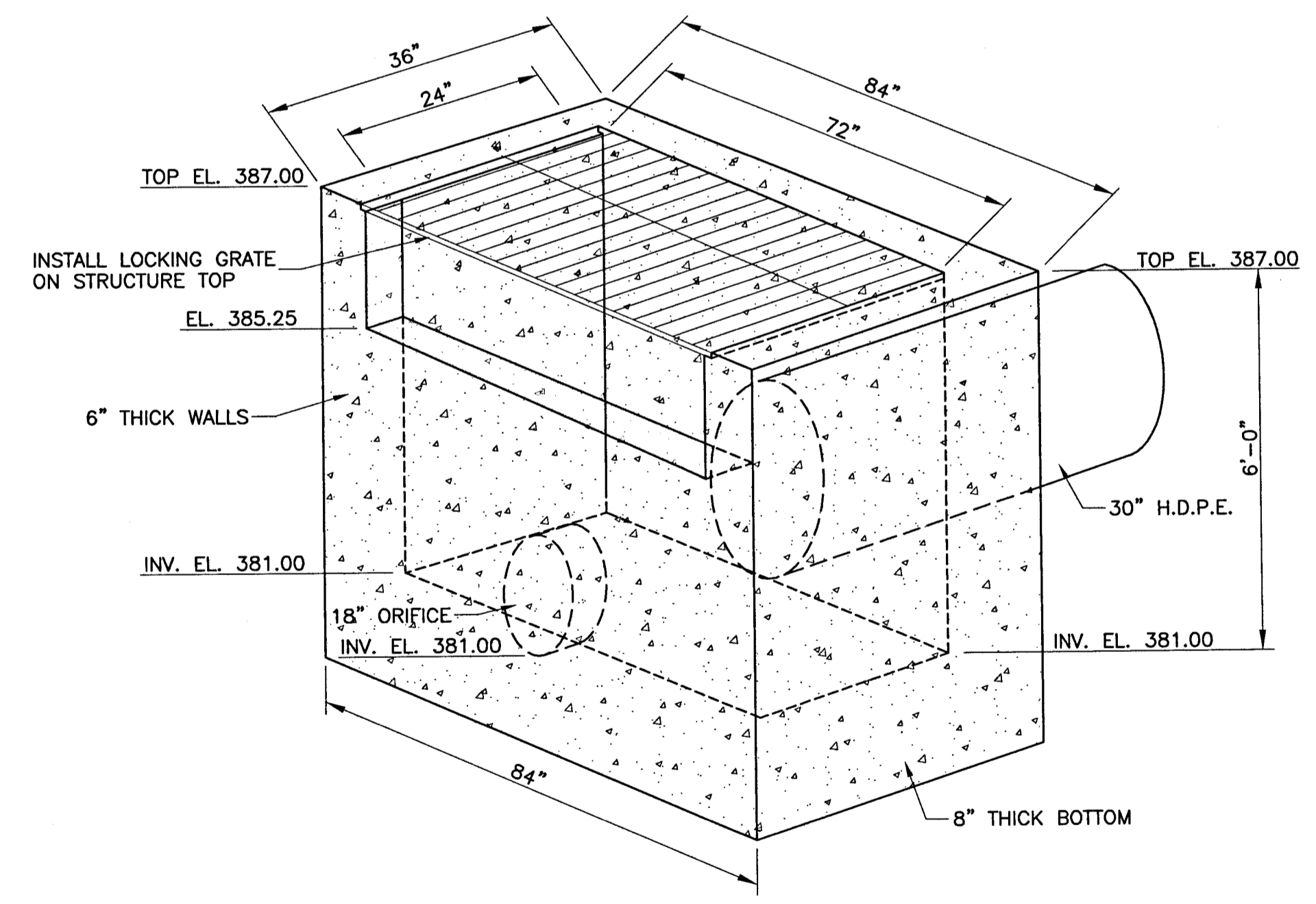
212 WATERFORD SQUARE  
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STORM SEWER LAYOUT
<b>5</b>



**POND DATA**  
 TOP OF DAM ELEV. - 388.00  
 BOTTOM ELEV. - 381.00  
 MAX. ELEV. AT 100 YR. - 387.75

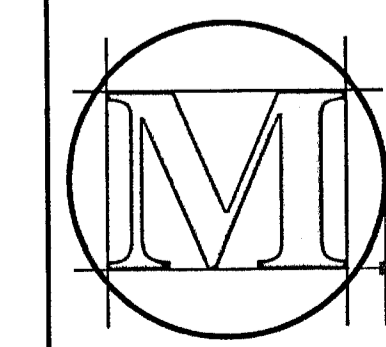


**DETENTION BASIN  
 OUTLET STRUCTURE DETAIL**  
 N.T.S.

Revisions				
#	Date	Nature	By	App'd.
1	4-1-18	RESPONSE TO COMMENTS	D.P.	R.M.

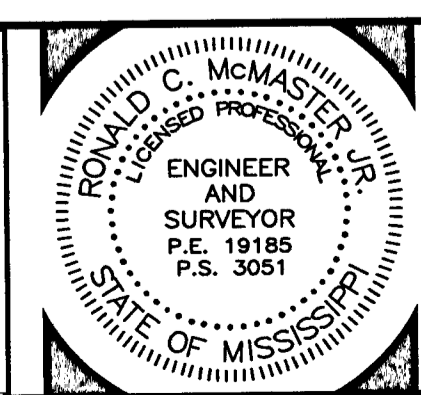
Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

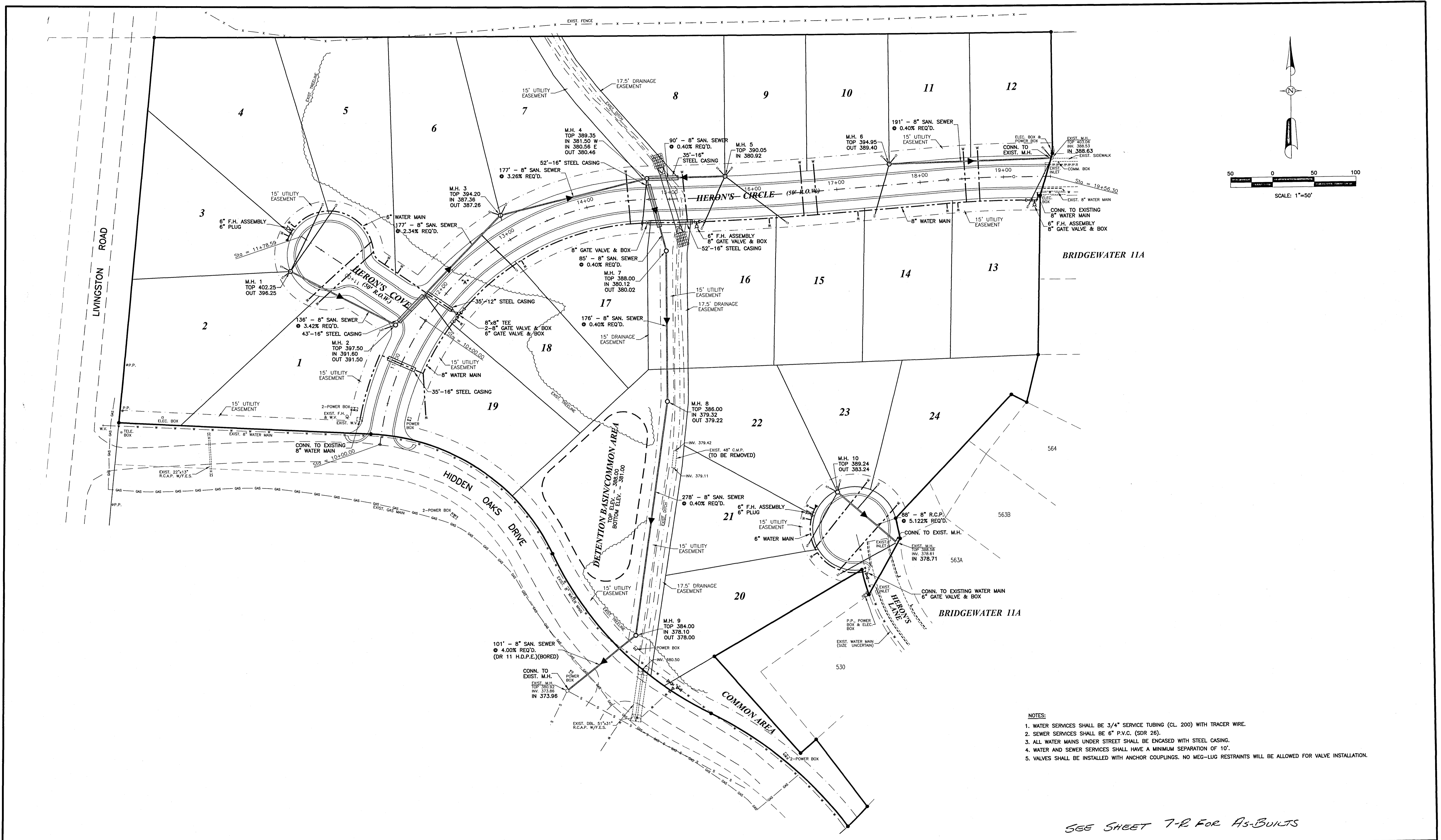
# BRIDGEWATER 11D



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212 WATERFORD SQUARE  
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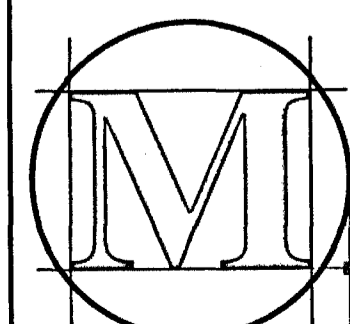
- NOTES:
1. WATER SERVICES SHALL BE 3/4" SERVICE TUBING (CL. 200) WITH TRACER WIRE.
  2. SEWER SERVICES SHALL BE 6" P.V.C. (SDR 26).
  3. ALL WATER MAINS UNDER STREET SHALL BE ENCASED WITH STEEL CASING.
  4. WATER AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10'.
  5. VALVES SHALL BE INSTALLED WITH ANCHOR COUPLINGS. NO MEG-LUG RESTRAINTS WILL BE ALLOWED FOR VALVE INSTALLATION.

SEE SHEET 7-R FOR AS-BUILTS

Revisions			
#	Date	Nature	By
1	4-1-16	RESPONSE TO COMMENTS	R.M.

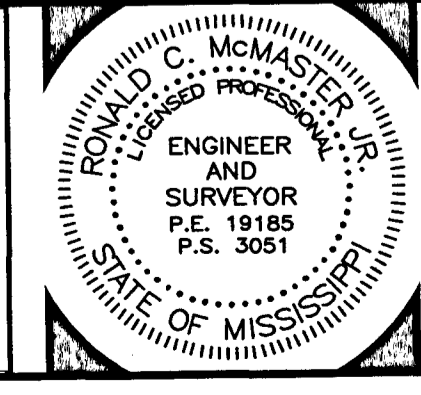
Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

# BRIDGEWATER 11D



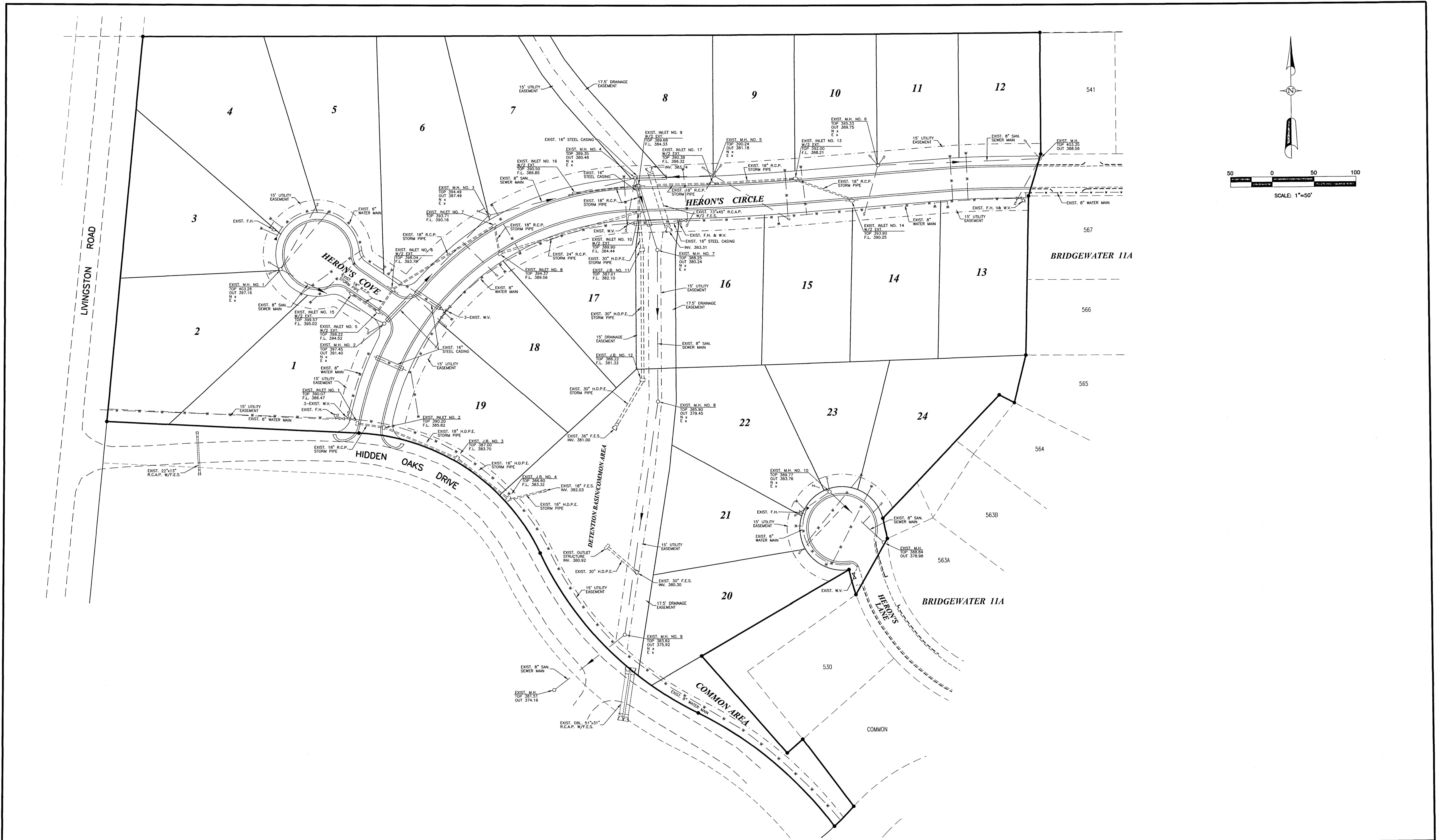
**MCM**  
**MASTER & ASSOCIATES, INC.**  
 CIVIL ENGINEERS & LAND SURVEYORS

212 WATERFORD SQUARE  
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WATER AND  
 SEWER LAYOUT

7



Revisions				
#	Date	Nature	By	App'd.

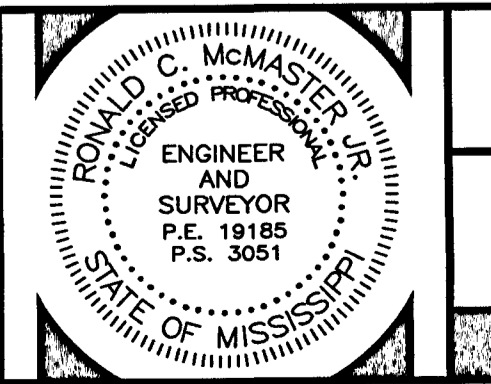
Project No.	M-2350	Designed By	R.C.M.
Date	10-26-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

# BRIDGEWATER 11D



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CIVIL ENGINEERS & LAND SURVEYORS

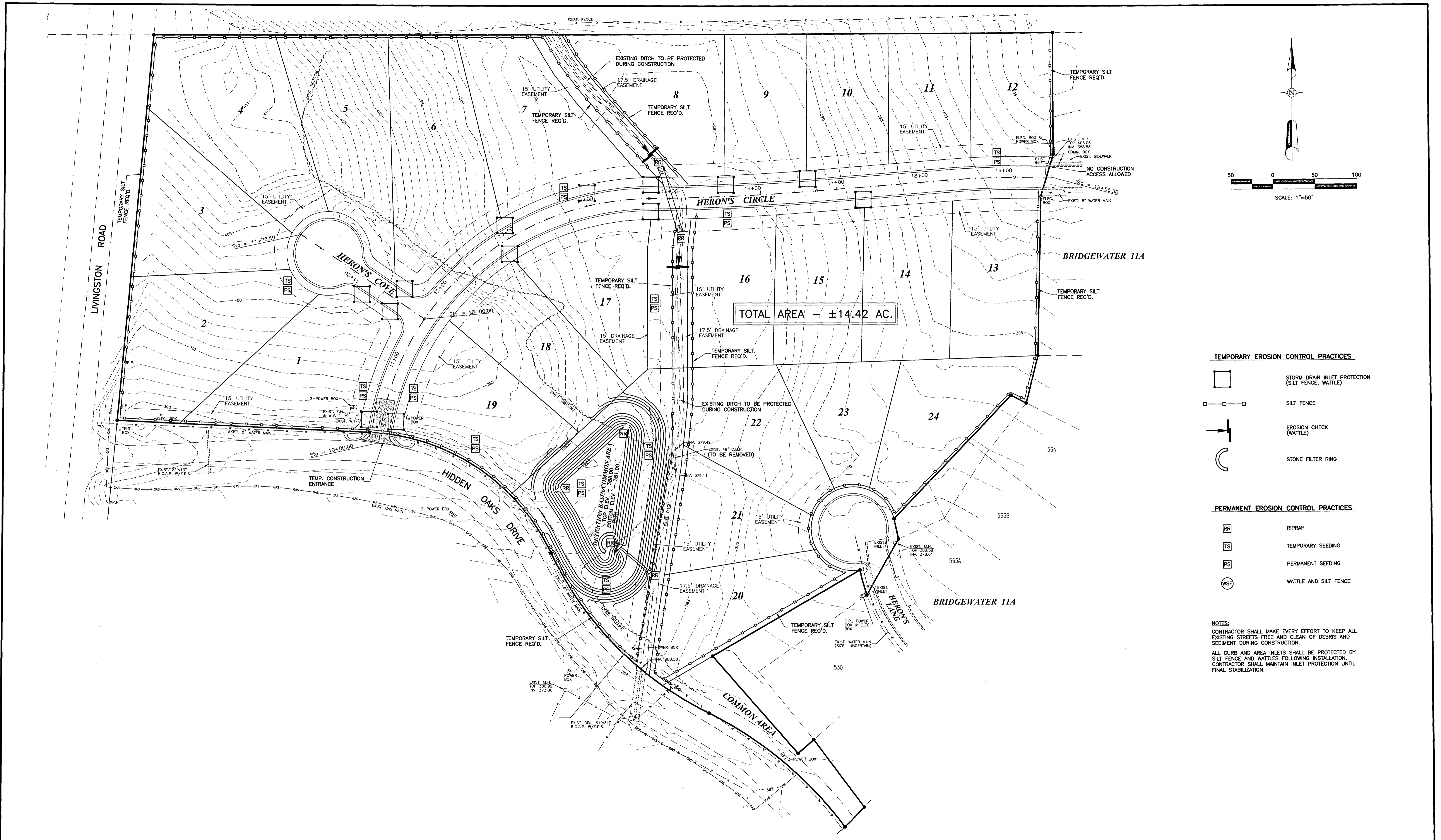
212 WATERFORD SQUARE  
SUITE 300  
MADISON, MS 39110  
601.605.1090



AS-BUILT  
DRAWING

## 7-R





Revisions			
#	Date	Nature	By
1	4-1-16	RESPONSE TO COMMENTS	D.P.

Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

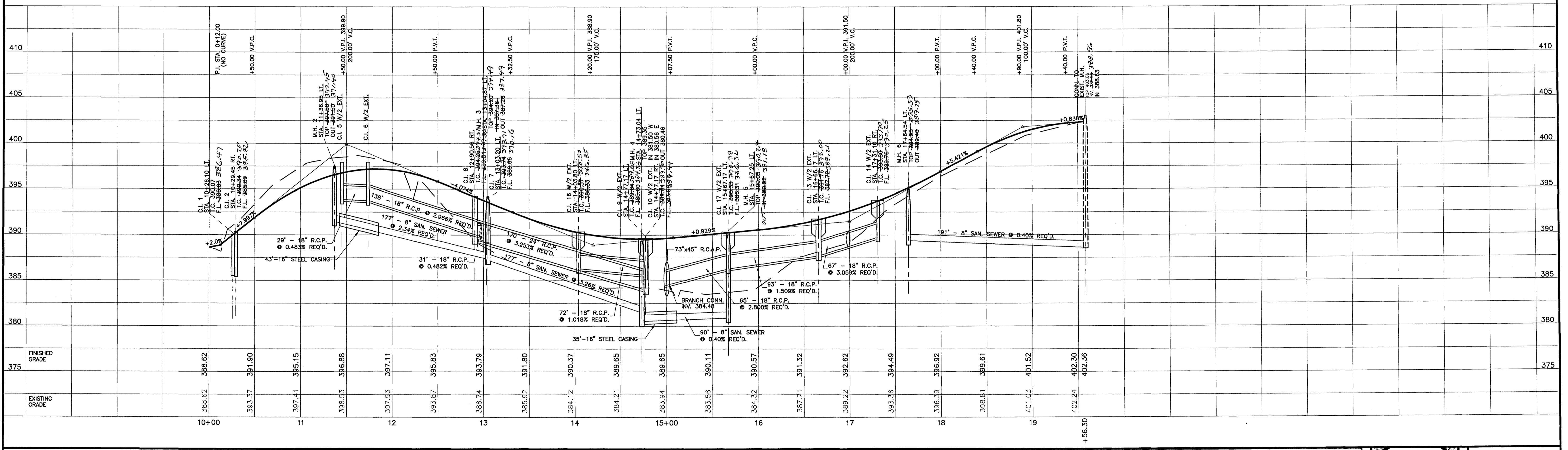
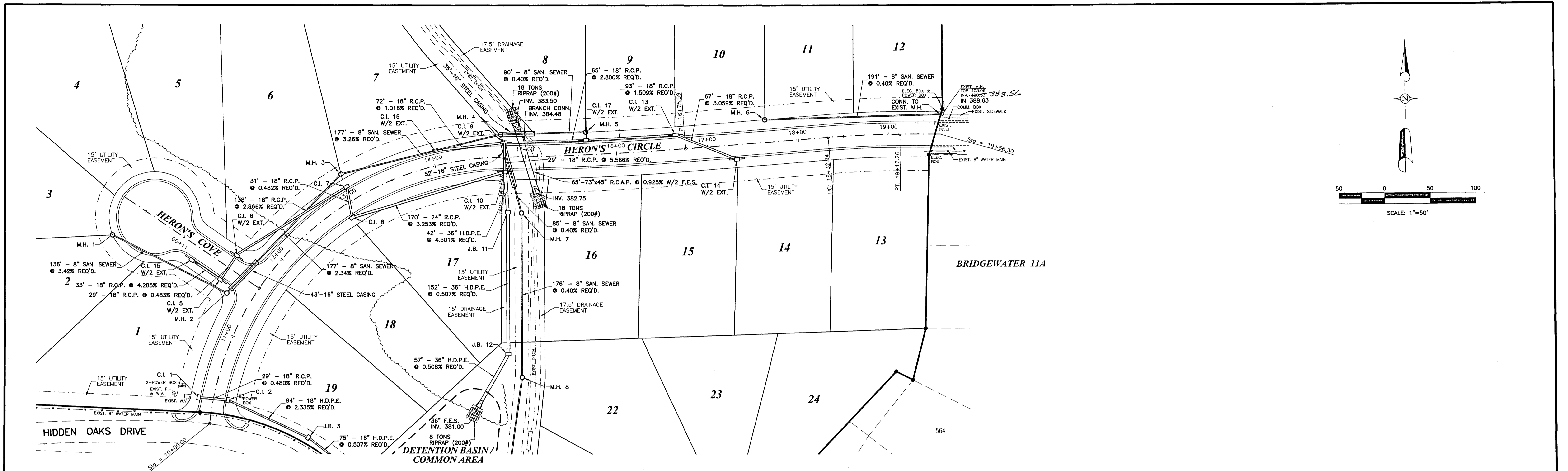
# BRIDGEWATER 11D

**M<sup>CM</sup>MASTER & ASSOCIATES, INC.**  
 CIVIL ENGINEERS & LAND SURVEYORS

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EROSION CONTROL PLAN

## 8



Revisions				
#	Date	Nature	By	App'd
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

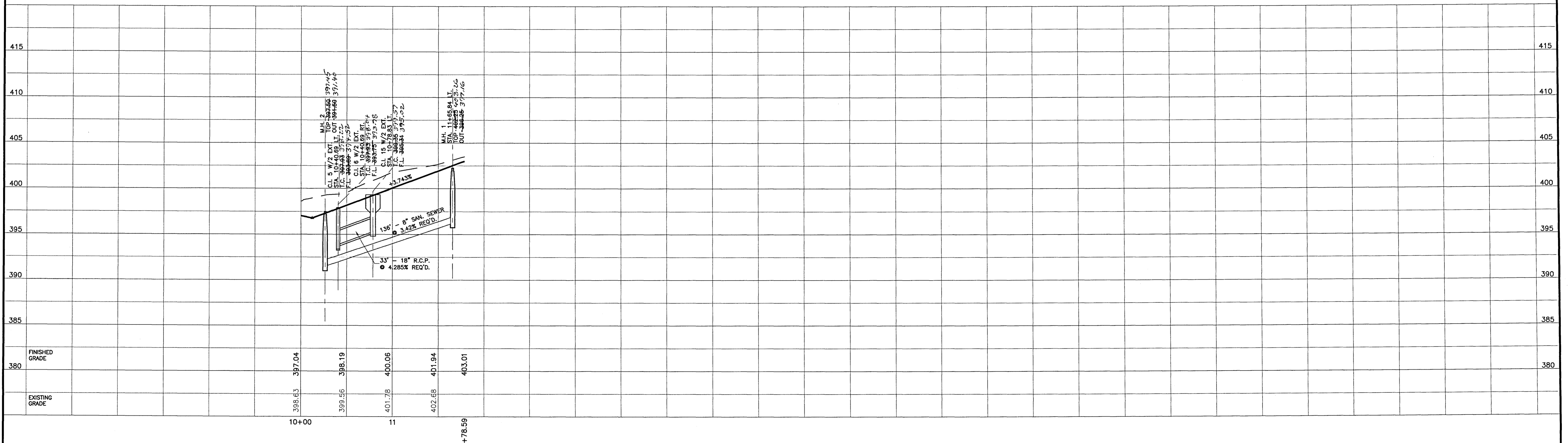
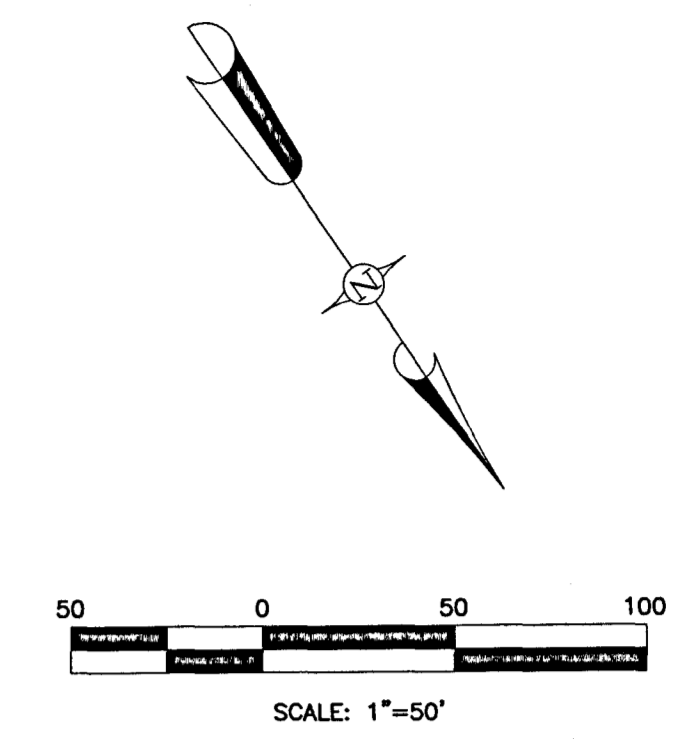
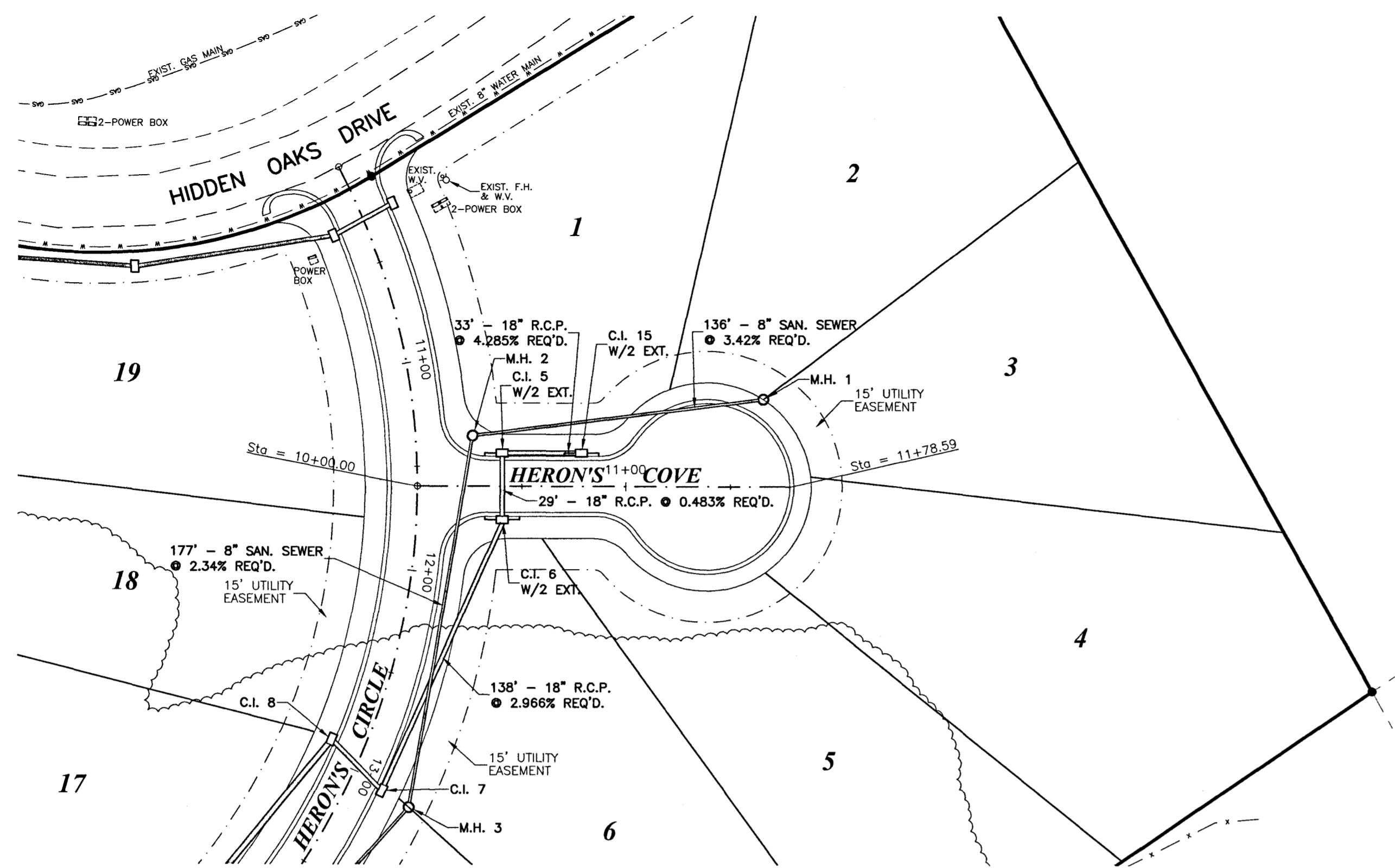
**BRIDGEWATER 11-D**

**MCM**  
**MASTER & ASSOCIATES, INC.**  
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212 WATERFORD SQUARE  
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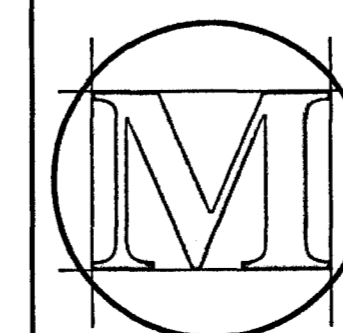
PLAN & PROFILE  
 HERON'S CIRCLE

**9**



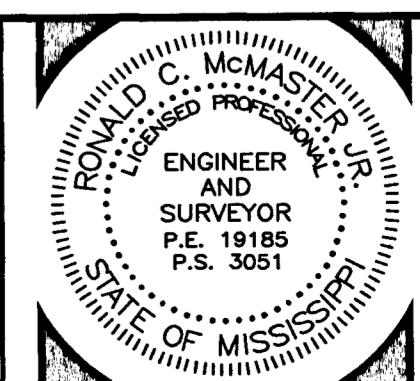
Revisions				Project No.	Designed By
#	Date	Nature	By	M-2350	R.C.M.
1	4-1-18	RESPONSE TO COMMENTS	D.P.	Date	3-18-16
				Drawn By	D.P.
				Checked By	R.C.M.
				Scale	SEE ABOVE

# BRIDGEWATER 11-D

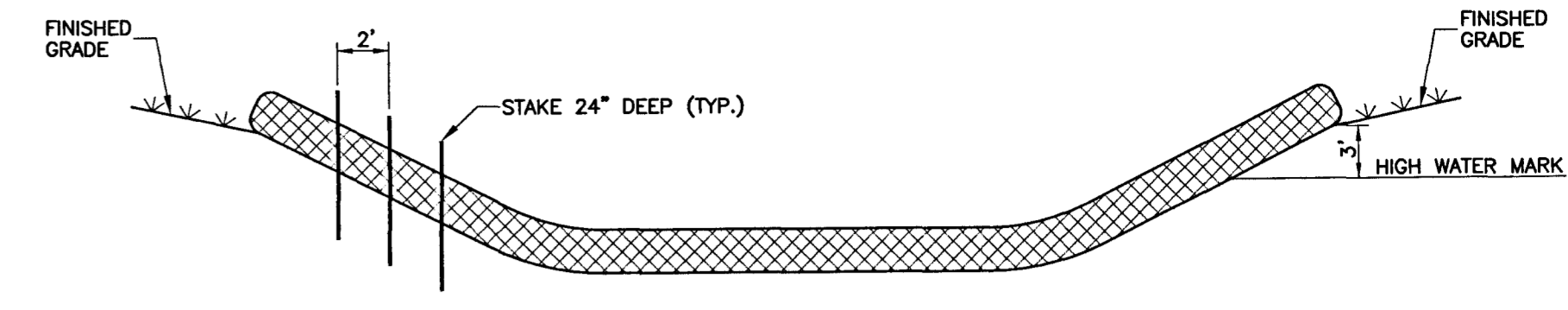


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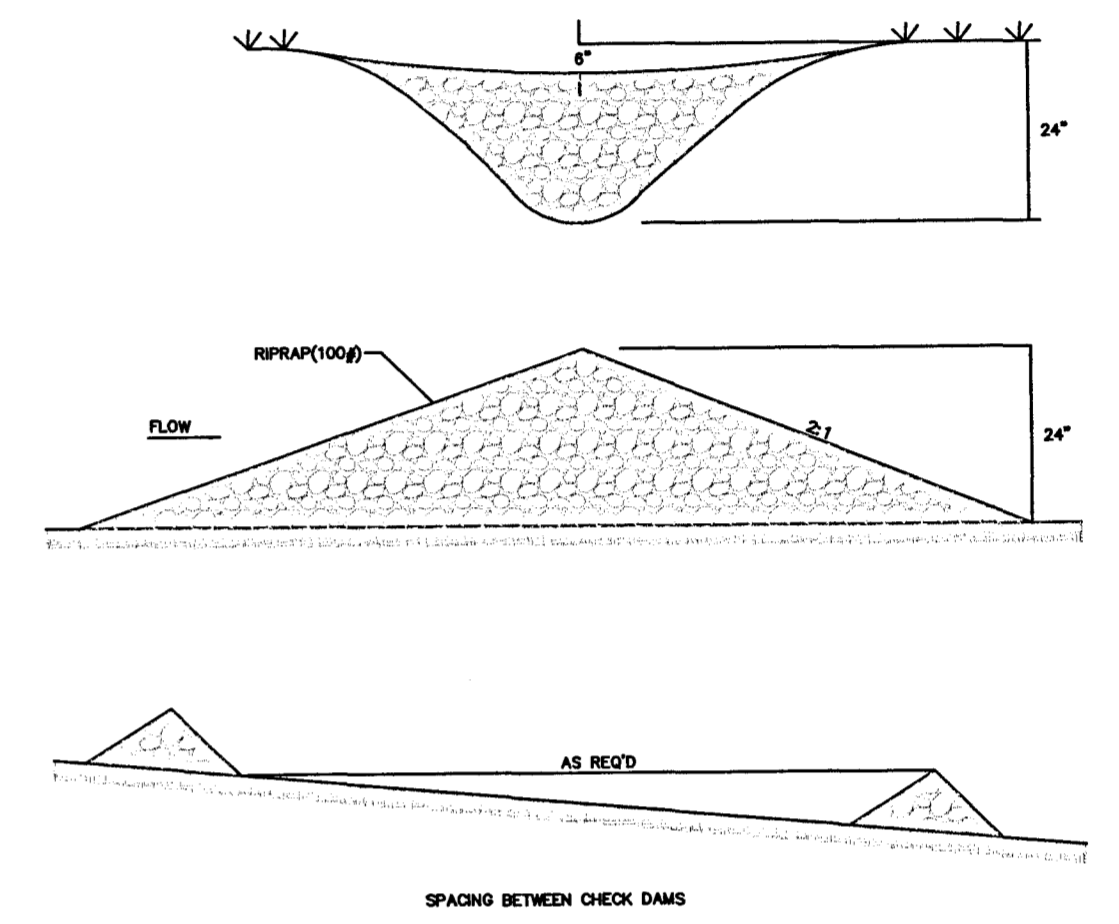


PLAN & PROFILE  
HERON'S COVE



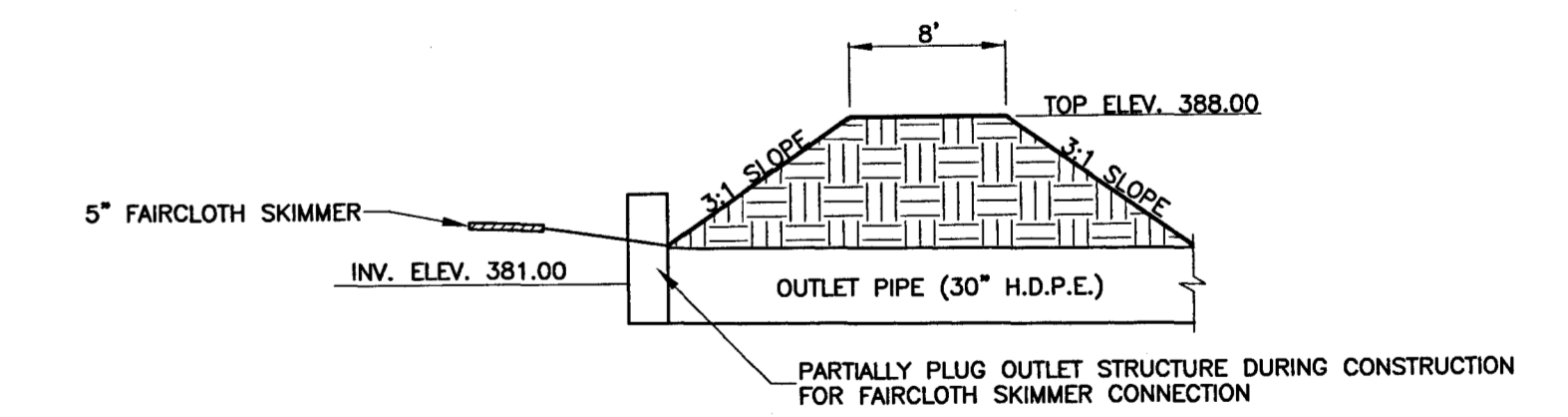
**WATTLE INSTALLATION CRITERIA:**  
 MAY BE INSTALLED FLAT ON THE GROUND OR ENTRENCHED.  
 MAY BE INSTALLED OVER BARE SOIL OR OVER EROSION CONTROL BLANKETS AND ON STEEP SLOPES.  
 SHOULD REMAIN IN PLACE UNTIL VEGETATION IS FULLY ESTABLISHED AND CAN SURVIVE ON ITS OWN.  
 TYPICALLY SECURED TO THE SUBGRADE SOIL USING A 1-INCH BY 1-INCH WOOD STAKE. STAKES SHOULD BE PLACED EVERY TWO FEET ACROSS THE LENGTH OF THE SEDIMENT TUBE. STAKES SHOULD BE INTERTWINED WITH OUTER MESH ON THE DOWNSTREAM SIDE AND DRIVEN INTO THE GROUND A MINIMUM OF 24 INCHES.  
 WATTLES PLACED IN SWALES OR CHANNEL BOTTOMS SHOULD CONTINUE UP THE SIDE SLOPES THREE FEET ABOVE THE ANTICIPATED HIGH WATER MARK AND PERPENDICULAR TO THE FLOW OF WATER.

**WATTLE INSTALLATION DETAIL**  
N.T.S.

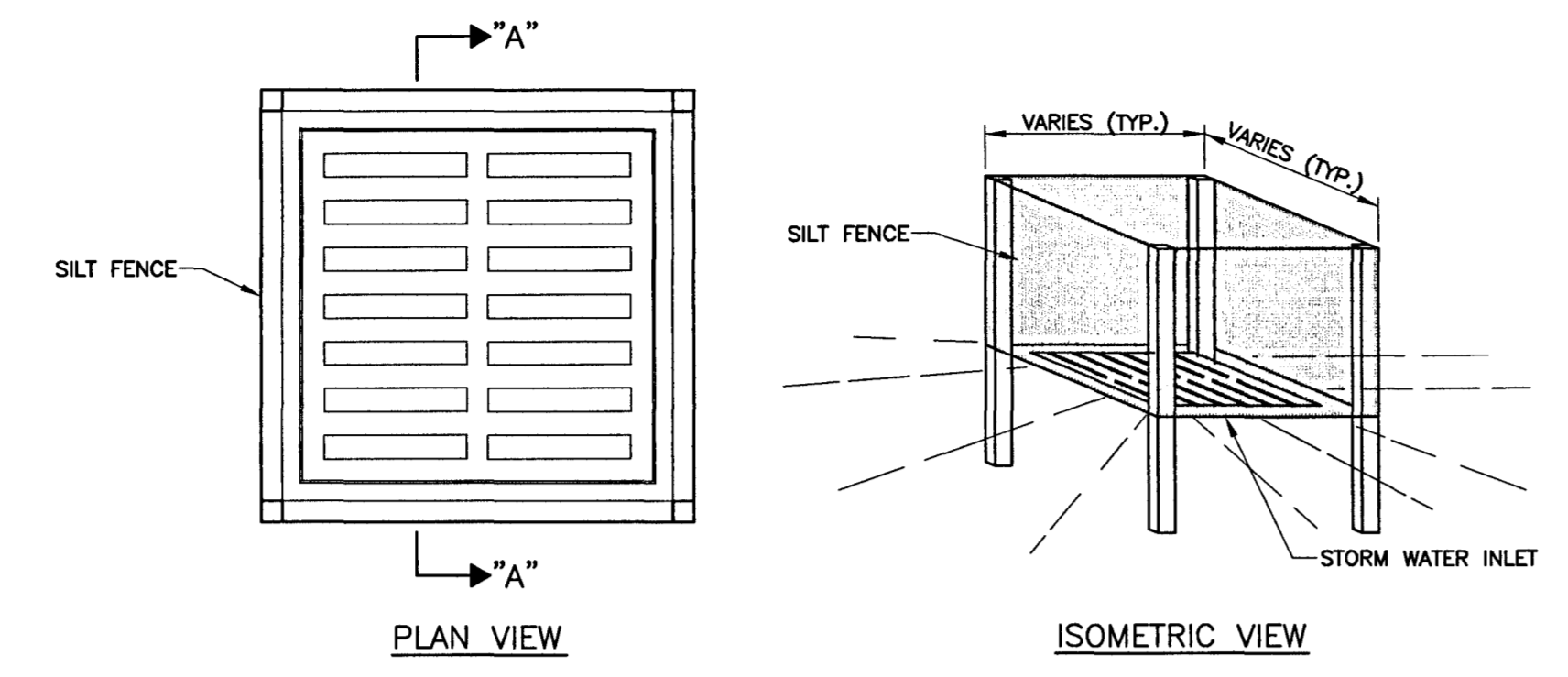


**CHECK DAM DETAIL**  
N.T.S.

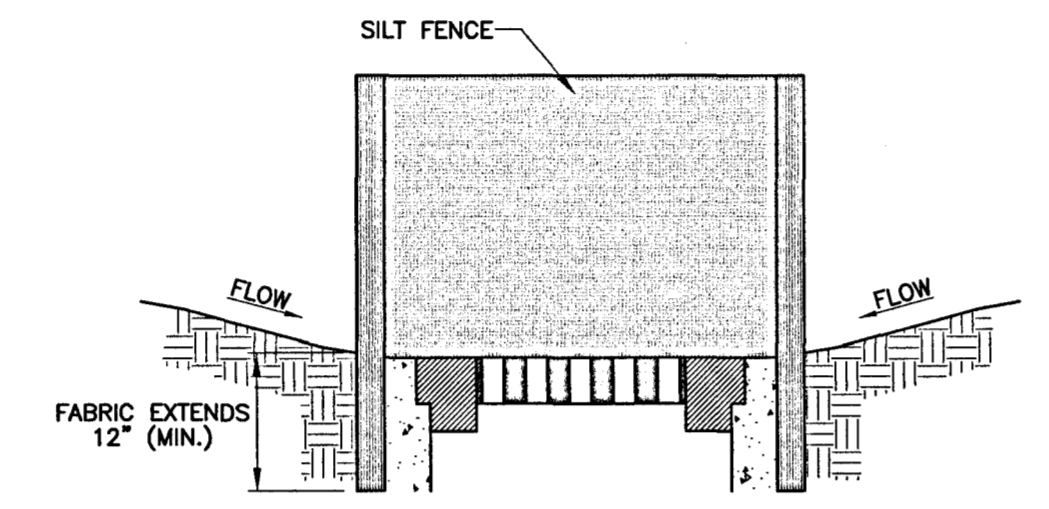
- NOTES:**
- CHECK DAM SHALL BE NO MORE THAN 2 FEET IN HEIGHT
  - THE CENTER OF THE CHECK DAM SHALL BE AT LEAST 6 INCHES LOWER THAN THE OUTER EDGES.
  - COVER THE SWALE WITH THE CHECK DAM AND SET THE HEIGHT FOR THE OUTER EDGES SO THAT RUNOFF WILL NOT FLOW AROUND EITHER END.
  - SPACE THE CHECK DAMS SO THAT THE CENTER OF EACH CHECK DAM IS THE SAME ELEVATION AS THE BOTTOM OF THE CHECK DAM IMMEDIATELY ABOVE IT.
  - USE 100# RIPRAP PLACED ON FILTER FABRIC.
  - CHECK FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 OF THE DAM'S ORIGINAL HEIGHT.
  - CHECK FOR EROSION AROUND EDGES OF DAM AND EXTEND DAM IF EROSION IS TAKING PLACE.
  - REMOVE DAM WHEN SURROUNDING AREA HAS BEEN STABILIZED. IMMEDIATELY STABILIZE AREA UNDER DAM.



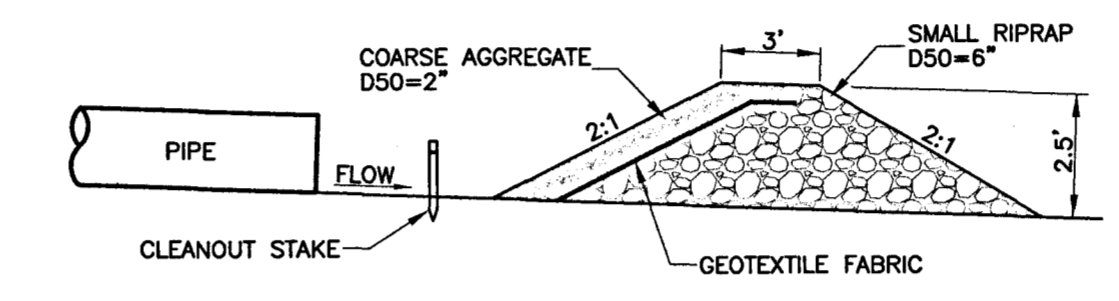
**TEMPORARY SEDIMENT/DETENTION BASIN OUTLET DETAIL**  
N.T.S.



**PLAN VIEW**  
**ISOMETRIC VIEW**

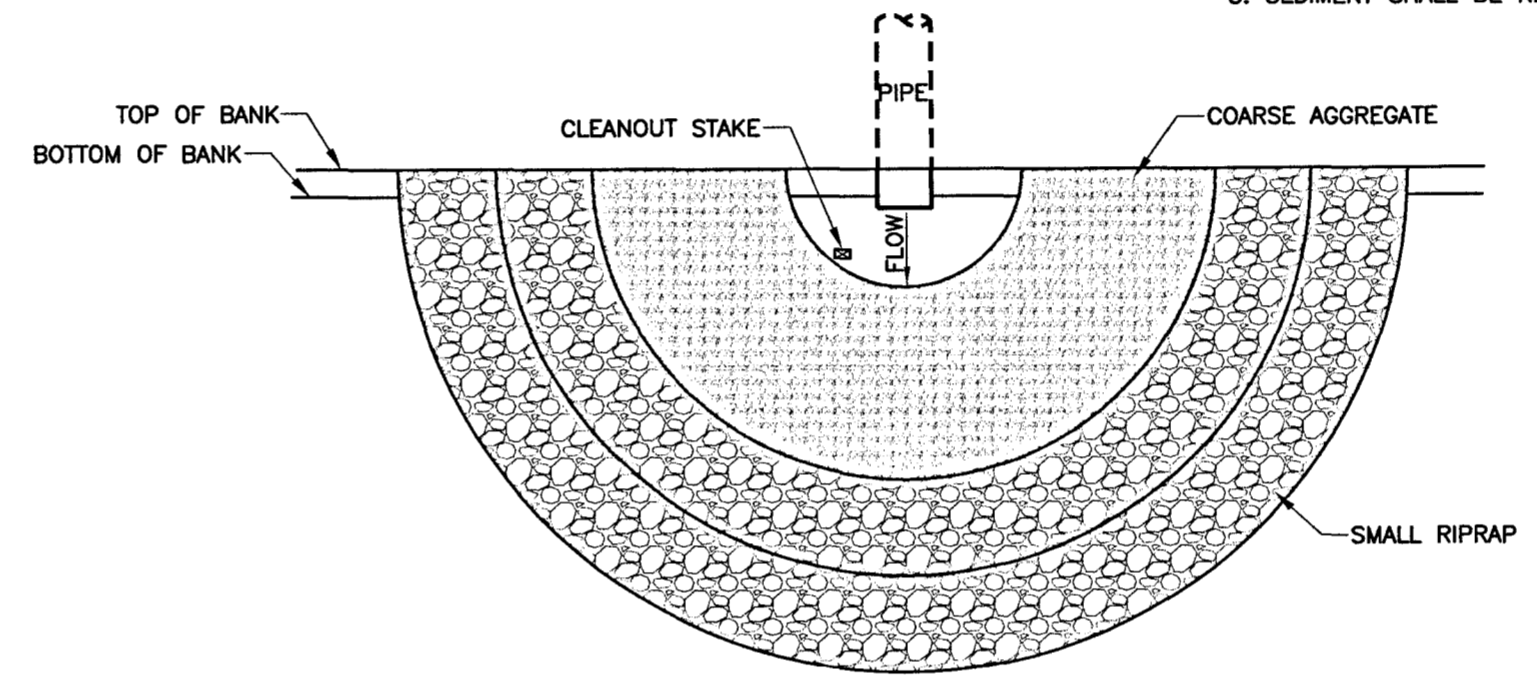


**SECTION "A-A"**  
**SILT FENCE INLET PROTECTION DETAILS**  
N.T.S.

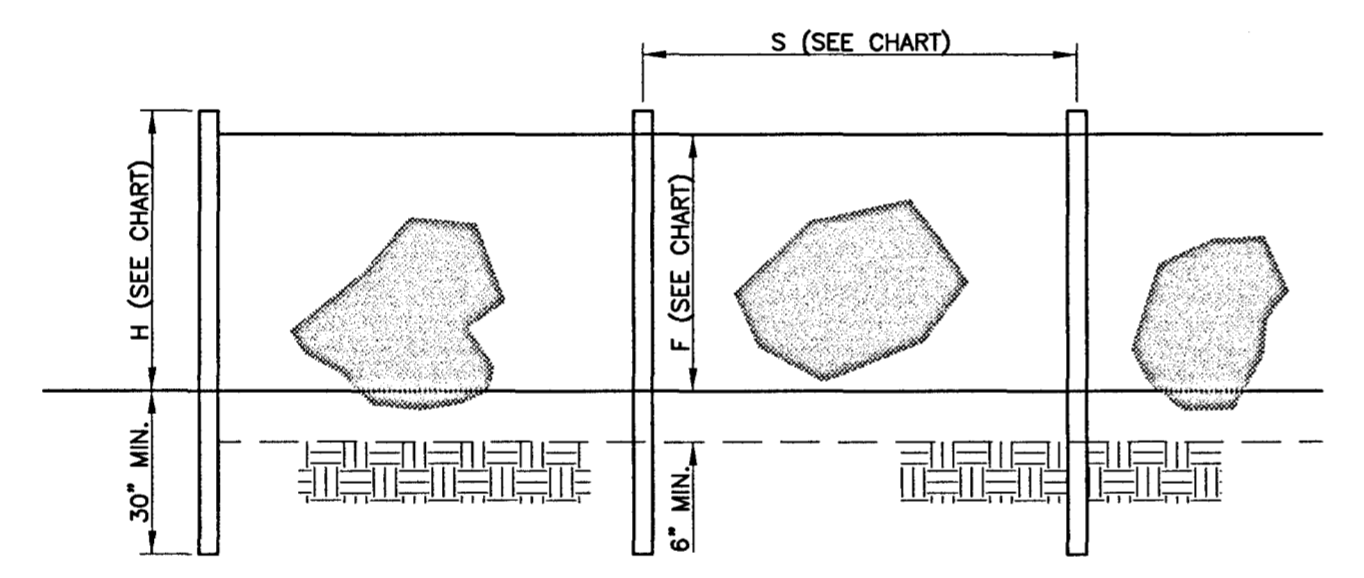


**CROSS SECTION VIEW**

- NOTES:**
- AGGREGATE AND RIPRAP SHALL BE WASHED WITH LITTLE TO NO FINES.
  - PROVIDE CLEANOUT STAKE.
  - SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF FULL.



**OUTLET (PLAN VIEW)**  
**TEMPORARY STONE FILTER RING DETAILS**  
N.T.S.

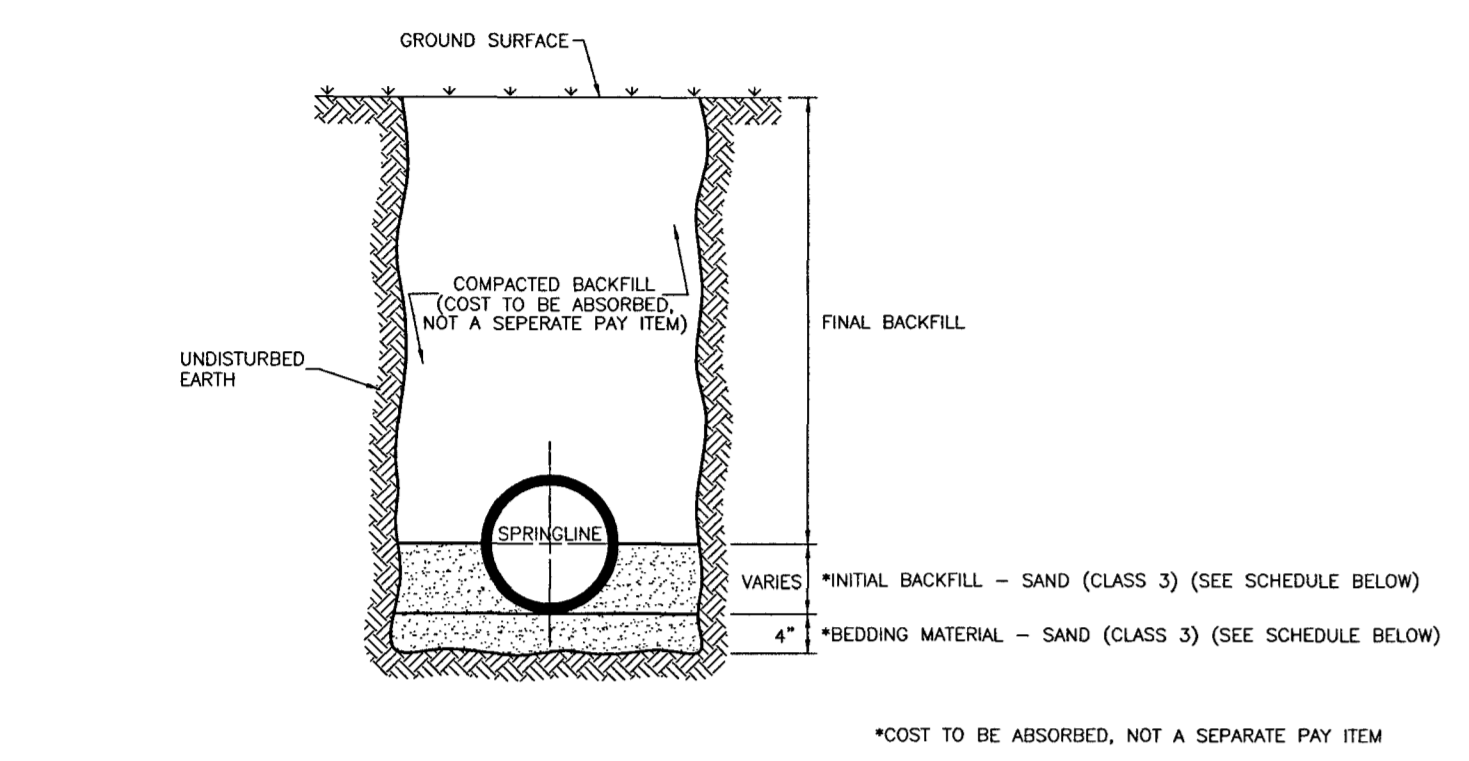


**POST SIZE, MATERIAL AND SPACING CHART**

	WITHOUT BACKING		WITH BACKING	
	MIN. LENGTH = L	MIN. HEIGHT = H	MIN. LENGTH = L	MIN. HEIGHT = H
MIN. LENGTH = L	58"	7'-0"	58"	7'-0"
MIN. HEIGHT = H	2'-0"	2'-0"	2'-0"	2'-0"
MAX. SPACING = S	6'-0"	6'-0"	6'-0"	6'-0"
MIN. FABRIC WIDTH	36"	36"	36"	36"
MATERIAL	1.25 LB/FT. STEEL	1.25 LB/FT. STEEL	1.25 LB/FT. STEEL	1.25 LB/FT. STEEL
	WITHOUT BACKING		WITH BACKING	
TENSILE STRENGTH (LBS. MIN.) (1)	WARF-120	FIL-300	WARF-310	FIL-200
(ASTM D-4632)				
ELONGATION (IN. MAX.) (ASTM D-4632)	20			
ACS (APPROXIMATE OPENING SIZE) (MAX. SIEVE SIZE) (ASTM D-4751)	450	470		
FLOW RATE (GAL./MIN./SQ.FT.) (ICG 87) (MAX.)	4	18		
ULTRAVIOLET STABILITY (2) (ASTM D-4632 AFTER 300 HOURS)	70	90		
WEATHERING IN ACCORDANCE WITH ASTM D-4355				
BURSTING STRENGTH (PSI/MIN.) (ASTM D-3768 DIAPHRAGM BURSTING STRENGTH TESTER)	250	400		
MIN. FABRIC WIDTH (INCHES) ± 1/4"	36	36		
(1) MINIMUM ROLL AVERAGE OF FIVE SPECIMENS				
(2) PERCENT OF REQUIRED INITIAL MINIMUM STRENGTH				

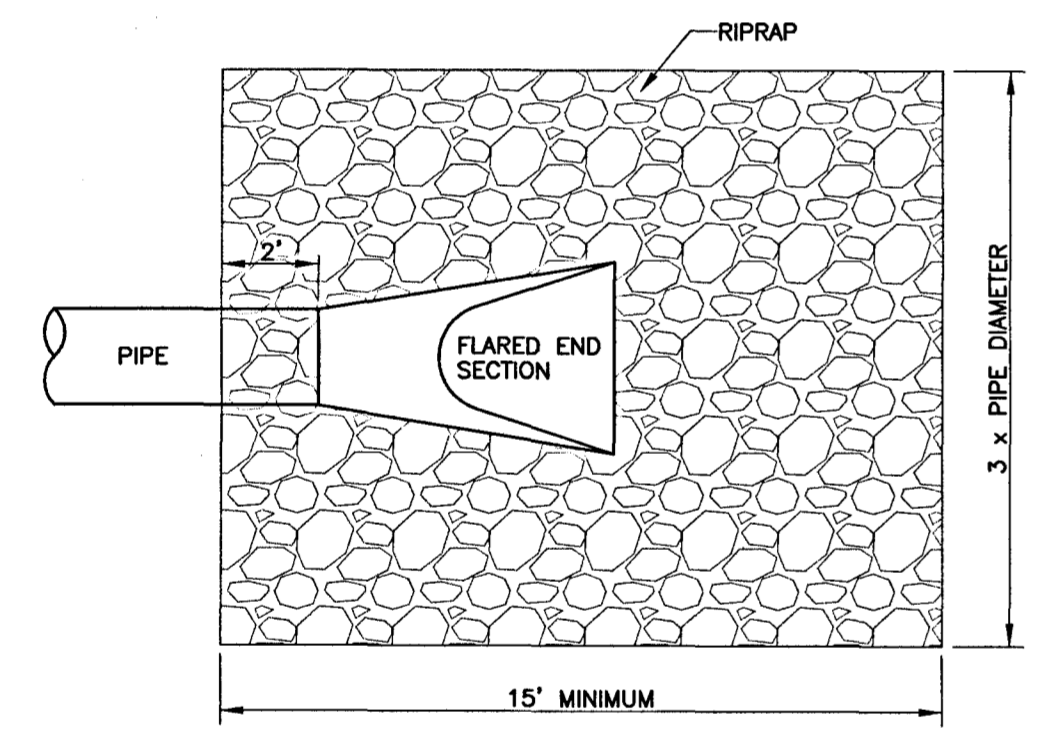
- NOTES:**
- USE SILT FENCE WITHOUT BACKING UNLESS OTHERWISE NOTED.
  - SILT FENCE SHALL BE INSTALLED USING A MECHANICAL TRENCHING MACHINE.
  - FABRIC, IN AREAS WHERE ROCK PROHIBITS PROPER EMBEDMENT, SHALL BE SECURED BY PLACING CLEAN CRUSHED STONE OR SAND ALONG THE BASE OF THE FENCE, 20 POUNDS OF STONE OR SAND PER FOOT, MINIMUM.
  - FILTER FABRIC SHALL BE FASTENED TO POSTS WITH A MINIMUM OF FIVE WIRES OR PLASTIC ZIP TIES WITH A MINIMUM OF 50 LBS. TENSILE STRENGTH.
  - CONTRACTOR SHALL PERIODICALLY REMOVE ACCUMULATED SEDIMENT WHEN SEDIMENT DEPTH REACHES 12".

**SILT FENCE INSTALLATION DETAILS**  
N.T.S.

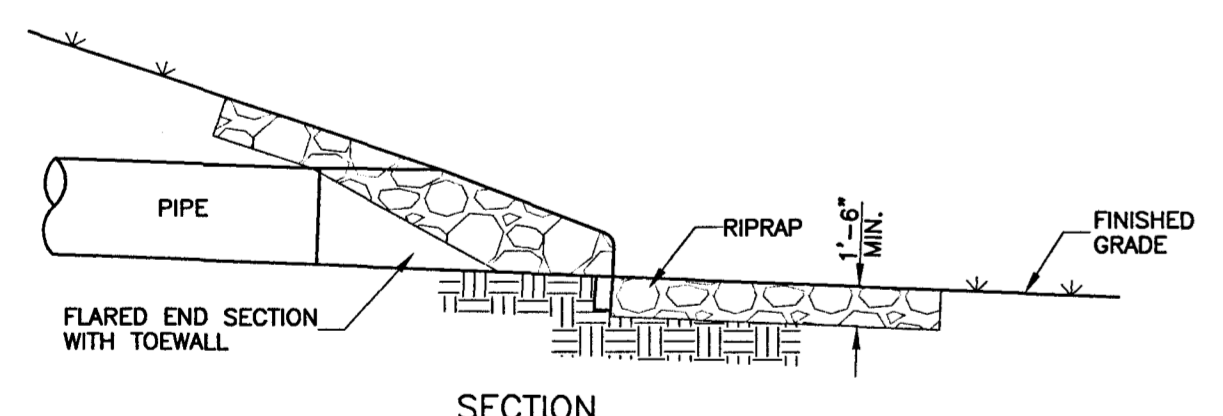


**TYPICAL TRENCH CROSS-SECTION FOR CORRUGATED POLYETHYLENE PIPE (H.D.P.E.) AND CORRUGATED METAL PIPE (C.M.A.P.)**

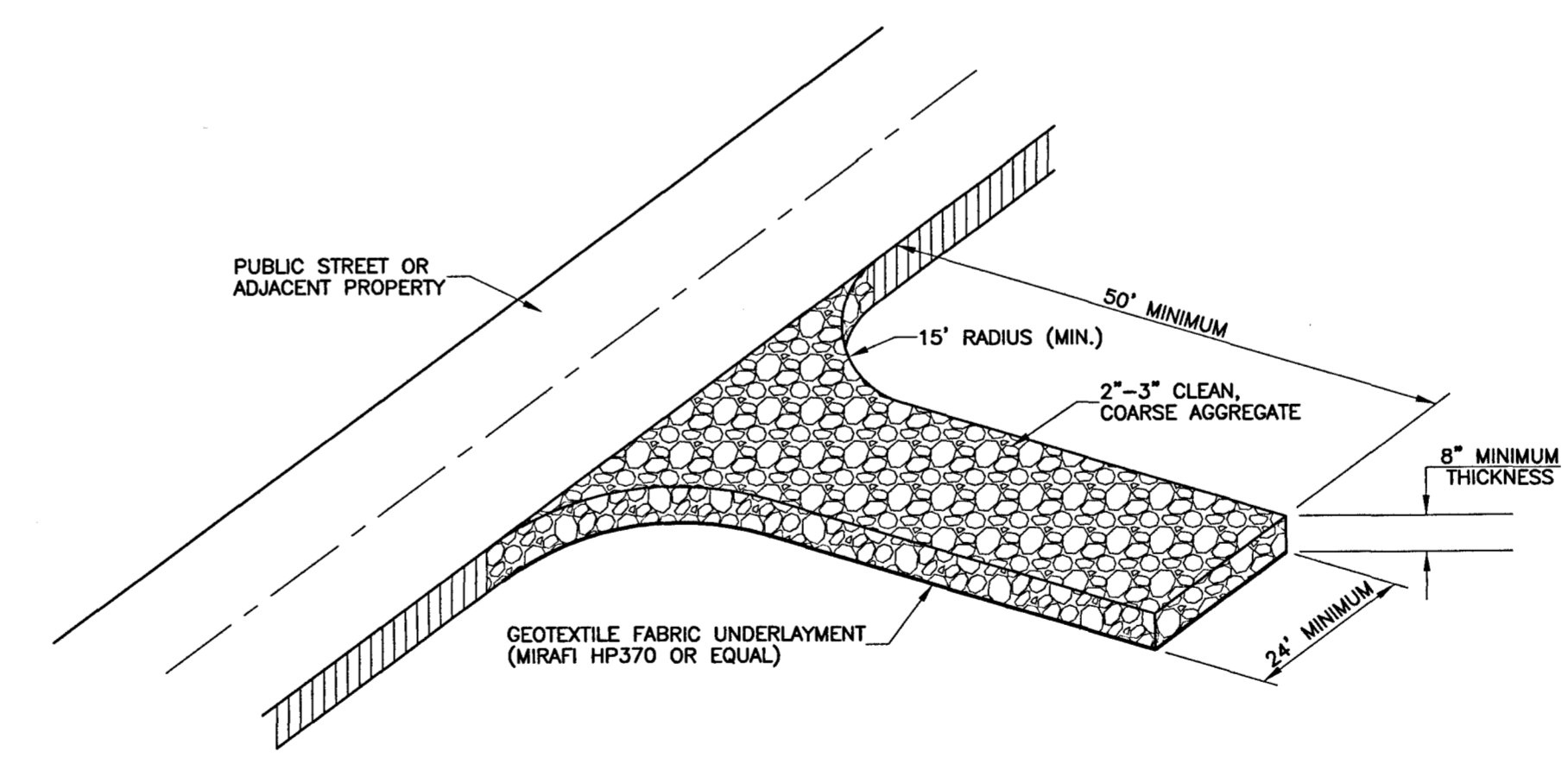
CLASS	3
PERCENT PASSING NO. 200 SIEVE (MAX.)	10
FRACTION PASSING NO. 40 SIEVE	---
LIQUID LIMIT (MAX.)	---
PLASTICITY INDEX (MAX.)	np



**PLAN VIEW**



**FLARED END SECTION WITH RIPRAP DETAILS**  
N.T.S.



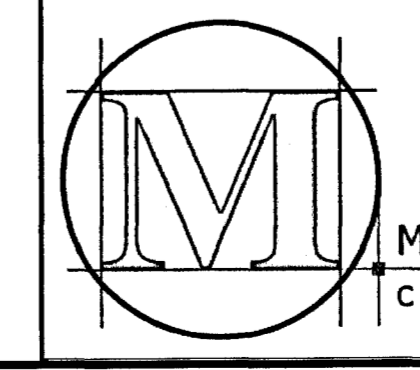
**ISOMETRIC VIEW**  
**CONSTRUCTION ENTRANCE DETAIL**  
N.T.S.

**Revisions**

#	Date	Nature	By	App'd.
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

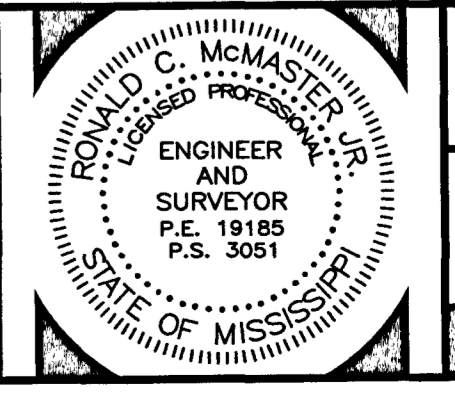
**Project No.** M-2350  
**Designed By** R.C.M.  
**Date** 3-18-16  
**Drawn By** D.P.  
**Scale** SEE ABOVE  
**Checked By** R.C.M.

**BRIDGEWATER 11D**

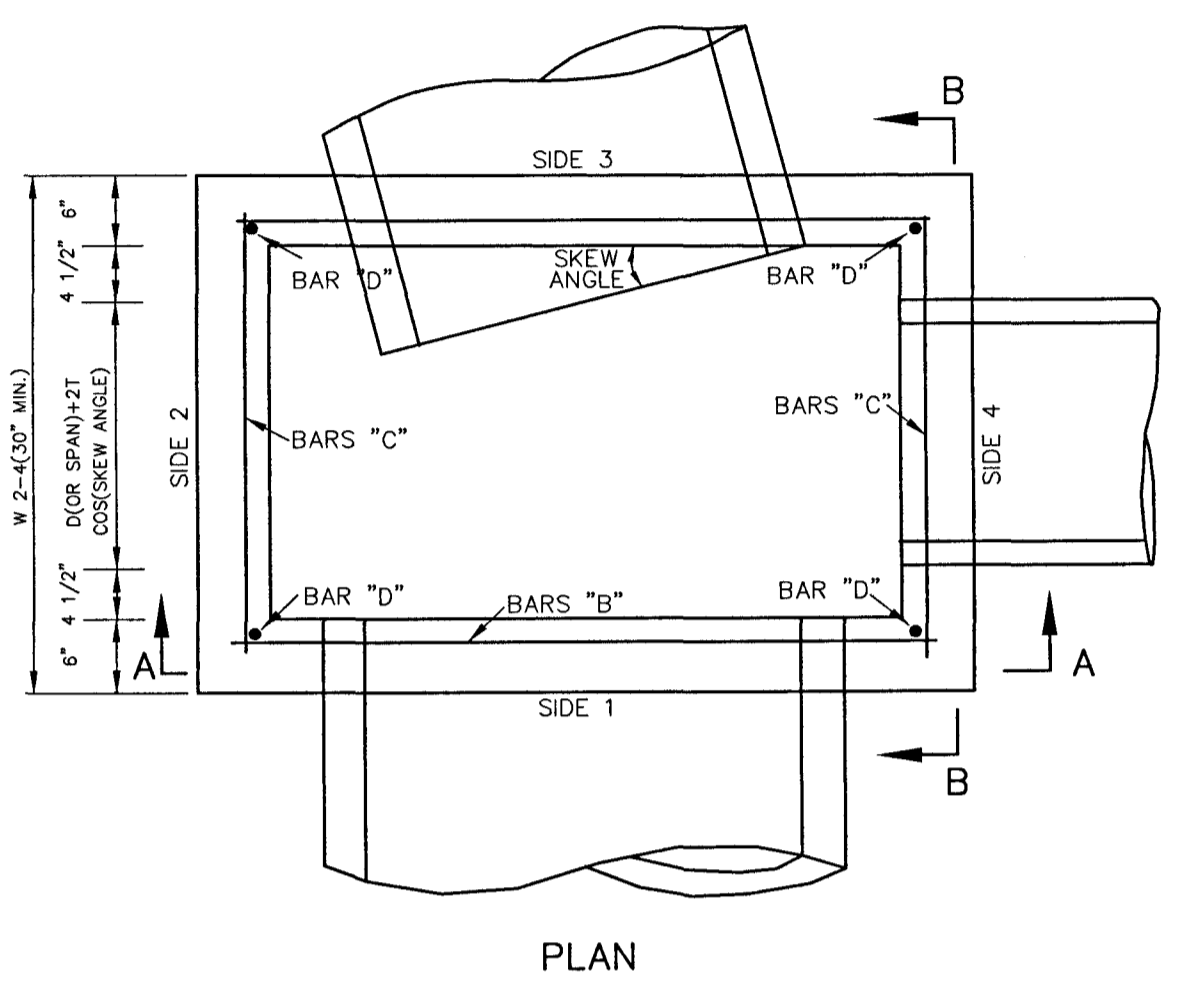
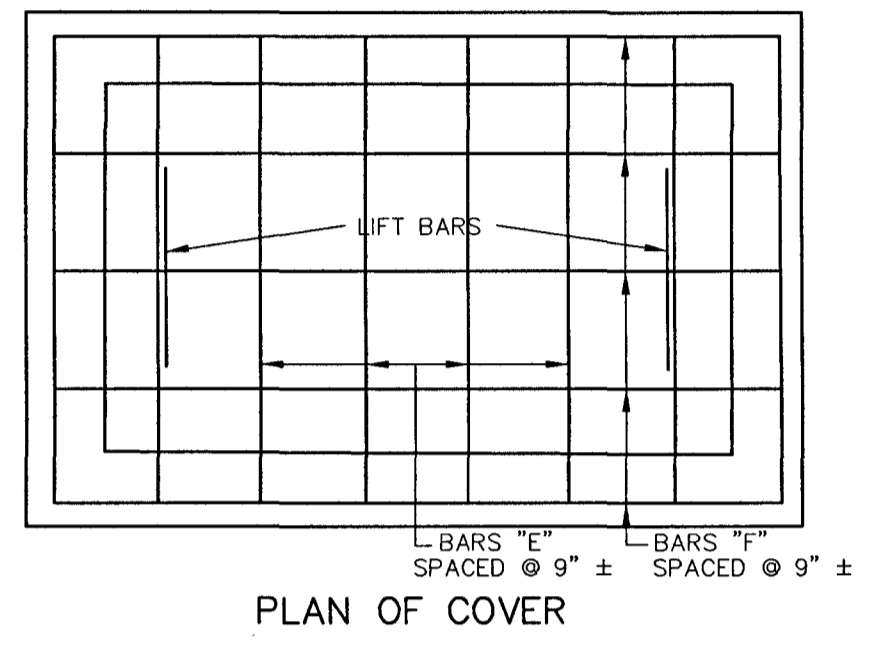


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SUITE 300  
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601.605.1090



MISCELLANEOUS DETAILS  
**11**



BAR LIST		
BAR	NUMBER REQUIRED	LENGTH (INCHES)
A	2 PER PIPE OPENING	$\sqrt{96} + (\frac{W}{2} + 2)$
B	2	W1-3-6
C	2	W2-4-6
D	4	H-6
E	$2[(\frac{W1-3}{9})^{**} + 1]$	W2-4-4
F	$2[(\frac{W2-4}{9})^{**} + 1]$	W1-3-4

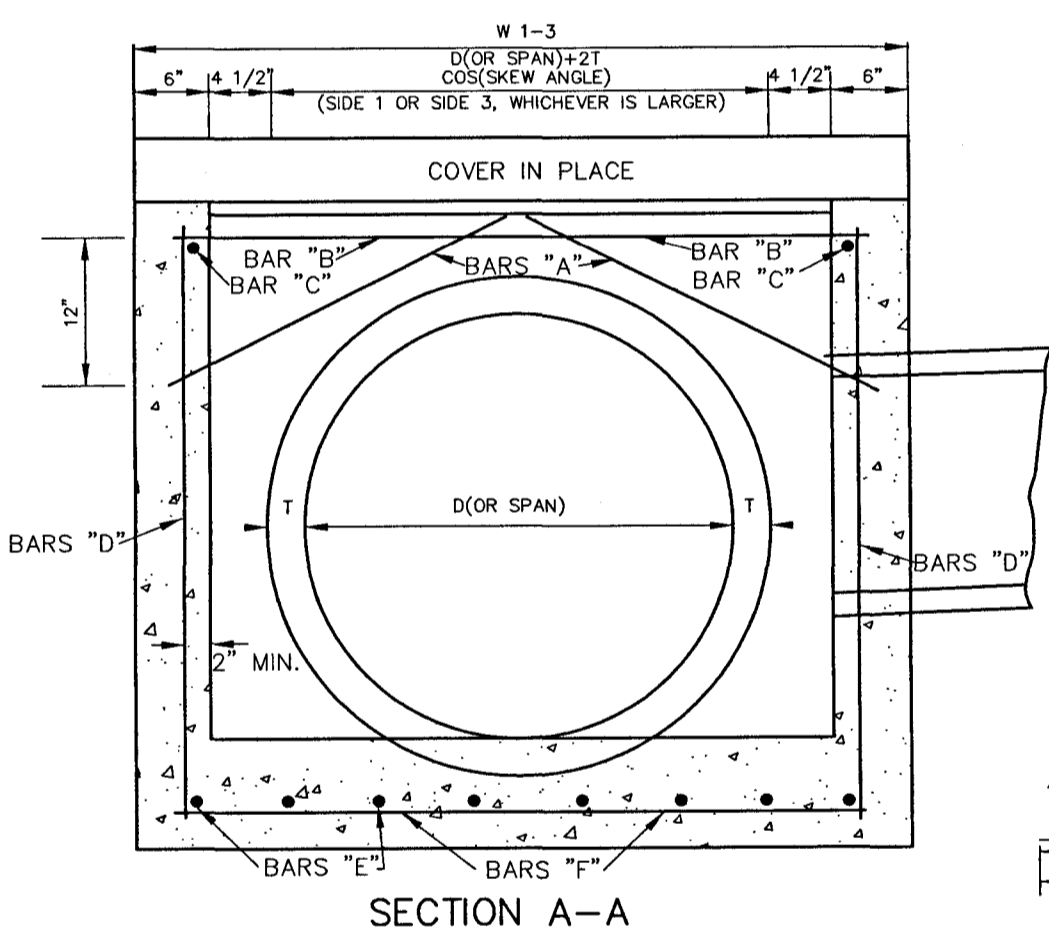
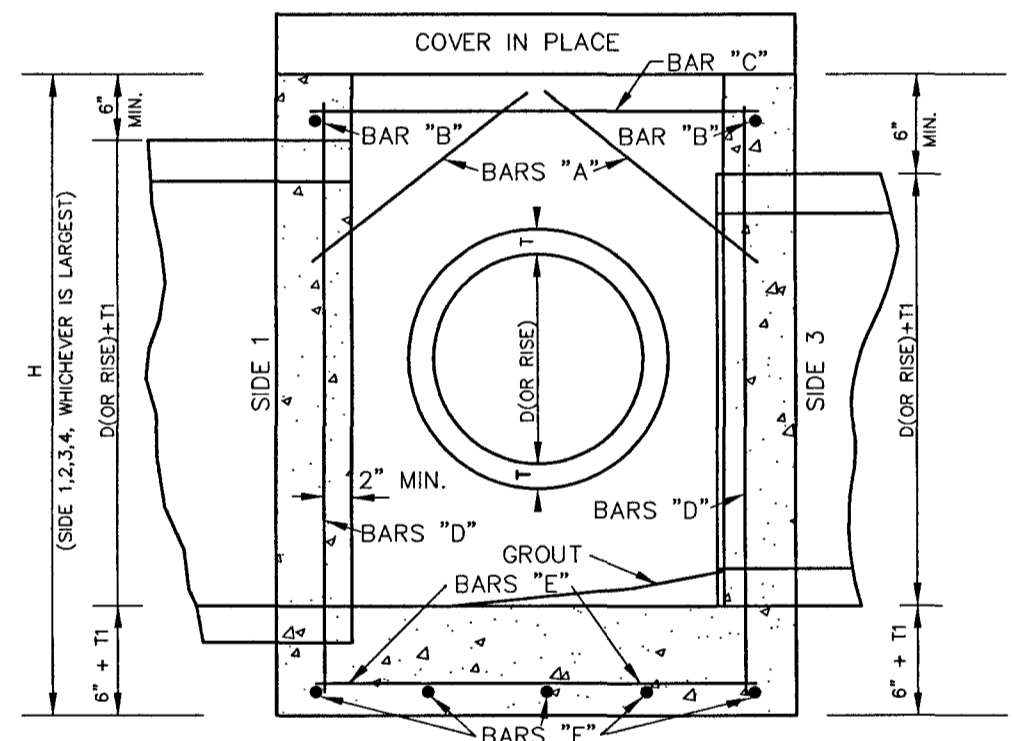
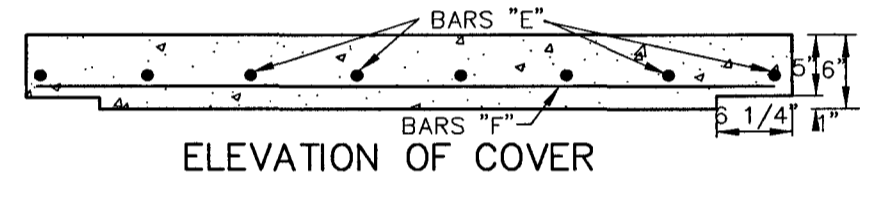
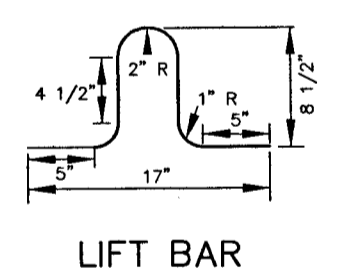
WHERE D (OR SPAN) = PIPE DIAMETER (OR SPAN) (INCHES)  
 W1-3 = WIDTH OF SIDE 1 & SIDE 3 (INCHES)  
 W2-4 = WIDTH OF SIDE 2 & SIDE 4 (INCHES)  
 W = W1-3 OR W2-4 (SIDE OF ENTERING PIPE)  
 \*\* ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (C.Y.) =  $[5W1-3W2-4] + [(W1-3-12.5)(W2-4-12.5)] + [(T1+6)W1-3W2-4] + 12[H-(T1+6)](W1-3-12)+W2-4$   
 46.658  
 (MINUS) DEDUCTIONS FOR PIPE OPENINGS (C.Y.)

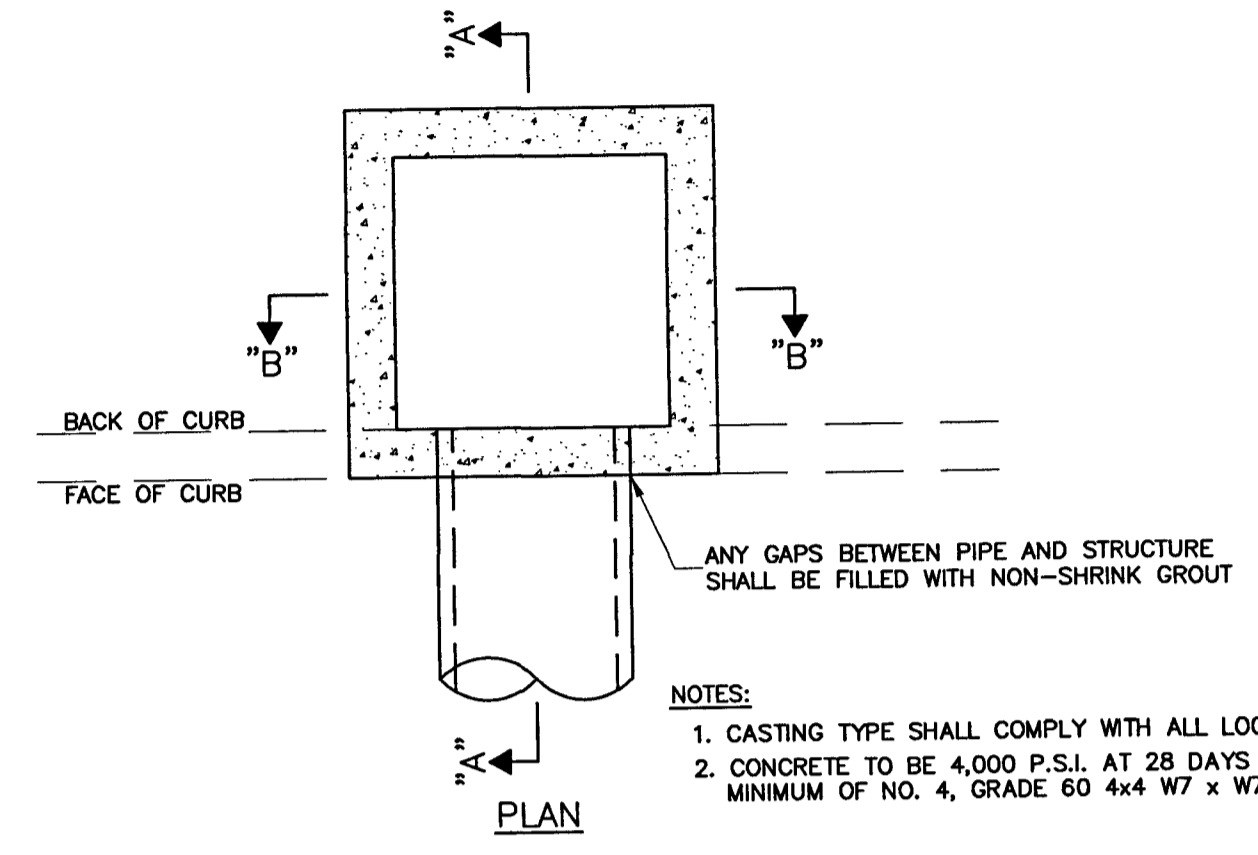
REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.  
 REINFORCING STEEL FOR 2 LIFT BARS = 4 LBS.

COMMON PIPE SIZE			
CIRCULAR PIPE		ARCH PIPE	
PIPE SIZE	PIPE THICKNESS INCHES	PIPE SIZE	PIPE THICKNESS INCHES
18"	2 1/2	22" X 13"	2 1/2
24"	3	29" X 19"	3
30"	3 1/2	36" X 23"	3 1/2
36"	4	44" X 27"	4
42"	4 1/2	51" X 31"	4 1/2
48"	5	58" X 36"	5
54"	5 1/2	65" X 40"	5 1/2
60"	6	73" X 45"	6
66"	6 1/2		
72"	7		

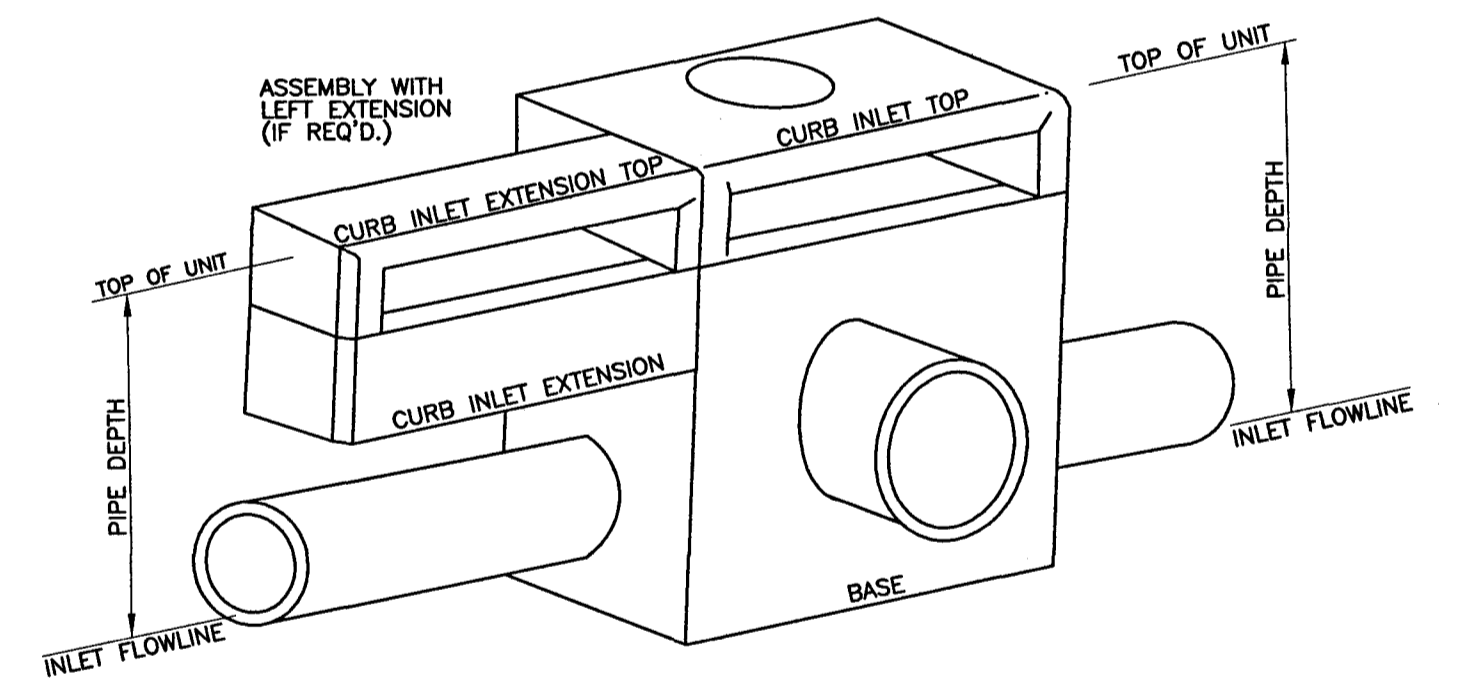
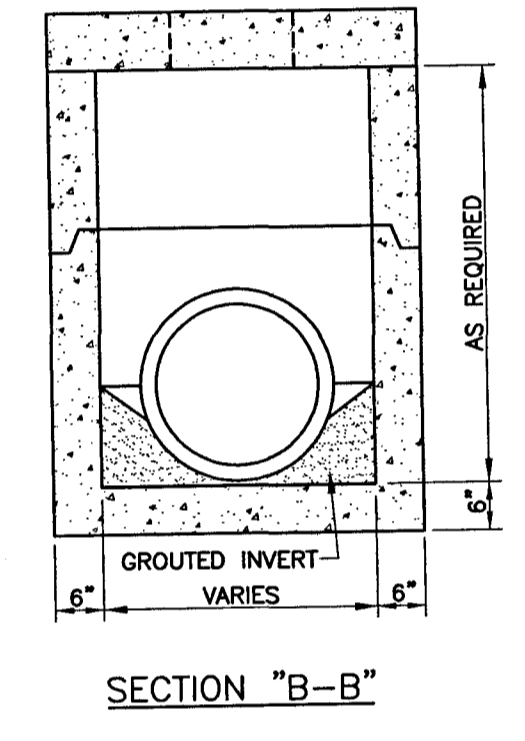
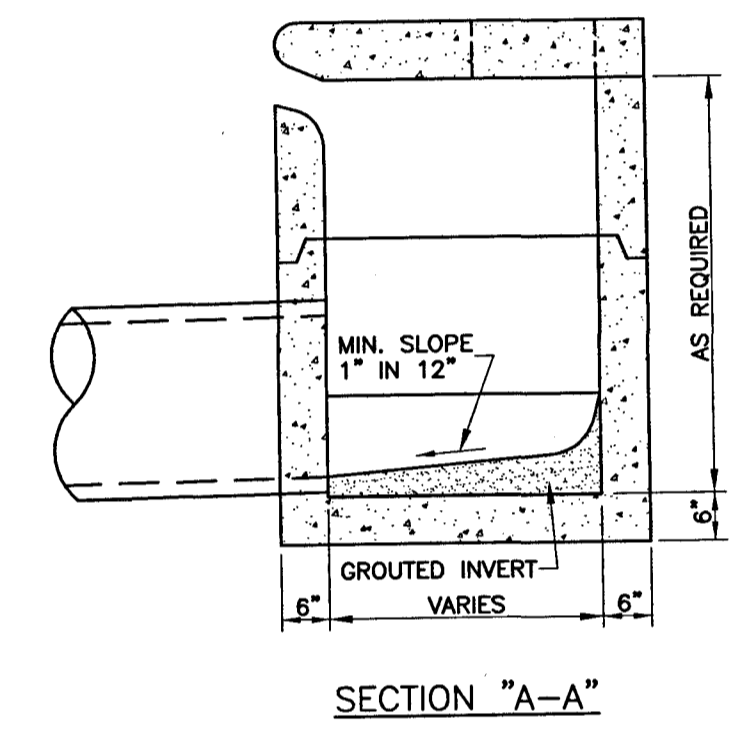
- GENERAL NOTES
- QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
  - CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS, SIZE #4.
  - SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
  - IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.



JUNCTION BOX DETAILS



- NOTES:
- CASTING TYPE SHALL COMPLY WITH ALL LOCAL STANDARDS.
  - CONCRETE TO BE 4,000 P.S.I. AT 28 DAYS AND REINFORCED WITH MINIMUM OF NO. 4, GRADE 60 4x4 W7 x W7 STEEL FABRIC.

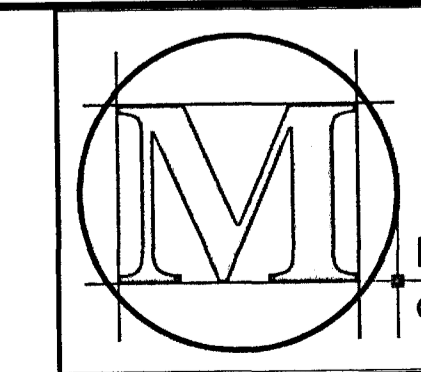


N.T.S.

Revisions			
#	Date	Nature	By
1	4-1-16	RESPONSE TO COMMENTS	D.P.

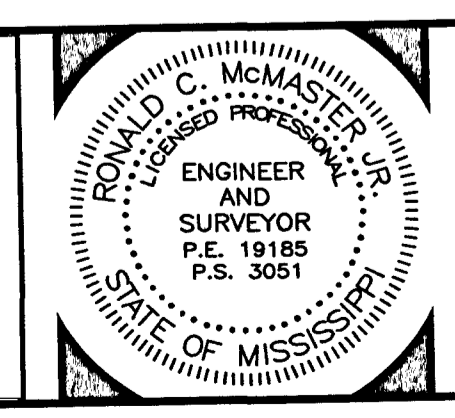
Project No.	M-2350	Designed By	R.C.M.
Date	3-18-16	Drawn By	D.P.
Scale	SEE ABOVE	Checked By	R.C.M.

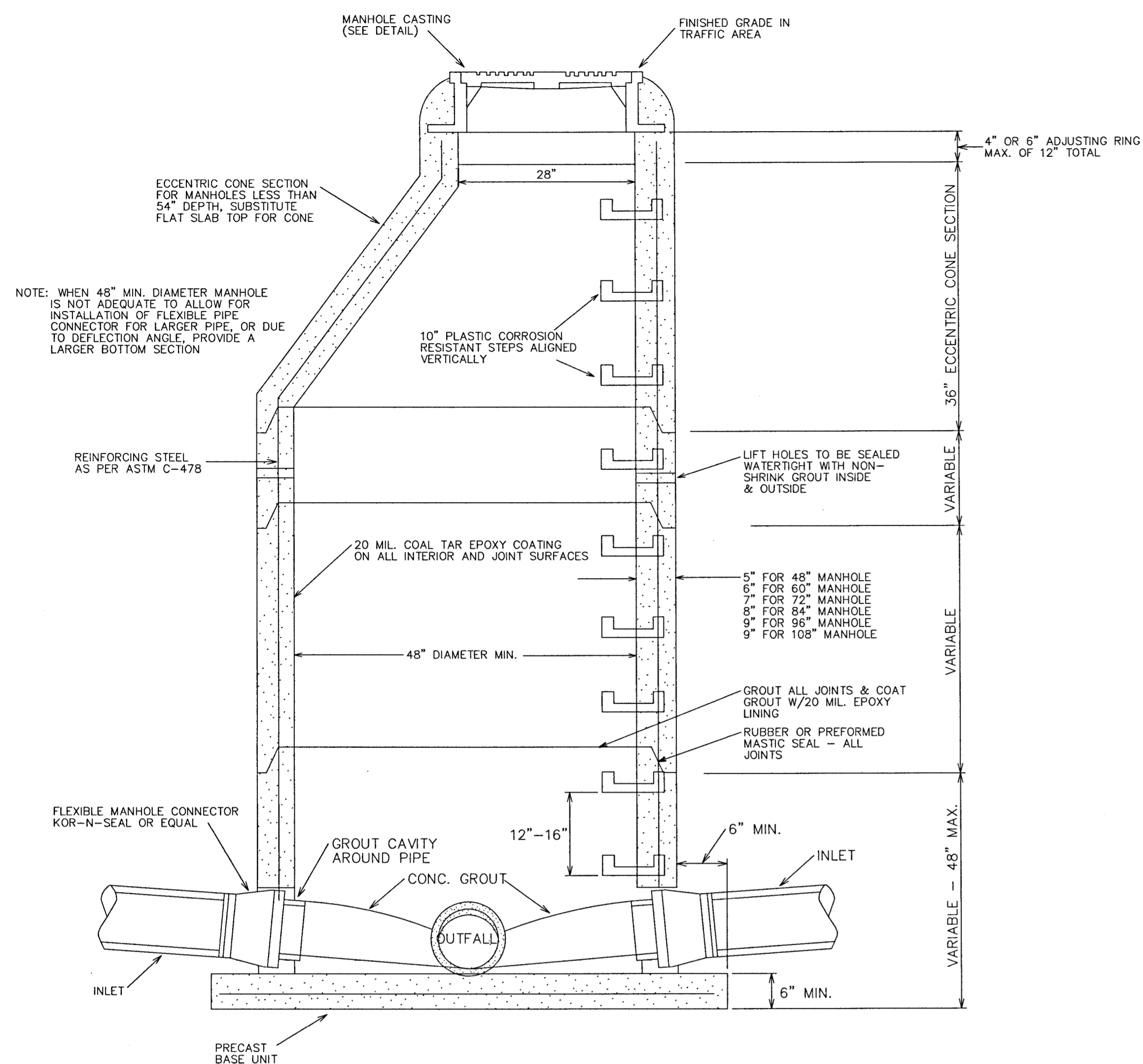
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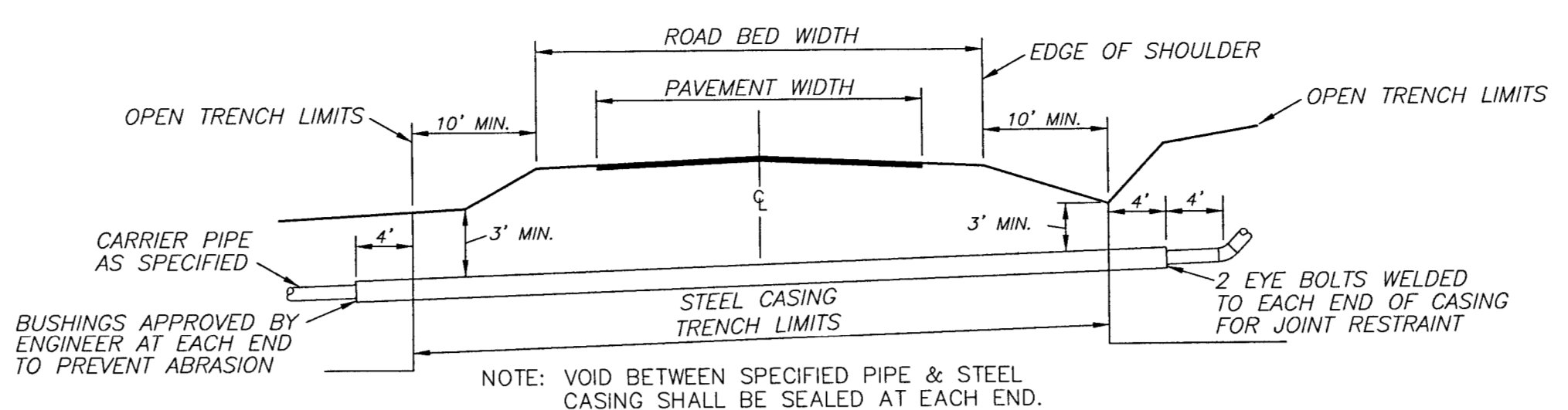
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212 WATERFORD SQUARE  
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 MADISON, MS 39110  
 601.605.1090

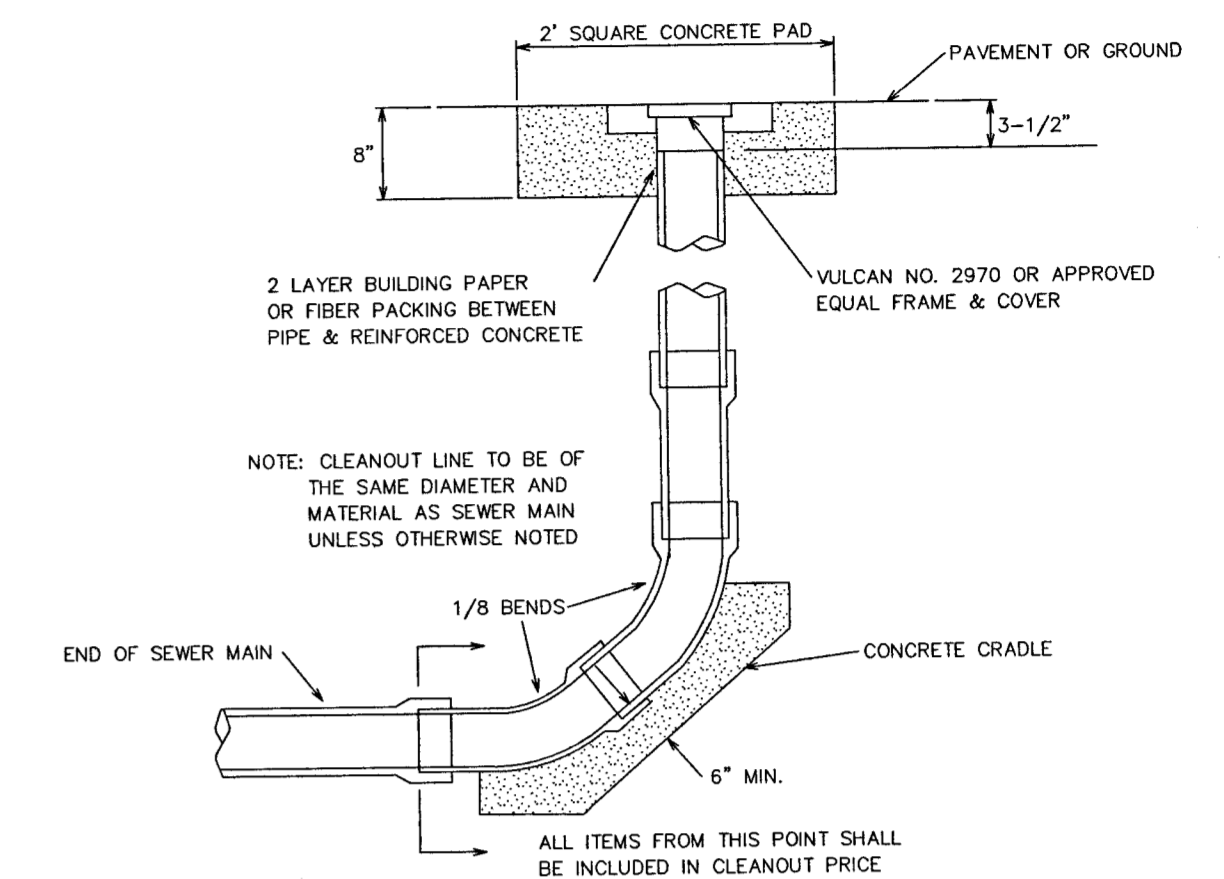




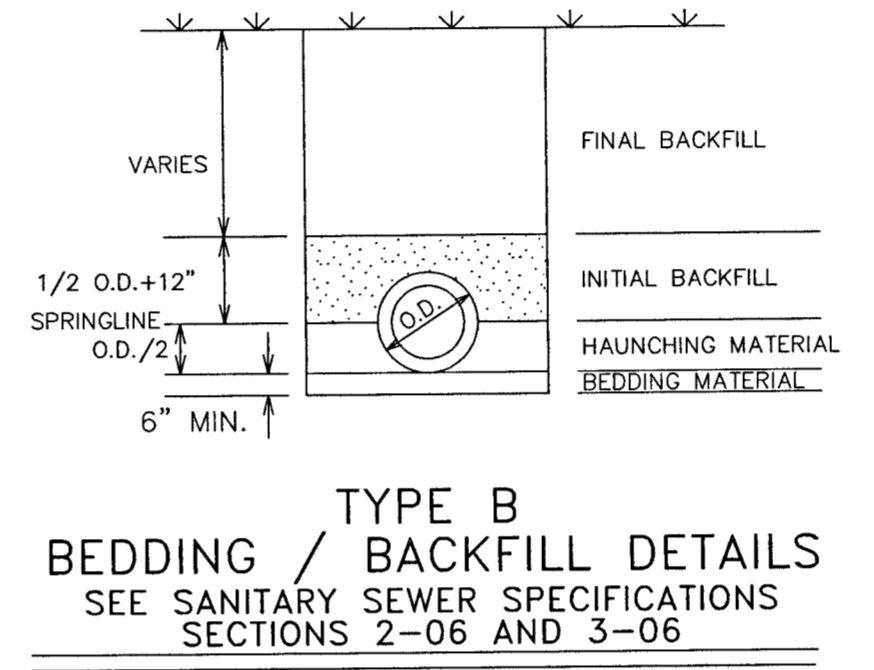
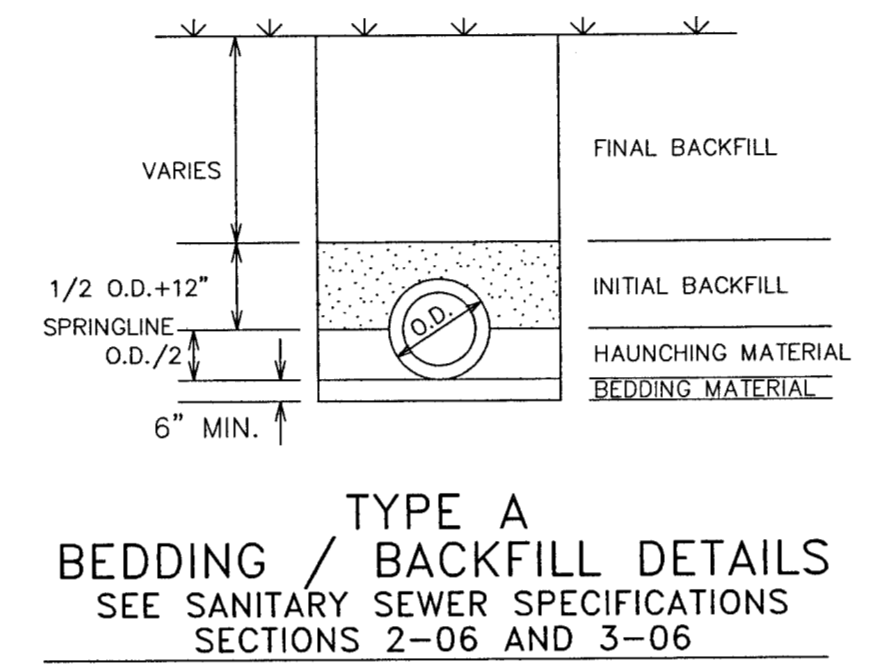
SECTION PRECAST CONCRETE MANHOLE



TYPICAL ROAD BORE

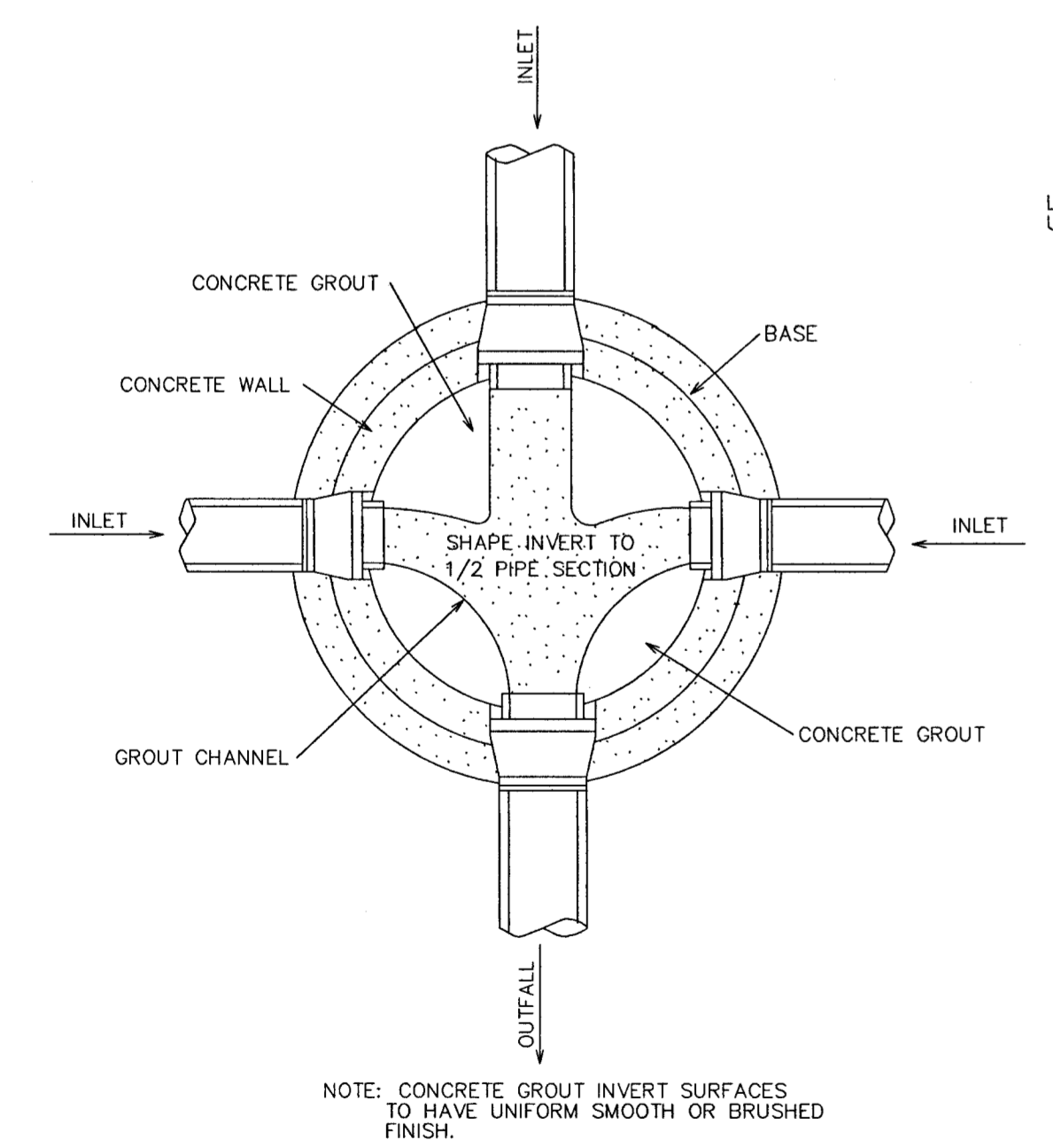


TERMINAL CLEANOUT

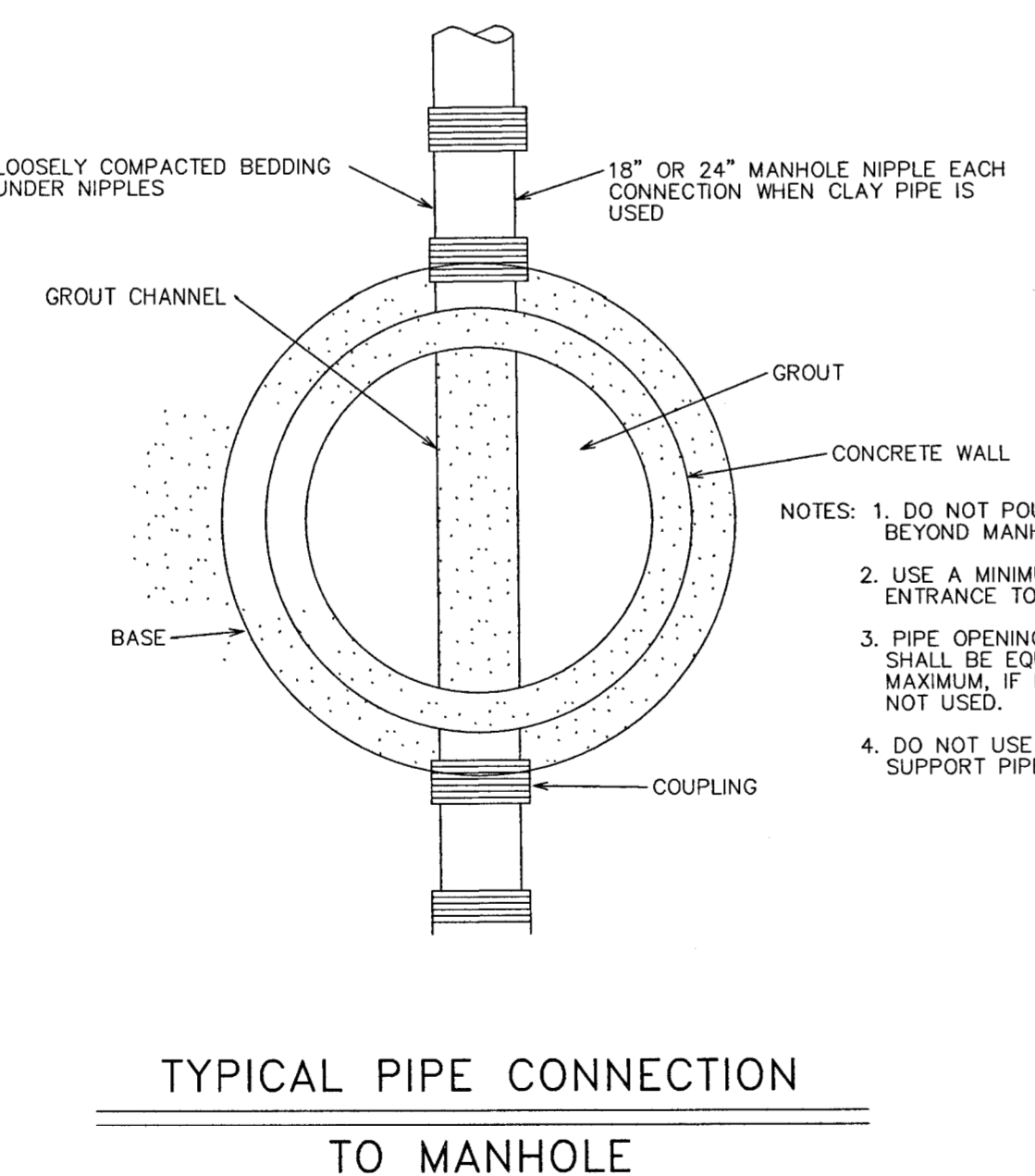


TYPE A BEDDING / BACKFILL DETAILS

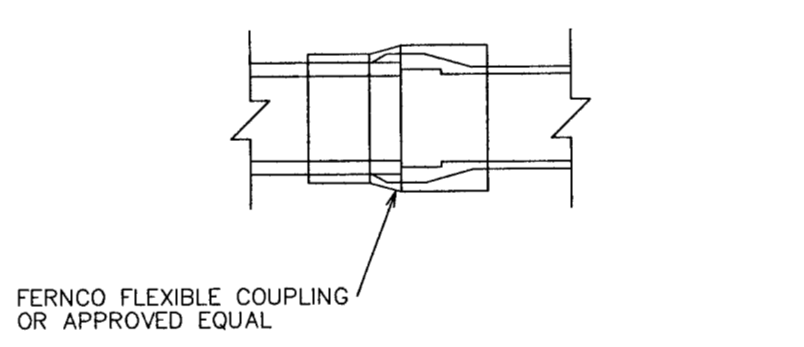
TYPE B BEDDING / BACKFILL DETAILS



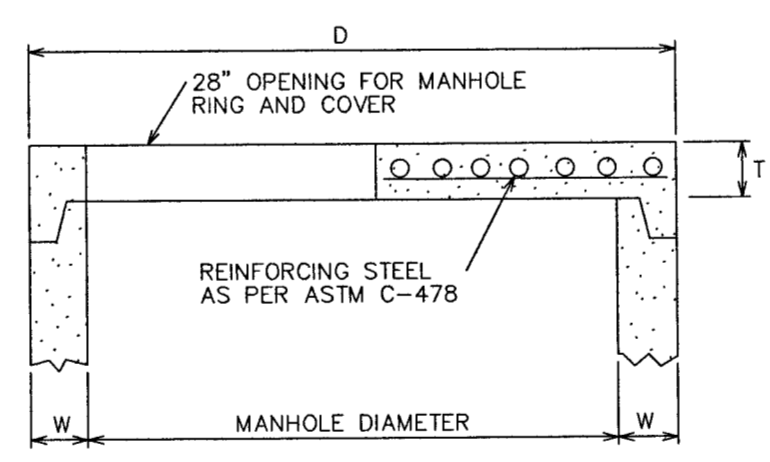
MANHOLE FLOW CHANNELS DETAIL



TYPICAL PIPE CONNECTION TO MANHOLE



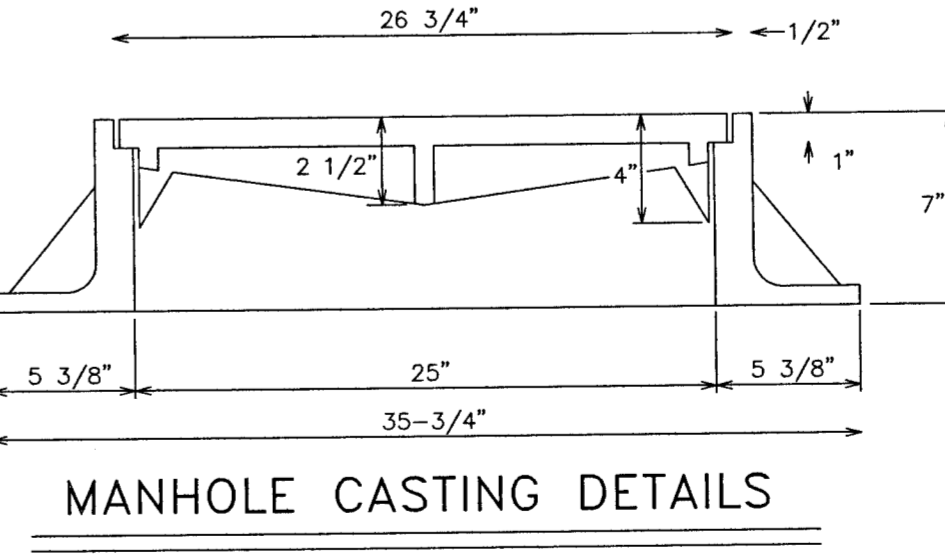
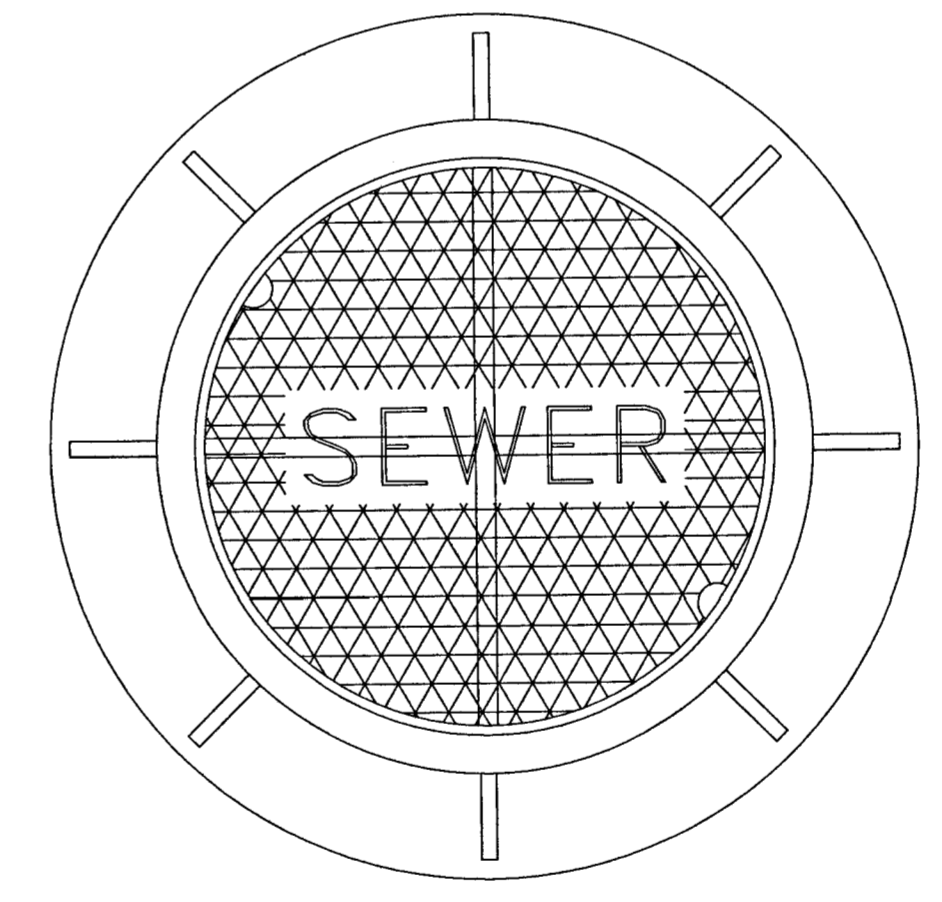
JOINTING DISSIMILAR PIPES



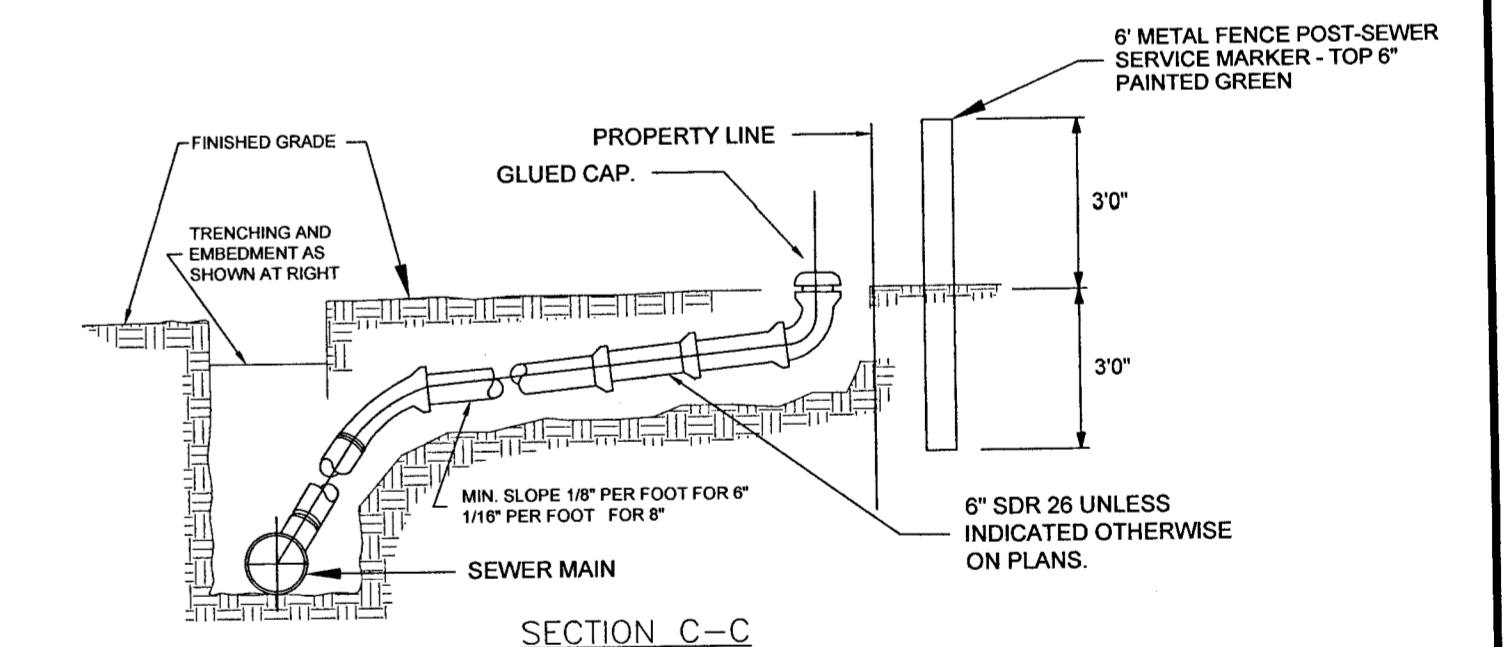
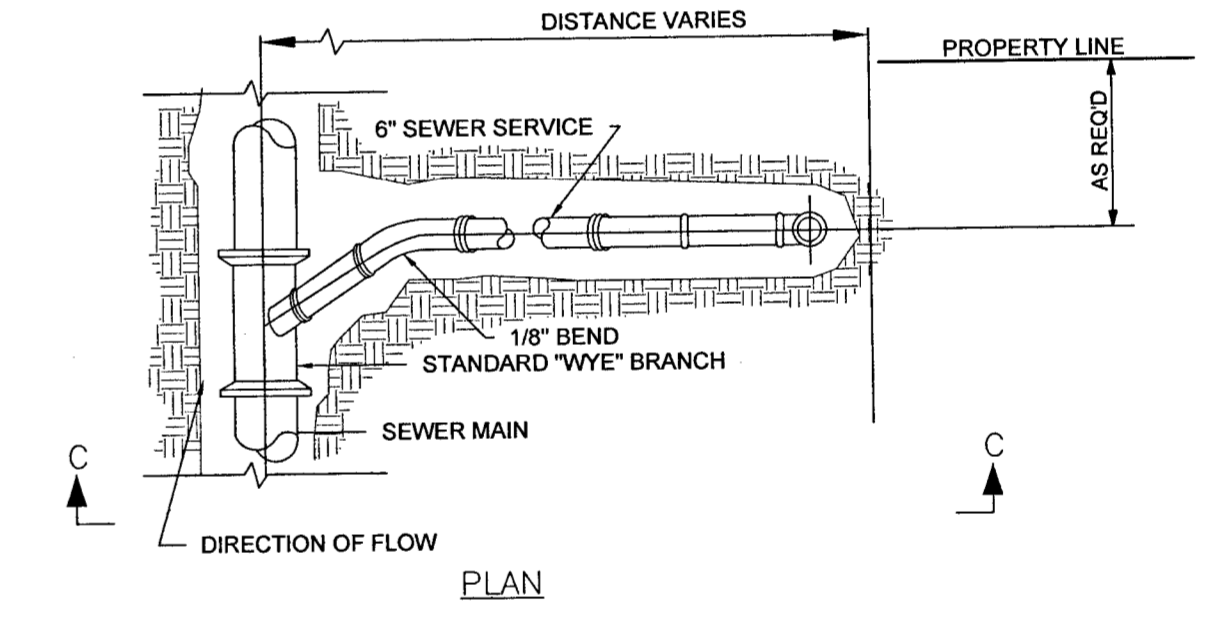
DIMENSION TABLE

PIPE DIAMETER	W	D	T
48"	3"	58"	8"
60"	6"	72"	8"
72"	7"	86"	8"
84"	8"	100"	8"
96"	9"	114"	8"
108"	10"	126"	8"

FLAT SLAB MANHOLE TOP



MANHOLE CASTING DETAILS



SEWER SERVICE CONNECTION DETAIL

Revisions

#	Date	Nature	By	App'd.
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

Project No. M-2350

Designed By R.C.M.

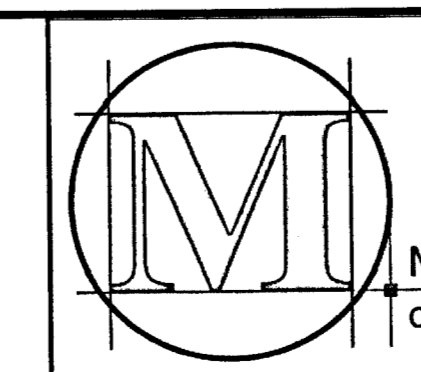
Date 3-18-16

Drawn By D.P.

Scale SEE ABOVE

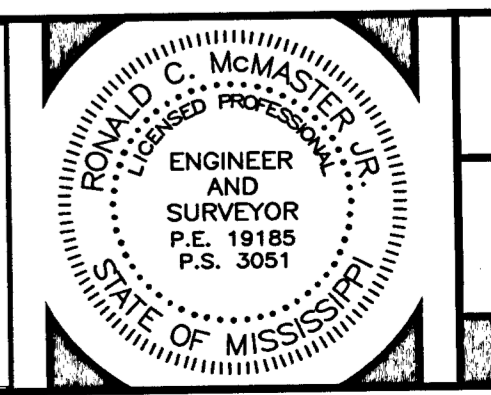
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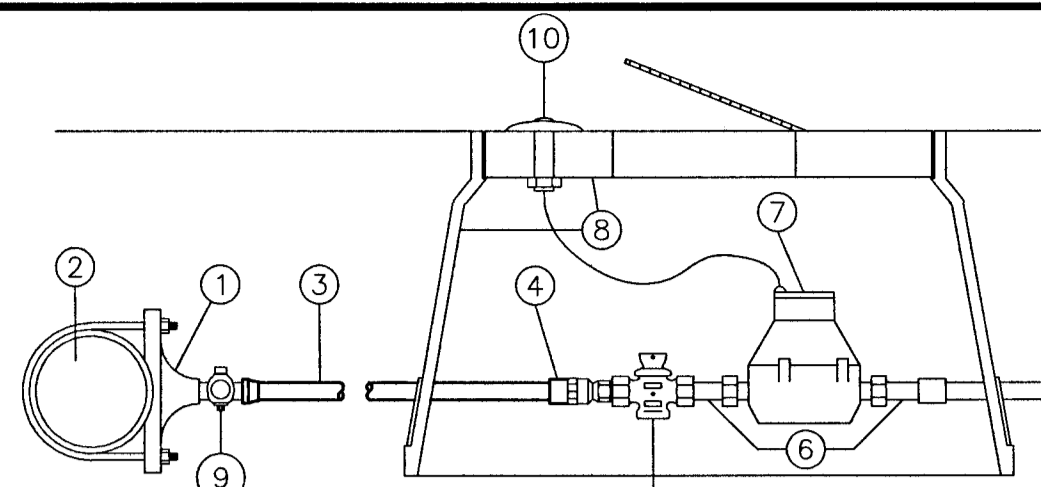
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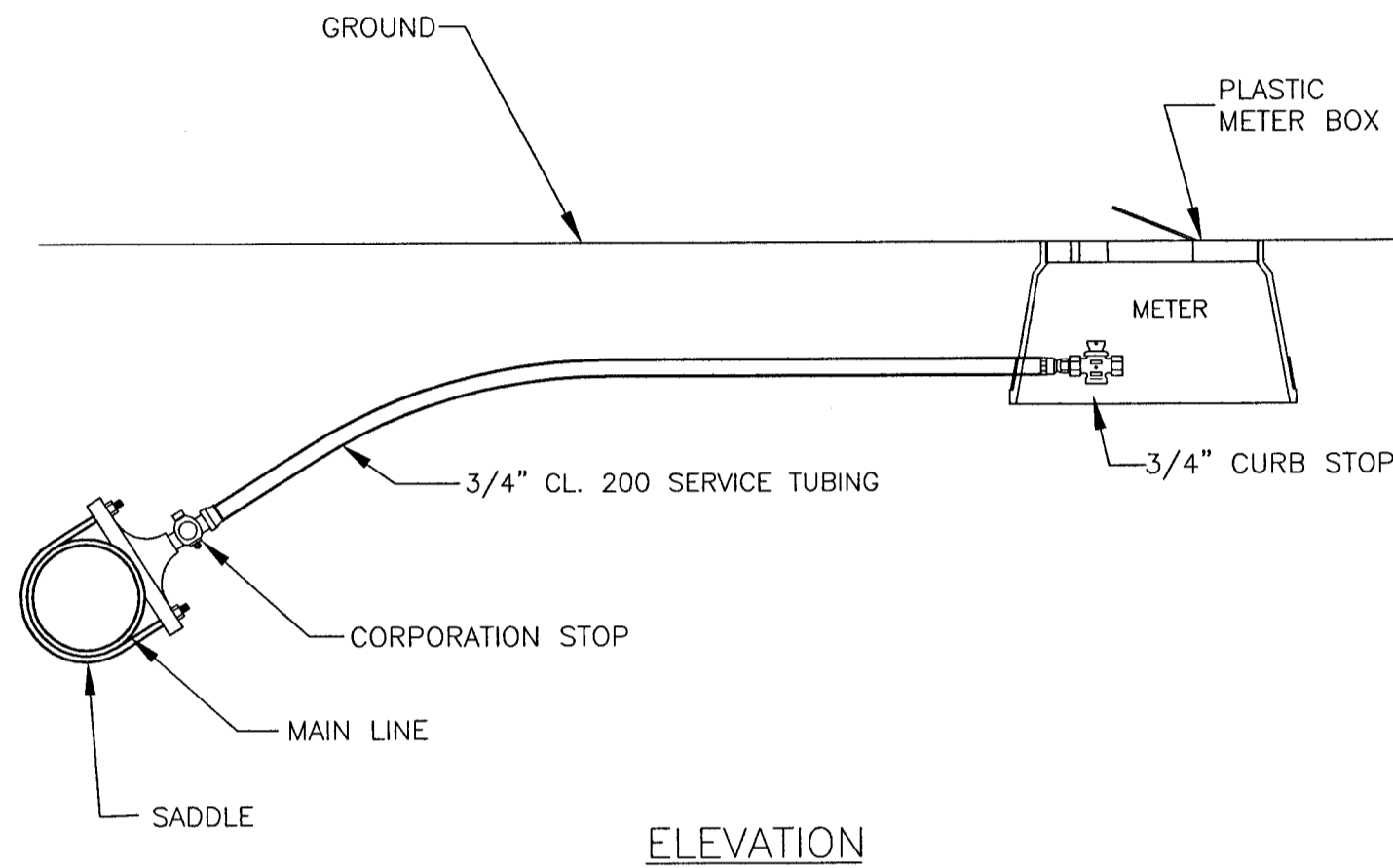
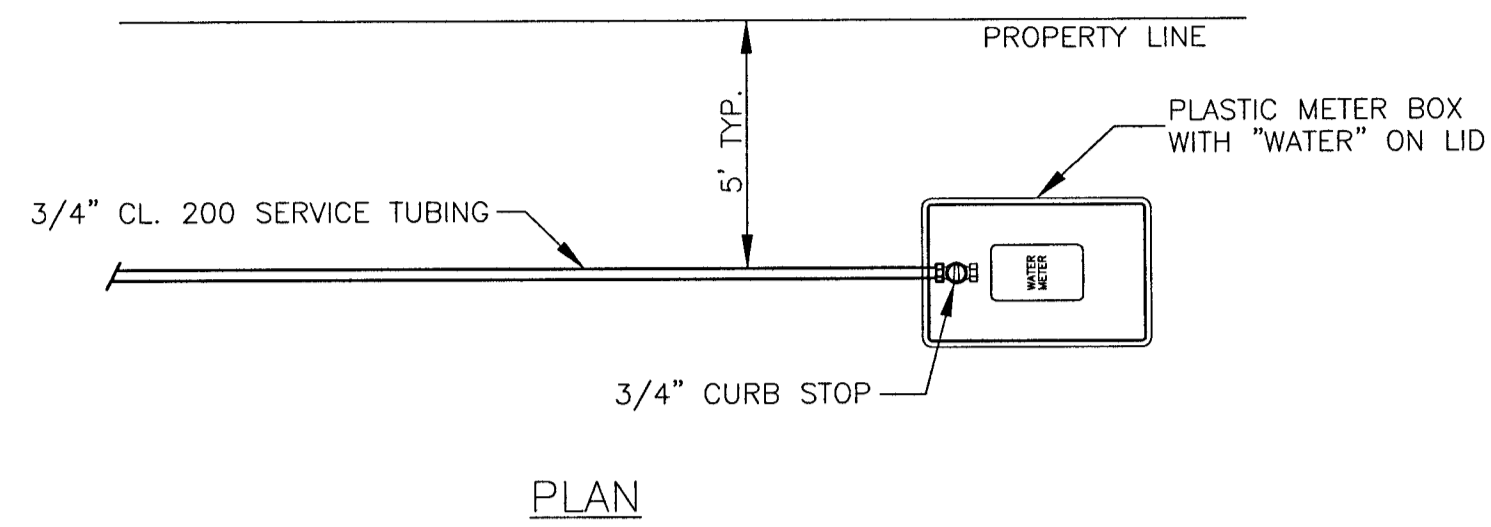
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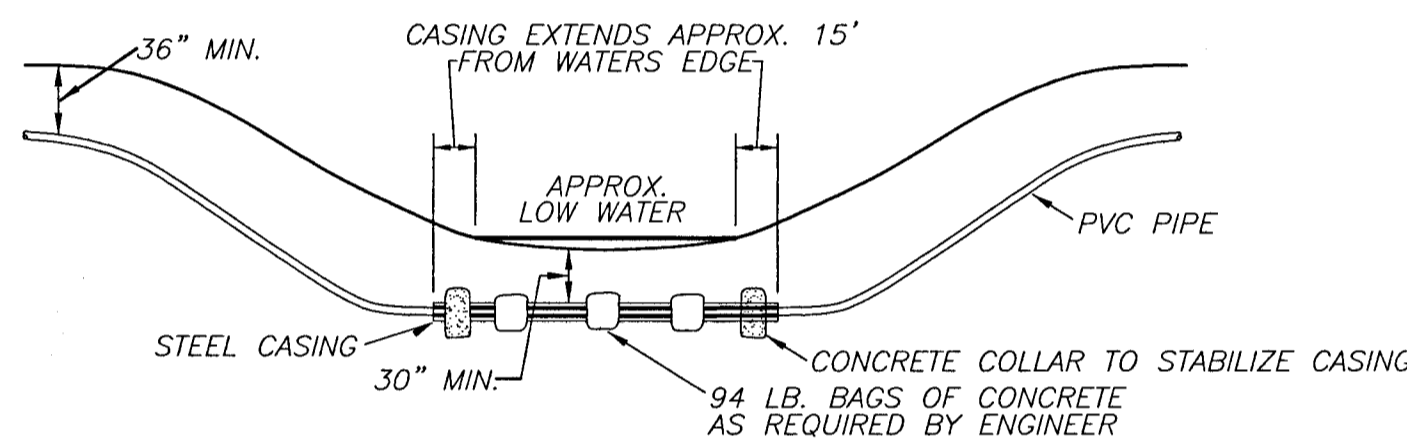


ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
1	SERVICE CLAMP	FORD 202B
2	P.V.C. MAIN	C-900 P.V.C., CLASS 150 MINIMUM
3	SERVICE LINE W/ SPECIFIED P.V.C. CASING UNDER ROADWAY	POLYETHYLENE CL-200
4	TRANSITION FITTING P.V.C.	MUELLER H-12211
5	CURB STOP	FORD B43-232W-NL
6	METER COUPLINGS	MUELLER H-10891
7	WATER METER	BADGER (TO BE INSTALLED BY CITY)
8	STANDARD BLACK PLASTIC METER BOX WITH READER LID.	NDS 12" STD BOX W/ 2 HOLES (TOUCH READ)
9	CORPORATION STOP	FORD F1000-3-NL
10	TOUCH READ DEVICE	(TO BE APPROVED BY CITY)

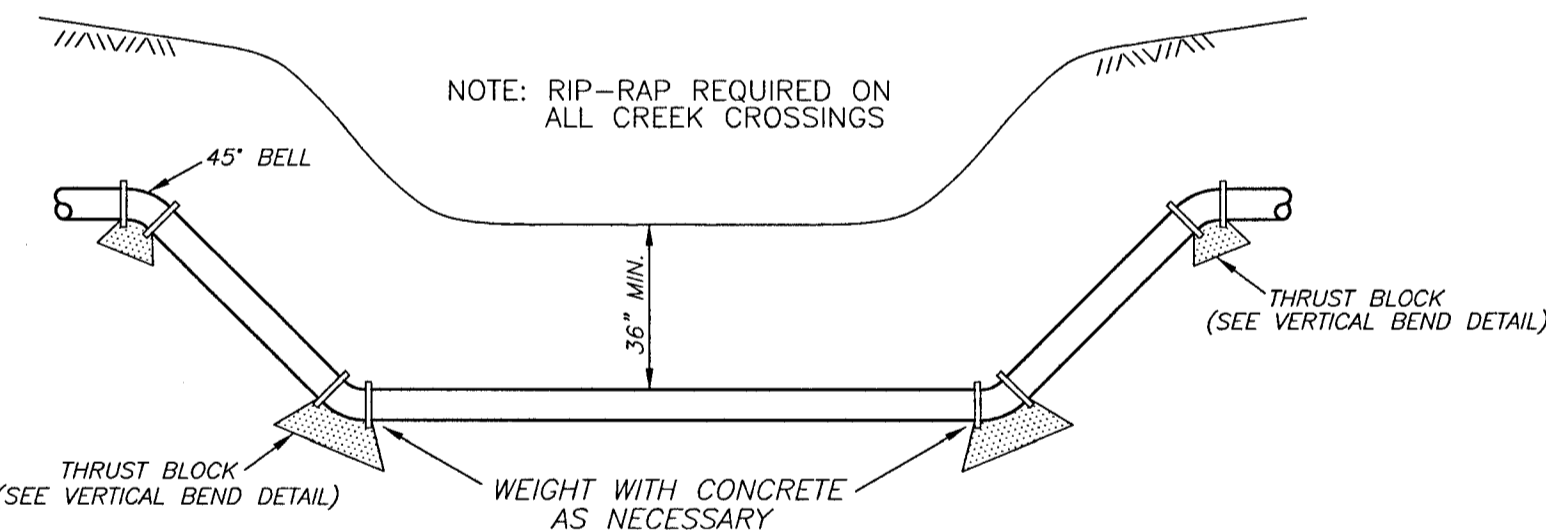
\*SEE PLANS FOR MATERIAL SIZES  
 \*ALL FITTINGS SHALL BE NO-LEAD (NL)  
**TYPICAL SERVICE ASSEMBLY**  
 CONNECTING TO PVC WATER MAIN



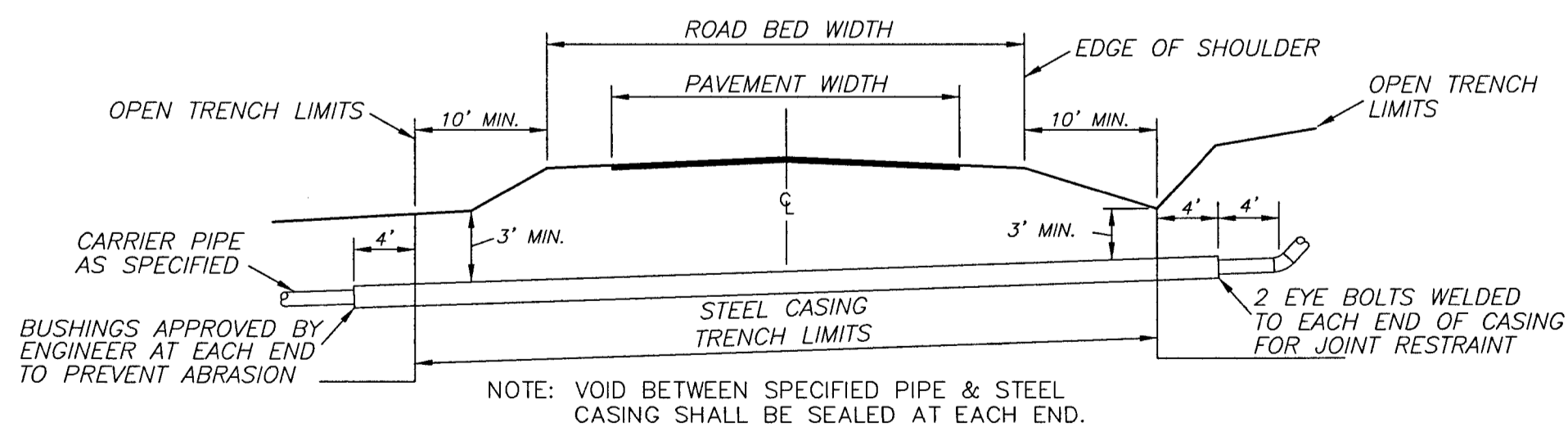
**TYPICAL SERVICE ASSEMBLY LESS METER**



**TYPICAL CREEK CROSSING FOR P.V.C. PIPE**

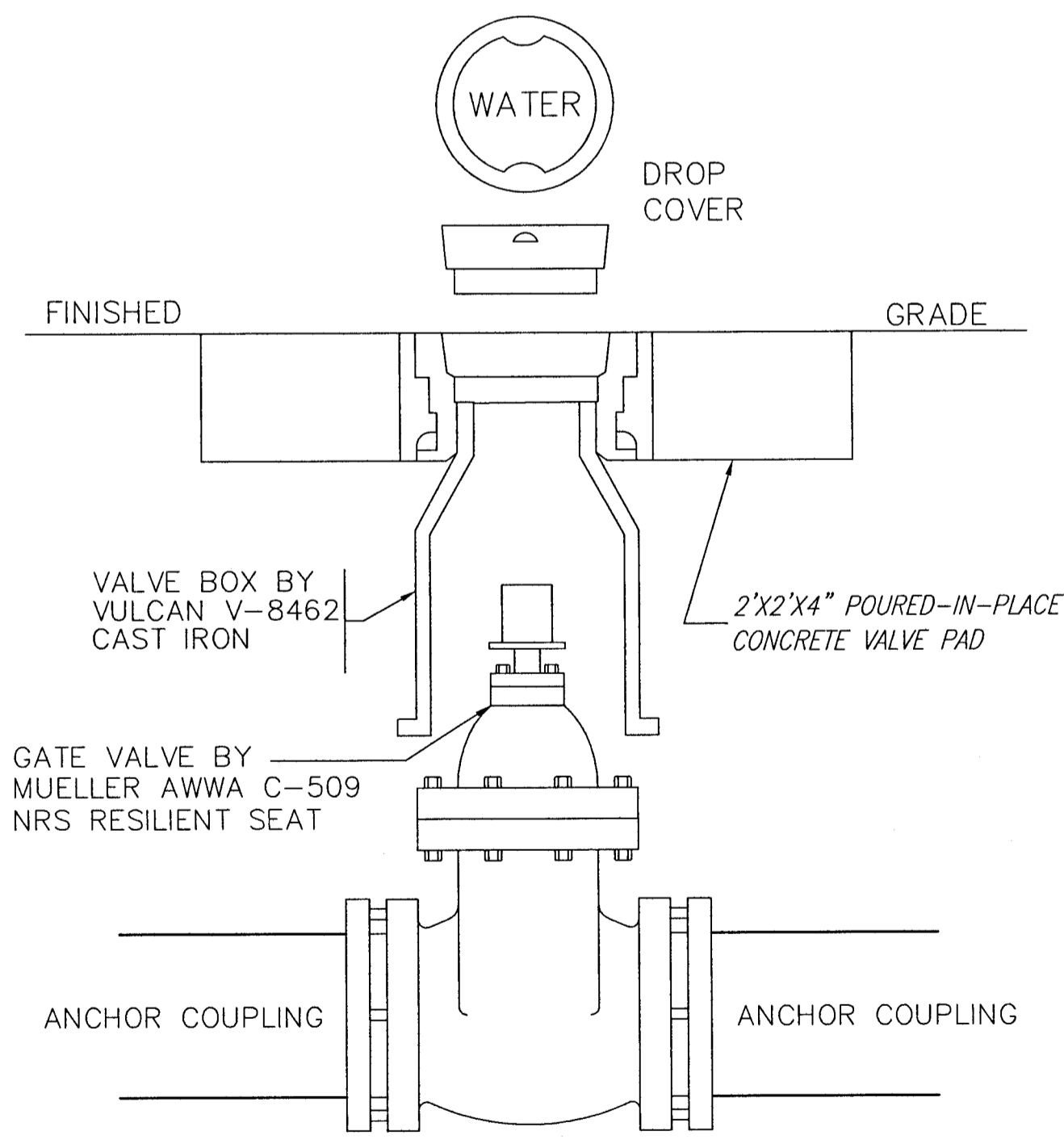


**TYPICAL CREEK CROSSING FOR DUCTILE IRON PIPE**

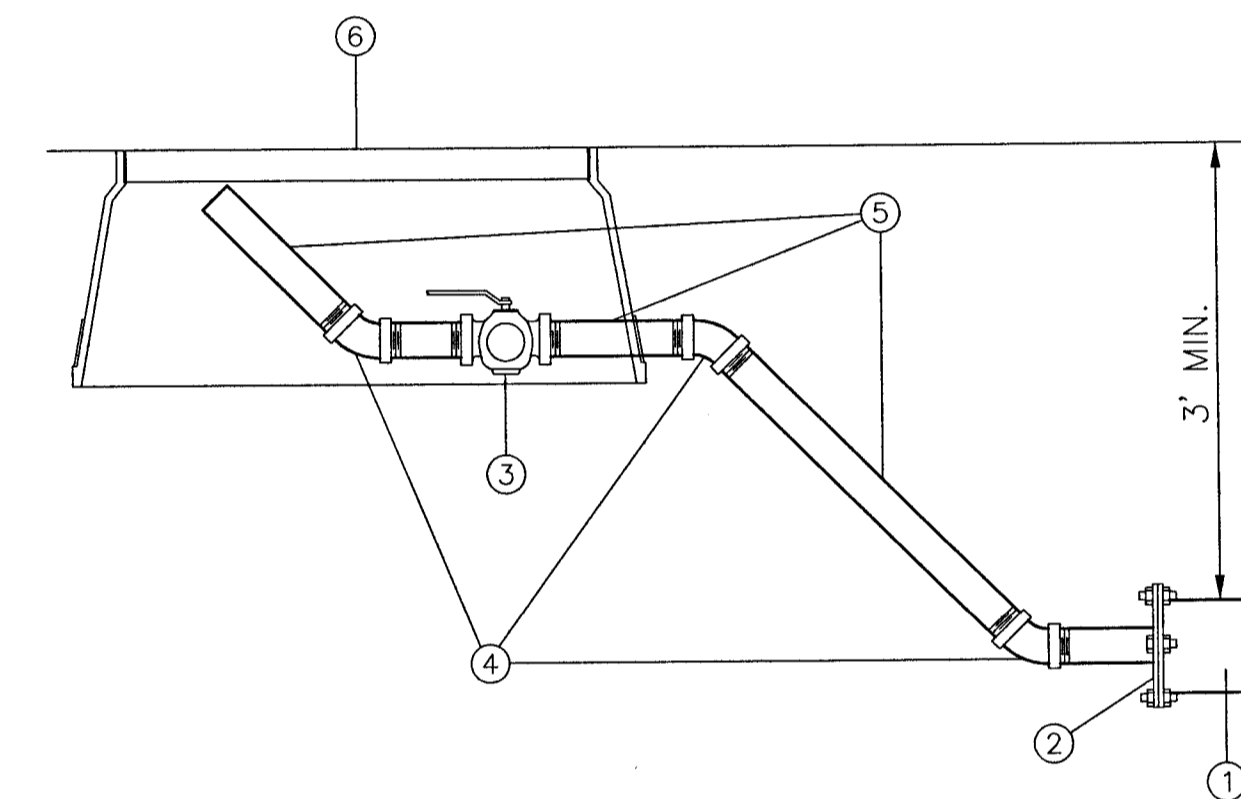


NOTE:  
 12" STEEL CASING FOR  
 8" CARRIER PIPE

**TYPICAL ROAD BORE**

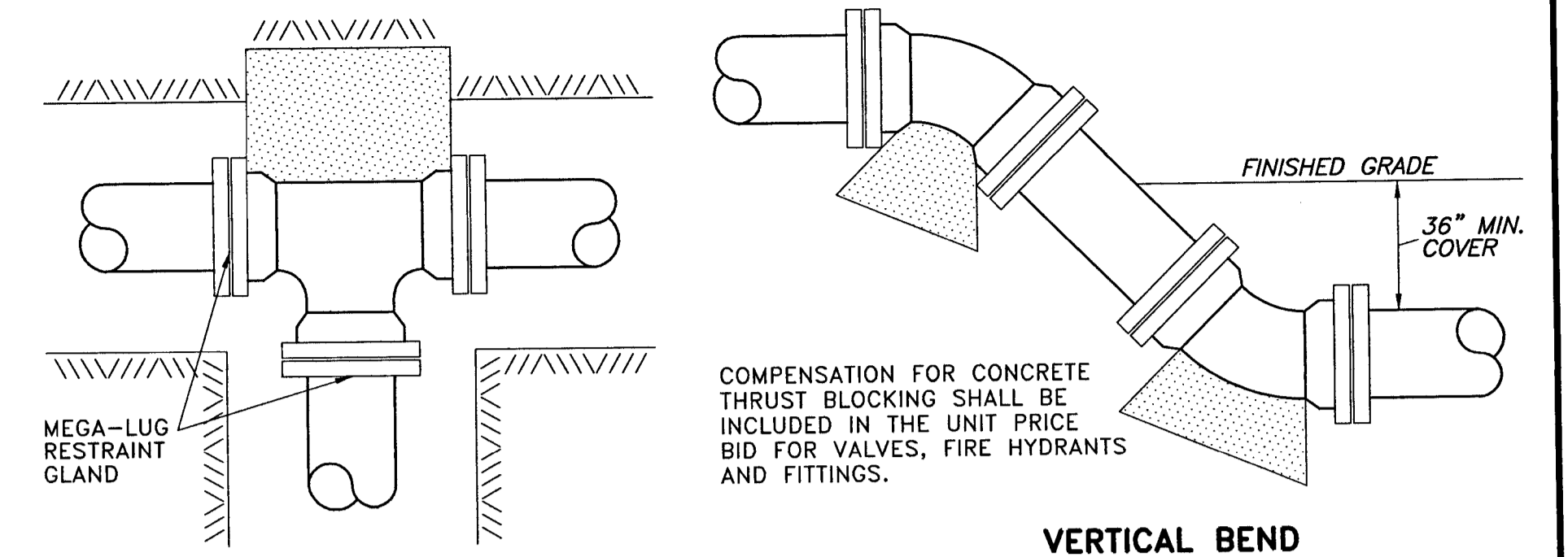


**TYPICAL GATE VALVE**



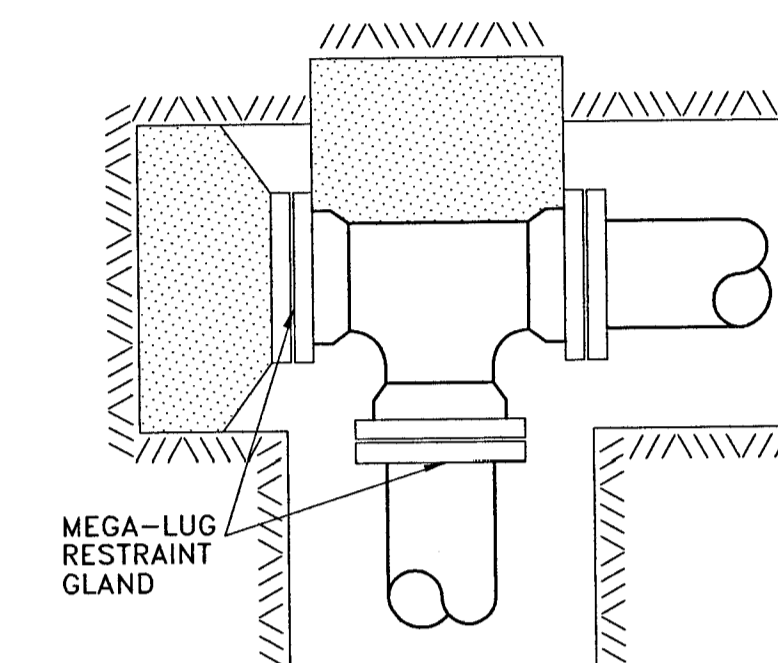
**TYPICAL 2" BLOW-OFF ASSEMBLY**

ITEM NO.	SIZE AND DESCRIPTION	MATERIAL SPECIFICATIONS
1	P.V.C. MAIN	C-900 P.V.C., CLASS 150 MINIMUM
2	DUCTILE IRON M.J. TAPPED CAP w/ MEGA-LUG	AS APPROVED
3	2" LOCKING BALL VALVE - SCREWED ENDS	MUELLER
4	2" GALVANIZED BENDS - THREADED	AS APPROVED
5	1-1/2" GALVANIZED PIPE - THREADED	AS APPROVED
6	OVERSIZED BLACK PLASTIC METER BOX.	NDS STD BOX

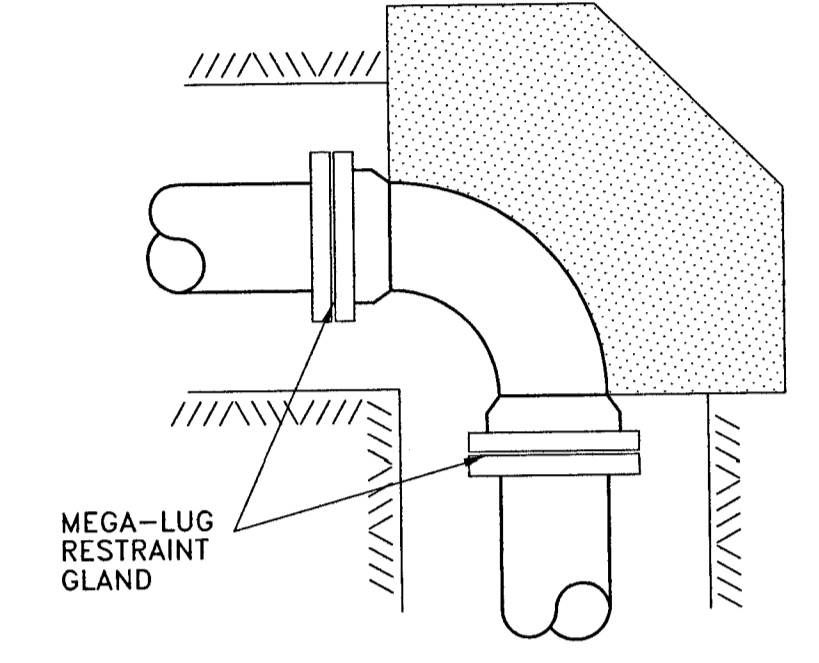


**TEE**

**VERTICAL BEND**



**PLUGGED TEE**



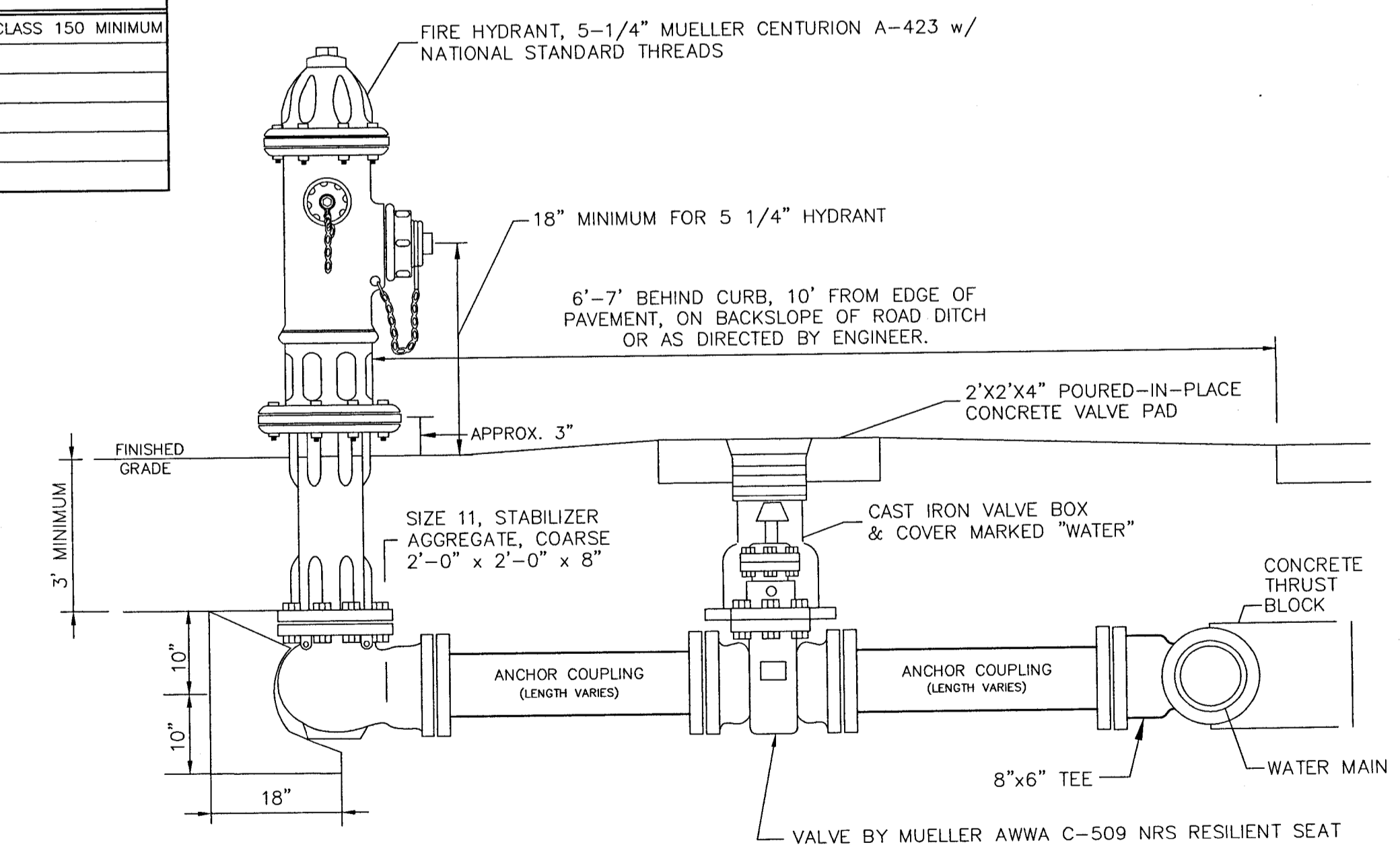
**90° BEND**

**TYPICAL BLOCKING ON WATER MAIN**  
 (3000 PSI CONCRETE REQUIRED)

**BEARING AREA IN SQ. FT.**

NOMINAL PIPE DIAMETER (IN)	DEAD-END OR TEE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND
4	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	2.0	2.0	2.0
8	3.0	3.0	2.0	2.0	2.0
12	5.0	5.0	4.0	3.0	3.0
16	8.0	12.0	6.0	4.0	4.0
4		6.0 (.22)	4.0 (.15)	4.0 (.15)	
6		14.0 (.52)	6.0 (.22)	4.0 (.15)	
8		27.0 (1.0)	9.0 (.33)	6.0 (.22)	
12		68.0 (2.5)	22.0 (.80)	9.0 (.33)	
16		90.0 (3.33)	52.0 (1.9)	18.0 (.67)	

VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

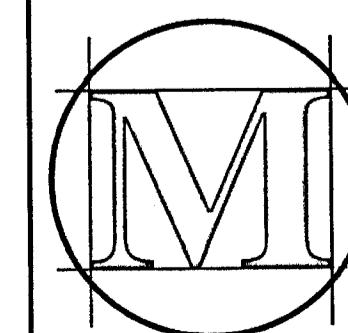


**FIRE HYDRANT ASSEMBLY**

Revisions				
#	Date	Nature	By	App'd
1	4-1-16	RESPONSE TO COMMENTS	D.P.	R.M.

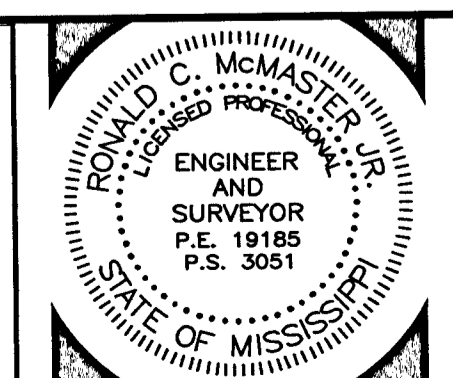
Project No.	Designed By
M-2350	R.C.M.
Date	Drawn By
3-18-16	D.P.
Scale	Checked By
SEE ABOVE	R.C.M.

**BRIDGEWATER 11D**



**M\*MASTER & ASSOCIATES, INC.**  
 CIVIL ENGINEERS & LAND SURVEYORS

212 WATERFORD SQUARE  
 SUITE 300  
 MADISON, MS 39110  
 601.605.1090



WATER DETAILS