

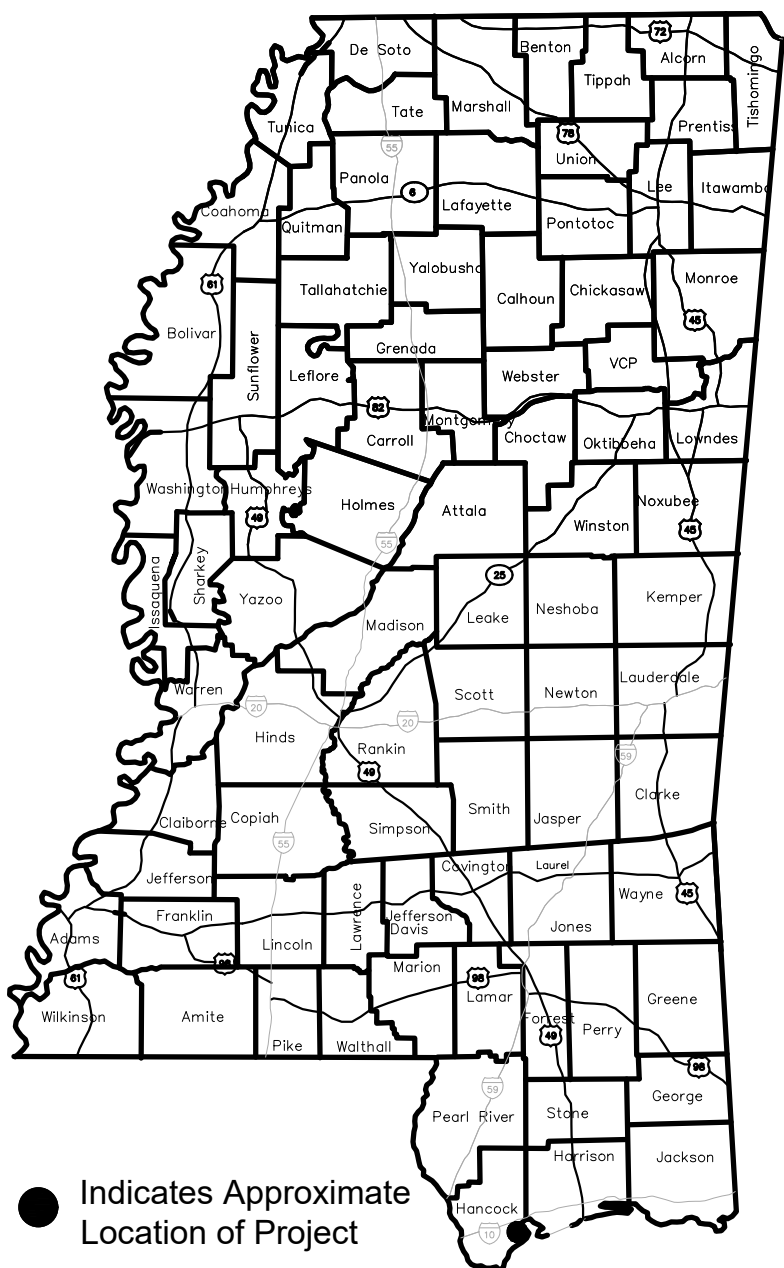
BAY ST. LOUIS CONVENIENCE STORE

1083 HIGHWAY 90, BAY SAINT LOUIS

HANCOCK COUNTY, MISSISSIPPI

(CIVIL PERMIT SET 276-1-2024)

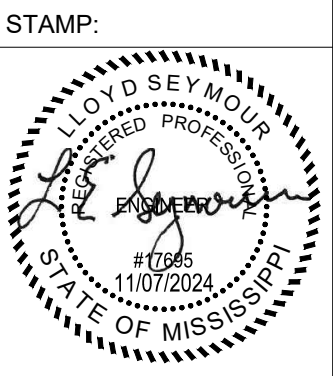
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SHEET NO.	DRAWING NO.	DESCRIPTION
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2	C001	EXISTING CONDITIONS
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4	C150	EROSION, SEDIMENT AND POLLUTION CONTROL PLAN DETAILS
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LOCATION MAP

BAY ST. LOUIS CONVENIENCE STORE
1083 HIGHWAY 90, BAY SAINT LOUIS
HANCOCK COUNTY, MISSISSIPPI
CIVIL PERMIT SET

SHEET REVISIONS:	
#	DATE/REFERENCE



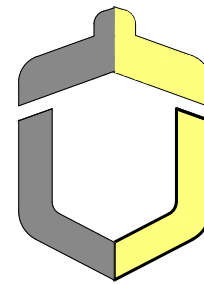
SHEET TITLE:

COVER SHEET

DATE: 11-7-2024
SHEET NUMBER: 1 OF 13

T001

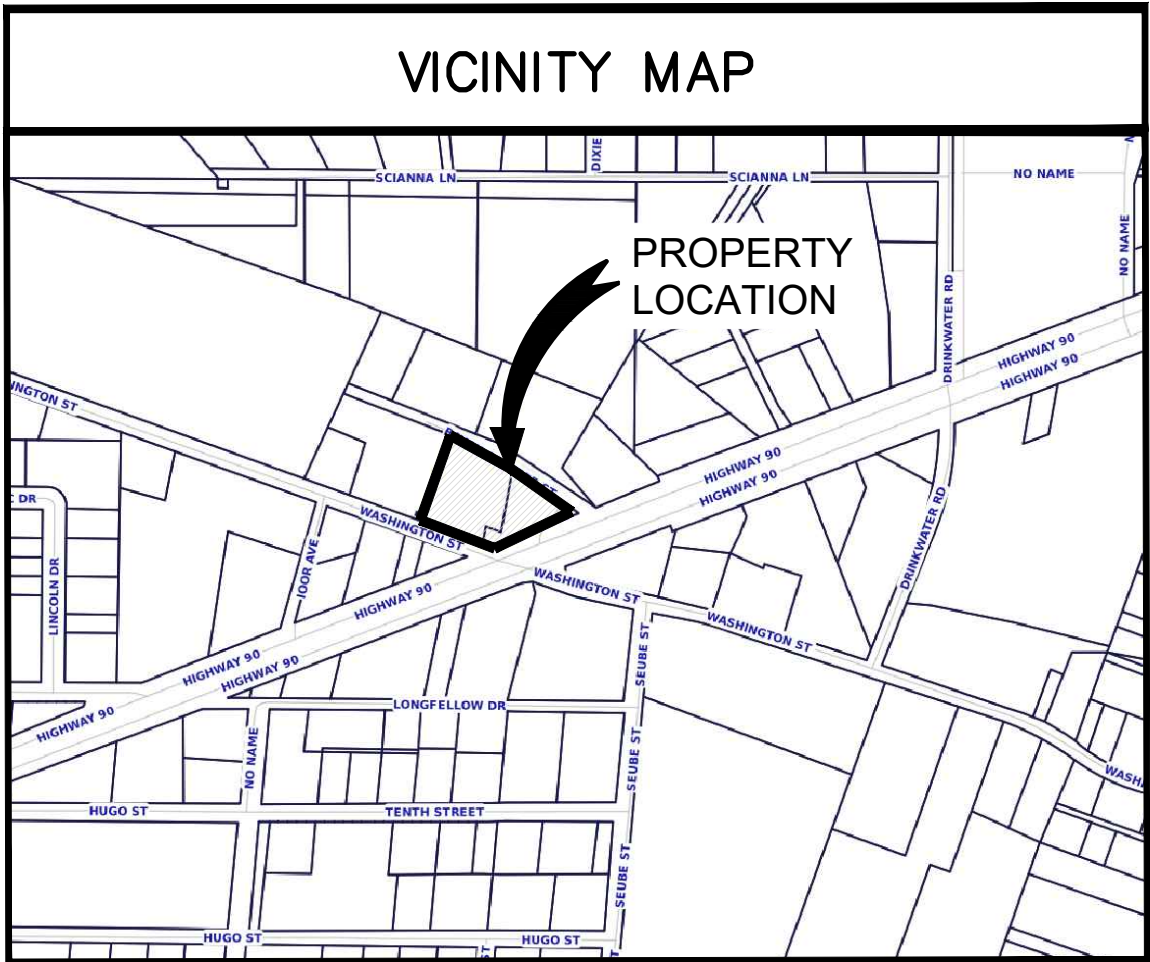
CIVIL ENGINEERING SERVICES

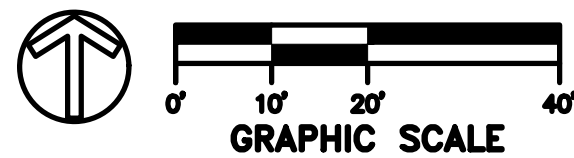


LIVE OAK

ENGINEERING

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BIRMINGHAM, AL 35233 BILOXI, MS 39530
LIVEOAKENGINEERING.COM 205.637.3115
LOE JOB # - XXX-XX

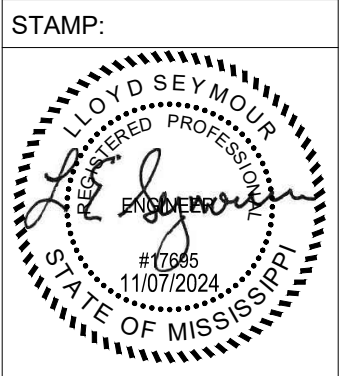




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BAY ST. LOUIS CONVENIENCE STORE
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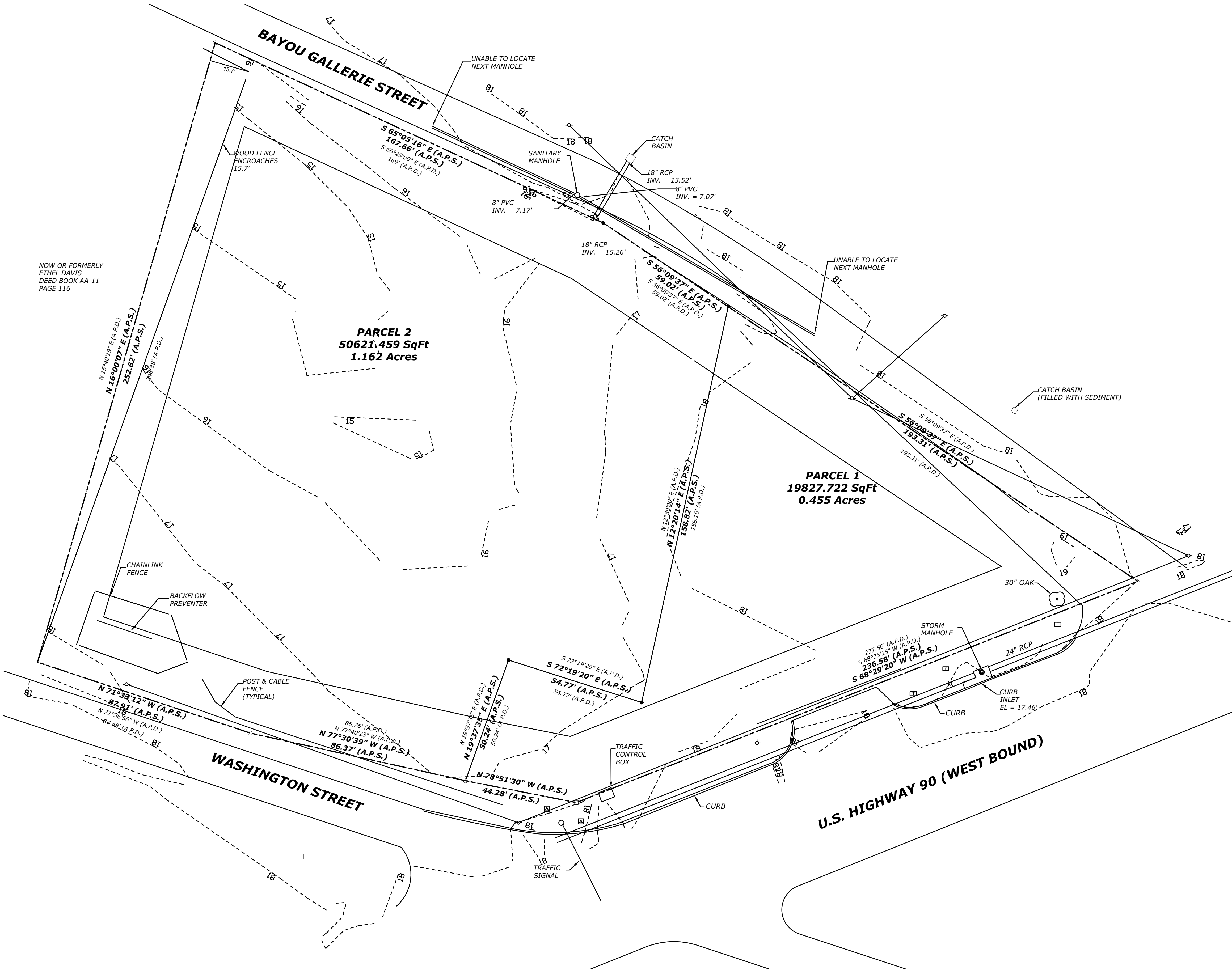


SHEET TITLE:

EXISTING
CONDITIONS

DATE: 11-7-2024
SHEET NUMBER: 2 OF 13

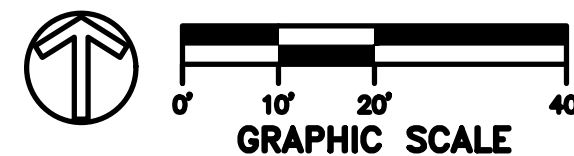
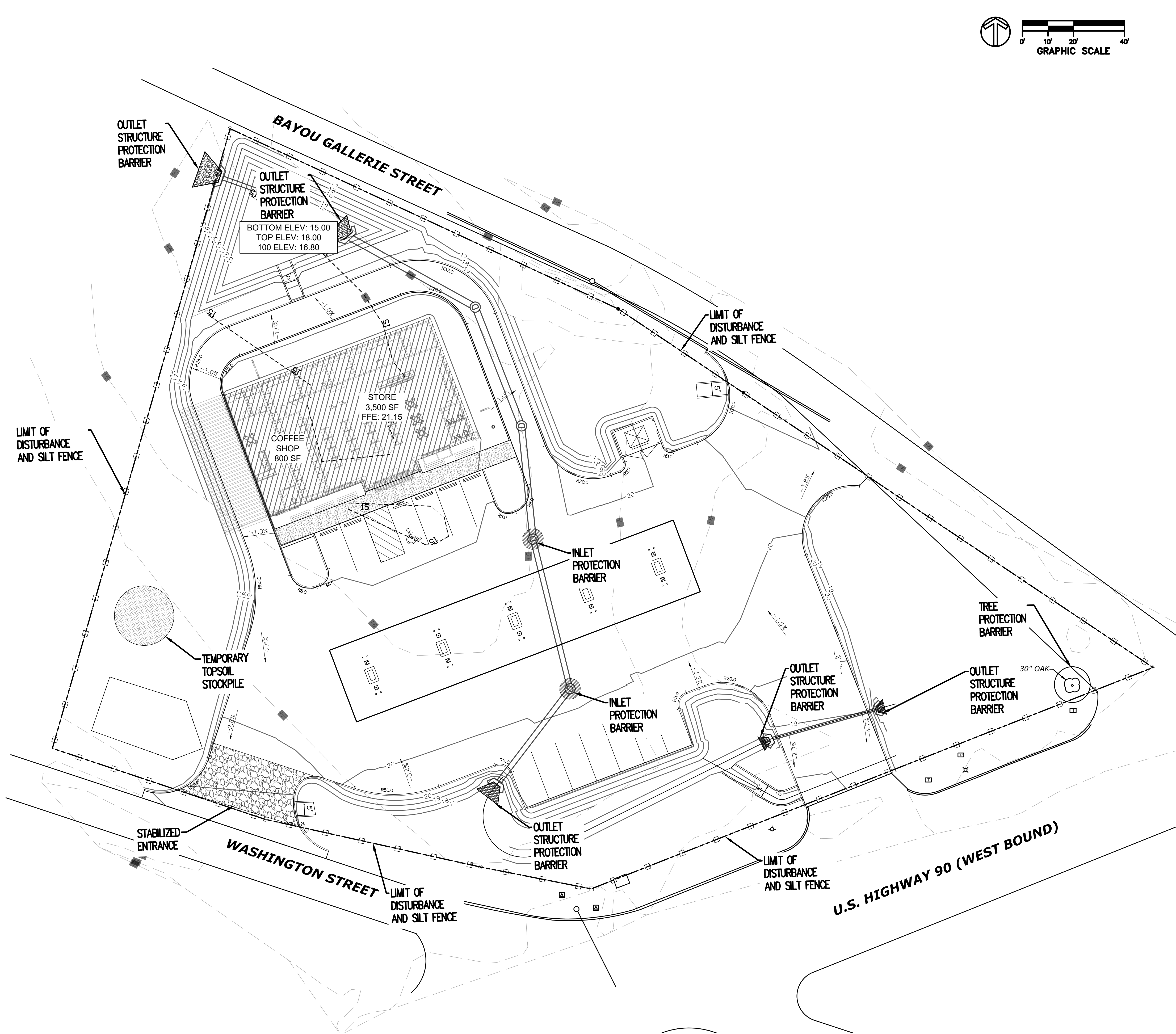
C001



UNDERGROUND UTILITY NOTES

- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL PROJECT RELATED UTILITIES, BURIED AND ABOVE GROUND, REGARDLESS OF INCLUSION ON THESE PLANS. THE LOCATIONS OF ANY EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- ALL CONTRACTOR DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

THIS SURVEY IS PROVIDED FOR
INFORMATIONAL PURPOSES ONLY!
CONTRACTOR SHALL CONSULT ORIGINAL SURVEY FOR ANY
PROPERTY INFORMATION AND EXISTING CONDITIONS



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SWPPP LEGEND

	100.00	DENOTES EXISTING GRADE CONTOUR
	100	DENOTES FINISHED GRADE CONTOUR
		DENOTES STORMWATER FLOW DIRECTION
		DENOTES PERIMETER CONTROLS
		DENOTES INLET PROTECTION
		DENOTES TREE PROTECTION

SWPPP NOTES

- THE CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENT CONTROLS DURING THE ENTIRE COURSE OF WORK TO PREVENT ANY SEDIMENT FROM LEAVING THE CONSTRUCTION SITE AND ENTERING ROADWAYS, STORM DRAINS SYSTEMS, DITCHES, SWALES, DETENTION BASINS, LOCAL WATER BODIES, AND/OR ADJACENT PROPERTIES.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO EXPOSING ANY SOIL.
- CONTRACTOR SHALL STAGE, TIME AND SEQUENCE CONSTRUCTION TO MINIMIZE THE SIZE OF EXPOSED SOIL AREAS AND THE TIME BETWEEN EXPOSING THE SOIL AREA AND FINISHING THE SOIL AREA.
- PERIMETER CONTROLS SHALL BE CONSTRUCTED OF SILT FENCE AND/OR APPROVED BMP'S AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ARCHITECT.
- ALL INLETS WITHIN THE CONTRACTOR'S LIMITS OF WORK SHALL BE PROTECTED WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES.
- CONTRACTOR SHALL PROVIDE VEGETATION FOR AREAS WHERE SOILS HAVE BEEN DISTURBED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT MIGRATES INTO THE STORM DRAIN SYSTEM. ANY SEDIMENT THAT HAS MIGRATED OFF OF THE PROJECT SITE SHALL BE REMOVED IMMEDIATELY UPON DISCOVERY.
- TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN FUNCTIONAL UNTIL PERMANENT EROSION AND SEDIMENT CONTROLS (SUCH AS PERMANENT GRASSING, PAVEMENT, ETC.) HAVE BEEN ESTABLISHED.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED. ANY ADDITIONAL TEMPORARY CONTROL DEVICES THAT MAY BE REQUIRED SHALL BE PROVIDED AS PART OF THIS PROJECT AT NO ADDITIONAL COST TO THE OWNER.

CONSTRUCTION PHASE SEQUENCE

PHASE ONE

- INSTALL CONSTRUCTION ENTRANCE/EXIT
- CLEAR AREA REQUIRED FOR SILT FENCE PLACEMENT
- INSTALL SILT FENCE

PHASE TWO

- DEMOLITION AND REMOVAL OF DEMO DEBRIS

PHASE THREE

- CLEAR/GRUB REMAINING SITE AREAS

PHASE FOUR

- GRADE SITE TO ROUGH GRADES
- INSTALL STORM DRAINAGE MEASURES

PHASE FIVE

- CONSTRUCT UTILITIES (WATER, SEPTIC)
- BUILDING CONSTRUCTION BEGINS

PHASE SIX

- CONSTRUCT ROADS (PAVING, CURB AND GUTTER, SIDEWALKS)
- BUILDING CONSTRUCTION CONTINUES

PHASE SEVEN

- BUILDING CONSTRUCTION COMPLETED
- STABILIZE DISTURBED AREAS WITH SOLID SOD/SEED AND MULCH
- INSTALL PERMANENT LANDSCAPING

PHASE EIGHT

- REMOVE BMP MEASURES

PHASE NINE

- REMOVE SILT FENCE
- PROJECT COMPLETE, FINAL INSPECTION



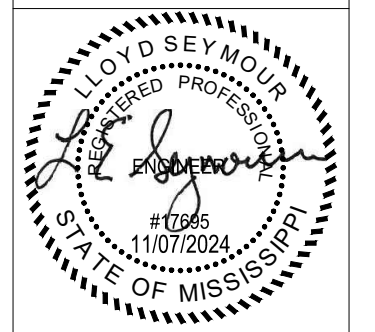
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LOE JOB# 278-1

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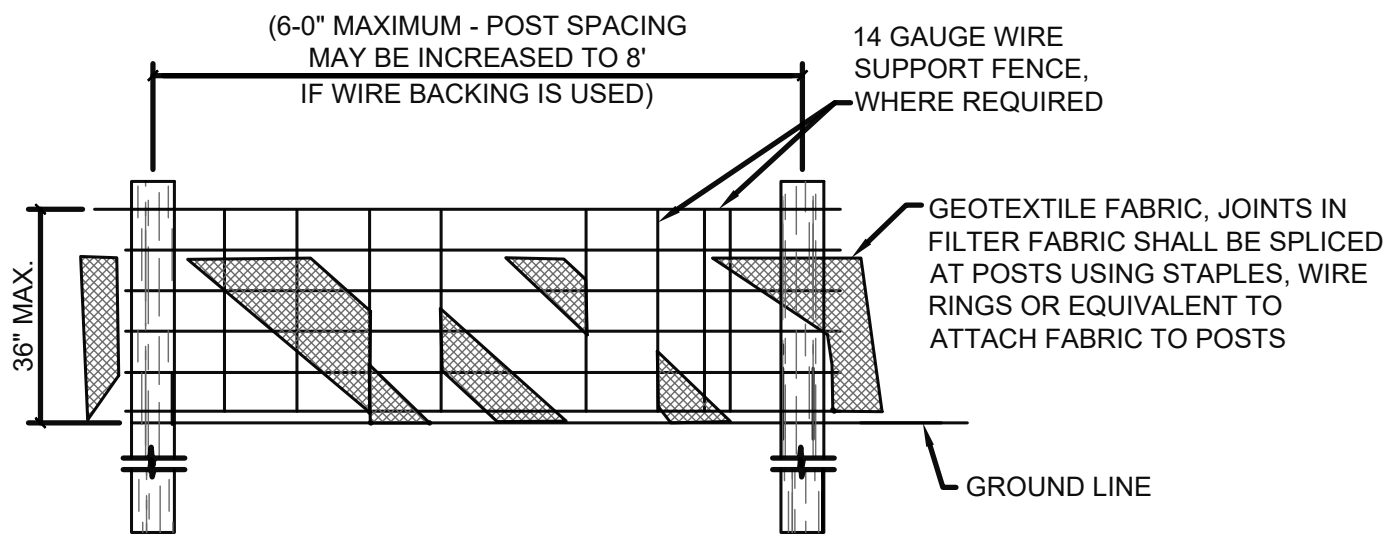
SHEET TITLE:

EROSION
AND
SEDIMENT
CONTROL
PLAN

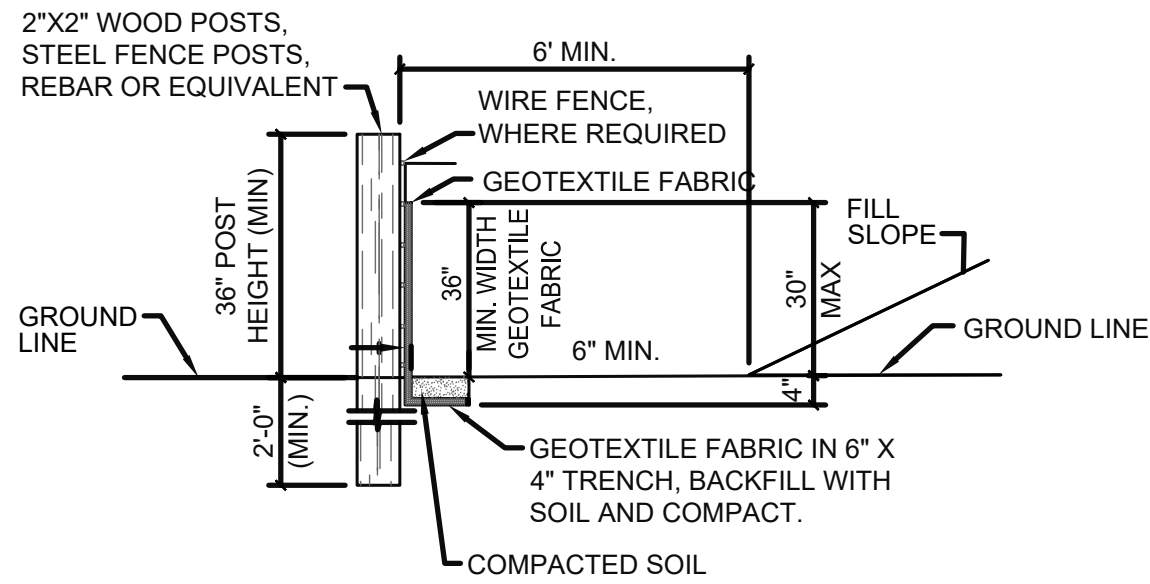
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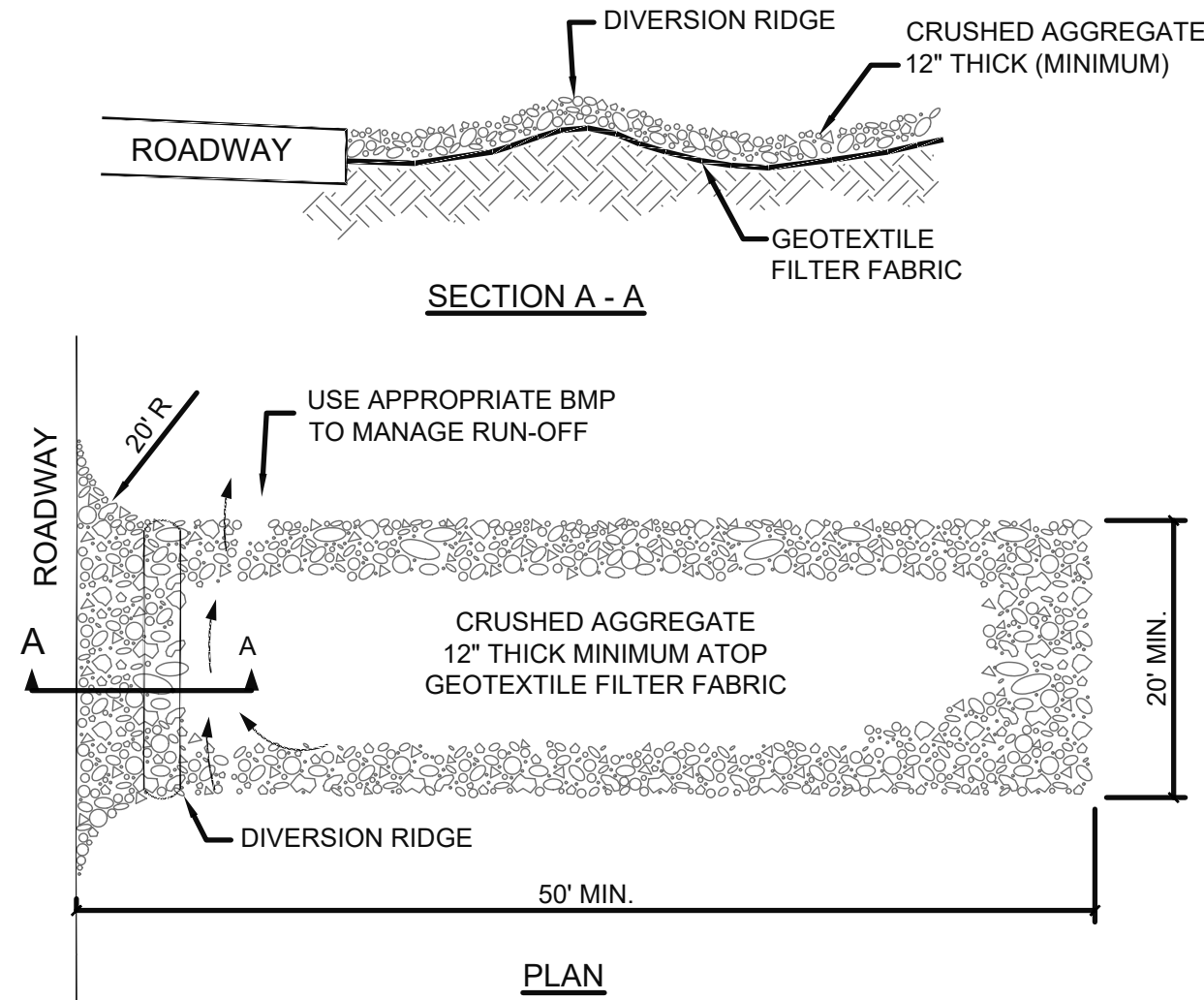
FRONT ELEVATION



SIDE ELEVATION

1 TYPICAL PERIMETER CONTROL DETAILS
SCALE: N.T.S.

CONSTRUCTION ENTRANCE/EXIT NOTE
1. CRUSHED AGGREGATE SHALL BE COMPRISED OF STONE RANGING FROM 3" MINIMUM TO 6" MAXIMUM IN SIZE.
2. THE ENTRANCE SHALL BE PROPERLY GRADED TO PREVENT THE FLOW OF SEDIMENT ONTO PUBLIC ROADWAY. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS SHALL BE REMOVED IMMEDIATELY.
3. THE ENTRANCE SHALL BE PROPERLY MAINTAINED FOR THE DURATION OF THE PROJECT TO PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROADWAY. ALL MAINTENANCE AND REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE ENTRANCE SHALL BE CHECKED ON A DAILY BASIS AND BEFORE AND AFTER ANY RAINFALL EVENT FOR ANY DAMAGES. ANY DAMAGES FOUND SHALL BE REMEDIATED BEFORE THE DAY'S END.
5. MEASURES SHALL BE TAKEN TO PREVENT VEHICULAR TRAFFIC FROM BYPASSING THE CONSTRUCTION ENTRANCE DURING INGRESS AND EGRESS.



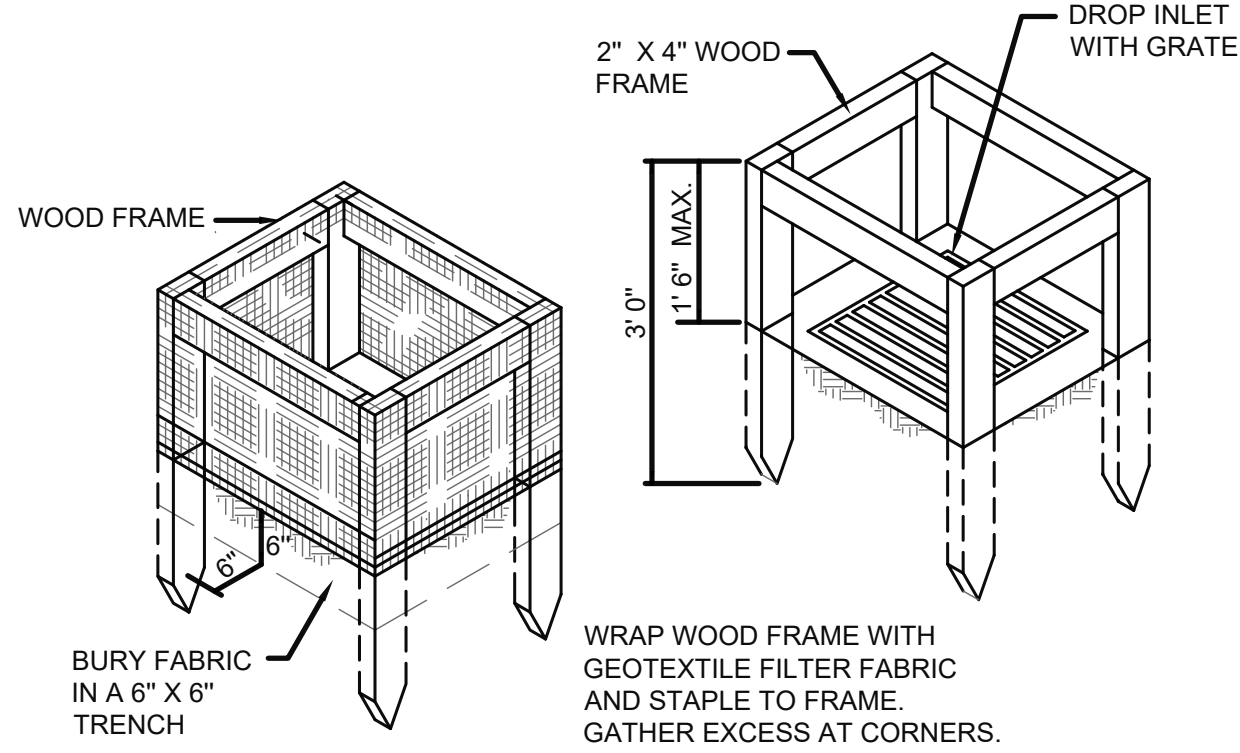
SECTION A - A

PLAN

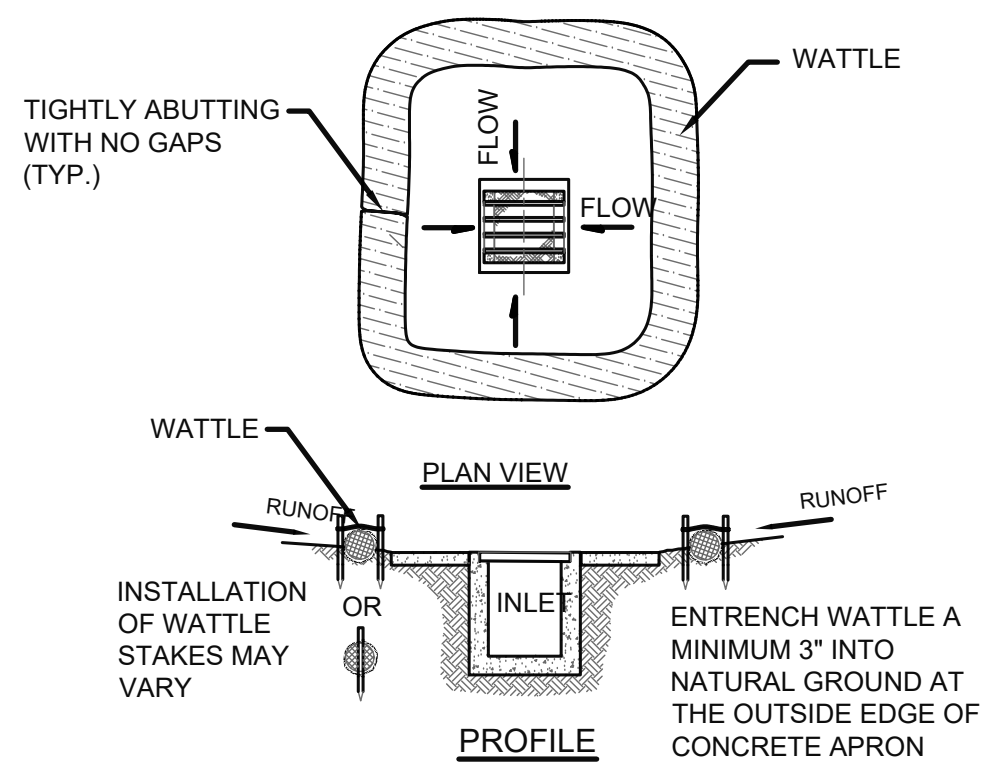
3 TYPICAL CONSTRUCTION ENTRANCE/EXIT DETAIL
SCALE: NTS

PERIMETER CONTROL NOTES

1. FILTER FABRIC FENCES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
1. POSTS SHALL BE SPACED A MAXIMUM OF 6' O.C. SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED.
2. POSTS SHALL BE A MINIMUM OF 5'-0" IN LENGTH. IN ADDITION POSTS SHALL BE EITHER 2" X 2" N.D. WOOD POST OR HEAVY DUTY STEEL T-POSTS WITH PROJECTIONS FOR WIRE FASTENING.
3. WIRE SUPPORT FENCE SHALL BE A MINIMUM OF 36" IN HEIGHT. SHALL NOT EXTEND MORE THAN 36" ABOVE THE GROUND, AND SHALL EXTEND 2" INTO THE TRENCH.
4. WIRE FENCE SHALL BE A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6". WIRE SHALL BE SECURELY FASTENED TO THE UPSLOPE, PROJECT SIDE OF POSTS USING HEAVY DUTY STAPLES (AT LEAST 1" LONG), TIE WIRES OR HOG RINGS.
5. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN HEIGHT, AND SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.
6. FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AT THE TOP, MIDDLE, AND BOTTOM OF EACH POST. IN ADDITION THE FABRIC SHALL BE STAPLED OR WIRED TO THE WIRE FENCE APPROXIMATELY ONE HALF (1/2) THE DISTANCE BETWEEN THE POSTS AT THE TOP, MIDDLE AND BOTTOM OF THE WIRE FENCE.
7. GEOTEXTILE FABRIC SHALL BE SPliced TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF 3" OVERLAP. EACH FREE END OF THE FABRIC SHALL BE SECURELY TIED TO THE WIRE FENCE AT 6" O.C. VERTICALLY.
8. SILT FENCES SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. THE ENTIRE LENGTH OF FENCE SHALL BE CHECKED FOR ANY DAMAGES ON A DAILY BASIS AND BEFORE AND AFTER ANY RAINFALL EVENT. FOR ANY DAMAGES, ANY DAMAGES FOUND SHALL BE REMEDIATED BEFORE THE DAY'S END AT NO ADDITIONAL COST TO THE OWNER.
9. SILT FENCES SHALL BE MAINTAINED TO PREVENT ANY MATERIAL FROM MIGRATING FROM THE UPSLOPE SIDE OF THE FENCE. ANY REQUIRED MAINTENANCE OF THE SILT FENCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH RAINFALL EVENT AND WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF (1/2) THE HEIGHT OF THE FENCE.
11. IN ORDER TO PREVENT SEDIMENT LADEN STORM WATER FROM BY-PASSING THE FENCE, IN AREAS WHERE SILT FENCES ARE NOT UTILIZED ON ALL SIDES OF A DISTURBED AREA, THE FENCE SHALL EXTEND BEYOND THE DISTURBED AREA IN J-HOOK SHAPE ON EACH END AS SHOWN IN THE ISOLATED SILT FENCE INSTALLATION PLAN VIEW.

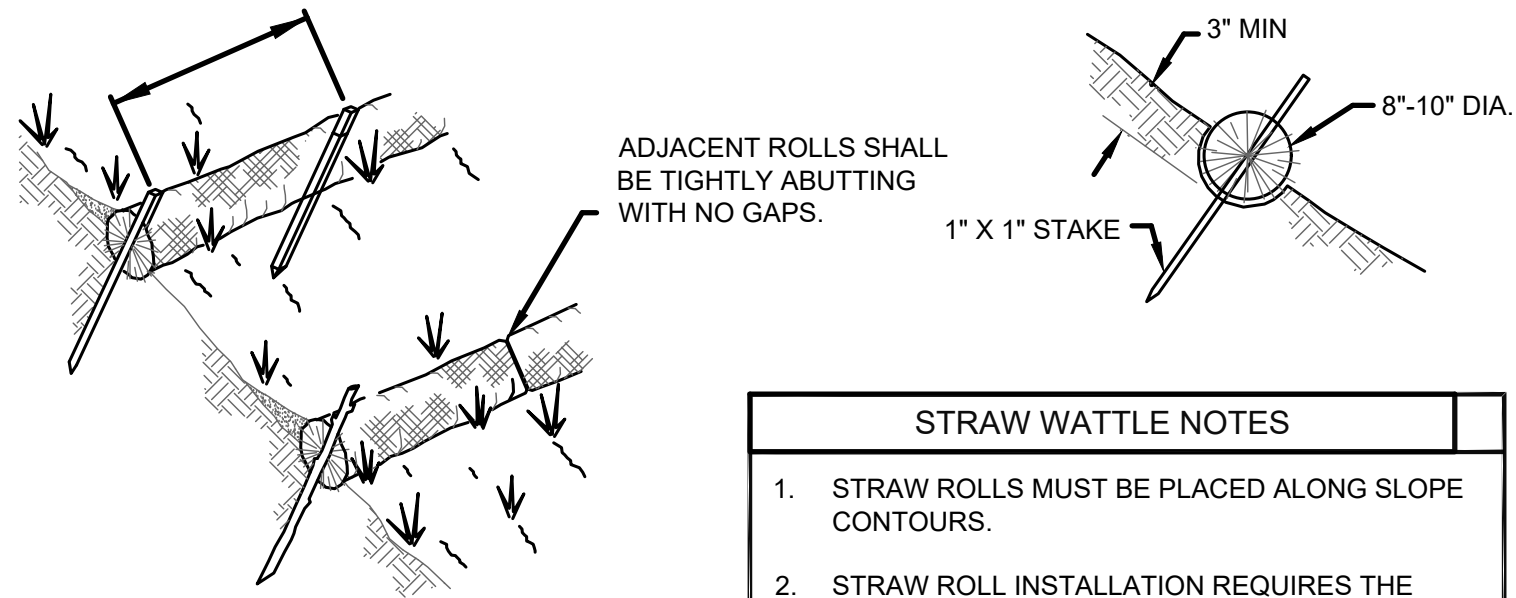


SILT FENCE OPTION



INLET STRAW ROLL WATTLE OPTION

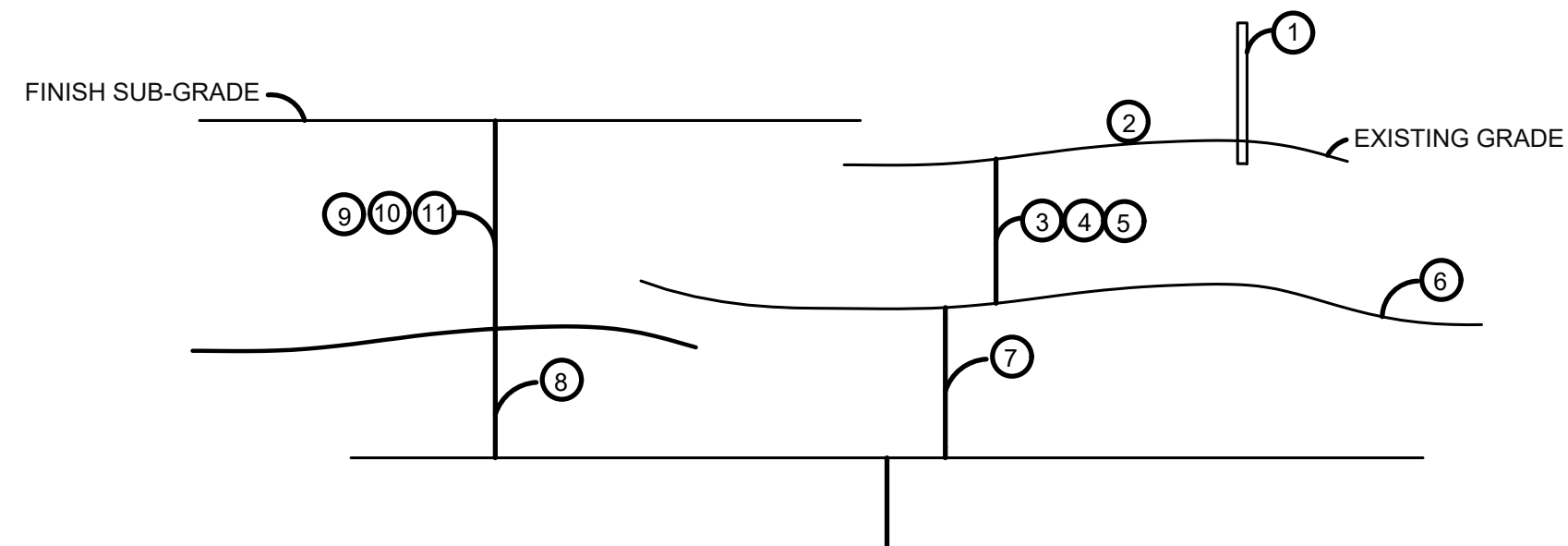
4 TYPICAL INLET/OUTLET PROTECTION DETAIL
SCALE: NTS



STRAW WATTLE NOTES

1. STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS.
2. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A 3" MINIMUM TRENCH DUG ON CONTOUR.
3. IF STAKES CAN NOT BE USED SECURE WITH SAND BAGS SPACED 4' APART.
4. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

2 TYPICAL PERIMETER CONTROL DETAILS
SCALE: NTS



EXCAVATION NOTES

1. **EROSION CONTROL MEASURES:** THE INITIAL STEP FOR SITE PREPARATION SHALL BE TO ESTABLISH EROSION AND SEDIMENT CONTROL MEASURES.
2. **DRAINAGE:** EFFECTIVE DRAINAGE, INCLUDING DITCHING AND/OR POSITIVE GRADING, SHOULD BE ESTABLISHED AT THE BEGINNING OF SITE DEVELOPMENT AND MODIFIED AS NECESSARY DURING CONSTRUCTION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. **CLEARING:** UPON COMPLETION OF DEMOLITION WORK THE CONTRACTOR SHALL VERIFY THAT ALL EXISTING PAVEMENTS, SLABS, FOUNDATIONS, SIDEWALKS, ABANDONED UTILITIES, AND OTHER MISCELLANEOUS DEBRIS HAVE BEEN COMPLETELY REMOVED TO AT LEAST A MINIMUM OF 5 FEET BEYOND THE PROPOSED BUILDING FOOTPRINTS AND NEW PAVEMENT AREAS.
4. **STRIPPING:** ONCE ALL PAVEMENTS, FOUNDATION AND DEBRIS HAVE BEEN REMOVED, STRIPPING EXCAVATIONS SHOULD BE CONTINUED TO APPROXIMATELY 6" BELOW EXISTING GRADE. STRIPPING EXCAVATION SHALL BE CARRIED OUT TO AT LEAST A MINIMUM OF 5 FEET BEYOND THE PROPOSED BUILDING FOOTPRINTS AND NEW PAVEMENT AREAS.
5. **TOPSOIL:** CONTRACTOR SHALL STOCKPILE TOPSOIL AND OTHER SUITABLE FILL MATERIAL TO BE REUSED ON SITE. ALL UNSUITABLE SOILS SHALL BE REMOVED FROM THE SITE.
6. **SUB-GRADE PREPARATION:** ONCE ALL TOPSOIL, ORGANIC MATERIALS, AND/OR OTHER UNSUITABLE SOILS HAVE BEEN REMOVED, THE FILL AREAS SHOULD BE LEVELED AND SEATED USING A STATIC ROLLER AND THEN PROOF-ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK WEIGHING AT LEAST 20 TONS TO IDENTIFY AREAS OF WEAK SOIL.
7. **MUCK:** WHEN EXCAVATIONS ENCOUNT UNSUITABLE MATERIALS BELOW THE BOTTOM OF THE STRIPPING AND UNDERCUT EXCAVATIONS, THE CONTRACTOR WILL BE REQUIRED TO REMOVE THE MATERIAL AND BACKFILL WITH APPROPRIATE FILL MATERIAL AS APPROVED BY THE ENGINEER. THE DEPTH AND WIDTH OF MUCK EXCAVATION WILL BE AS DIRECTED OR APPROVED BY THE ENGINEER. THE DIMENSIONS AND ELEVATIONS AS SHOWN ON THE PLANS OR EXCAVATION THAT HAS NOT BEEN DIRECTED OR APPROVED BY THE ENGINEER. ALL MUCK AND FILL FORMATIONS BELOW THE BOTTOM OF THE STRIPPING/UNDERCUT EXCAVATIONS SHALL BE MEASURED AS UNIT PRICE PAY ITEMS PER THE UNSUITABLE SOILS ALLOWANCE.
8. **ON-SITE SOILS:** ON-SITE SOILS ARE SUITABLE TO USE AS STRUCTURAL FILL, BUT WILL LIKELY REQUIRE MOISTURE CONDITIONING TO MEET THE REQUIREMENTS OF STRUCTURAL FILL. IF CONSTRUCTION IS PERFORMED DURING THE WET SEASON THE NEAR SURFACE SOILS MAY BECOME UNSTABLE UNDER CONSTRUCTION TRAFFIC AND REQUIRE ADDITIONAL UNDERCUT.
9. **STRUCTURAL FILL:** IF REQUIRED, STRUCTURAL FILL MATERIAL SHOULD BE SILTY SAND, CLAYEY SAND, OR LEAN CLAY (UNIFIED CLASSIFICATION SM, SC, OR CL) TYPE SOIL. THE PLASTICITY INDEX OF FILL SHOULD BE A MAXIMUM OF 20 AND HAVE A MAXIMUM LIQUID LIMIT OF 40.
10. **COMPACTION:** MATERIALS SHOULD BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY PER STANDARD PROCTOR (ASTM D 698). COMPACTION SHOULD BE ACHIEVED PRIOR TO PLACING SUBSEQUENT LIFTS. FILL SOILS SHOULD BE PLACED IN MAXIMUM LOOSE LIFTS OF 8" AT A MOISTURE CONTENT COMPARABLE (±3%) TO THE OPTIMUM MOISTURE CONTENT ESTABLISHED IN THE LABORATORY.
11. **TESTING:** IN PLACE DENSITY TESTS SHOULD BE MADE PER 2,500 SQUARE FEET PER LIFT WITHIN THE BUILDING FOOTPRINT AND 5,000 SQUARE FEET PER LIFT UNDER PAVEMENT.

5 EXCAVATION DETAIL AND NOTES
SCALE: NTS

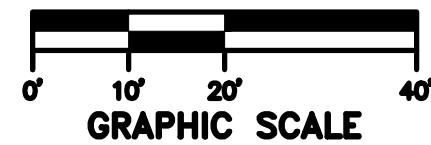
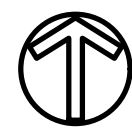
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SHEET TITLE:

EROSION
AND
SEDIMENT
CONTROL
DETAILS



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BAY ST. LOUIS CONVENIENCE STORE
1083 HIGHWAY 90, BAY SAINT LOUIS
HANCOCK COUNTY, MISSISSIPPI
CIVIL PERMIT SET

CIVIL SITE LEGEND

- DENOTES LIGHT DUTY ASPHALT PAVEMENT (SEE PAVEMENT DETAILS)
- DENOTES HEAVY DUTY ASPHALT PAVEMENT (SEE PAVEMENT DETAILS)
- DENOTES 6" HEAVY DUTY CONCRETE PAVEMENT (SEE PAVEMENT DETAILS)
- DENOTES 4" CONCRETE SIDEWALK PAVEMENT (SEE PAVEMENT DETAILS)
- DENOTES GRASS PAVERS WITH PAVER EDGE (SEE PAVEMENT DETAILS)

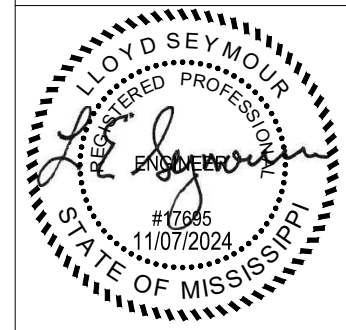
SITE WORK KEYNOTES

- ① HEAVY DUTY ASPHALT PAVEMENT AND GRANULAR BASE (DTL 2 & PAGE 250).
- ② 6" WIDE CONCRETE CURB/GUTTER (DTL 5 PAGE 250).
- ③ STOP BAR AND STOP SIGN
- ④ HORIZONTAL DEMARICATION PAINTING
- ⑤ GREEN SPACE TO RECEIVE TOPSOIL AND SOD. TOPSOIL MUST CONTAIN NO STONES ROOTS, TRASH, ETC. AND MUST BE UNIFORMLY DISTRIBUTED TO RECEIVE SOD PROVIDE AND INSTALL IRRIGATION SYSTEM AS REQUIRED FOR LOCAL CLIMATE CONDITIONS.
- ⑥ 4" WIDE PAINTED TRAFFIC STRIPES WHITE.
- ⑦ HEAVY DUTY CONCRETE PAVEMENT
- ⑧ GAS DISPENSER
- ⑨ CAR STOP
- ⑩ CONCRETE STOP
- ⑪ PICK UP WINDOW
- ⑫ CONCRETE FLUME

SHEET REVISIONS:

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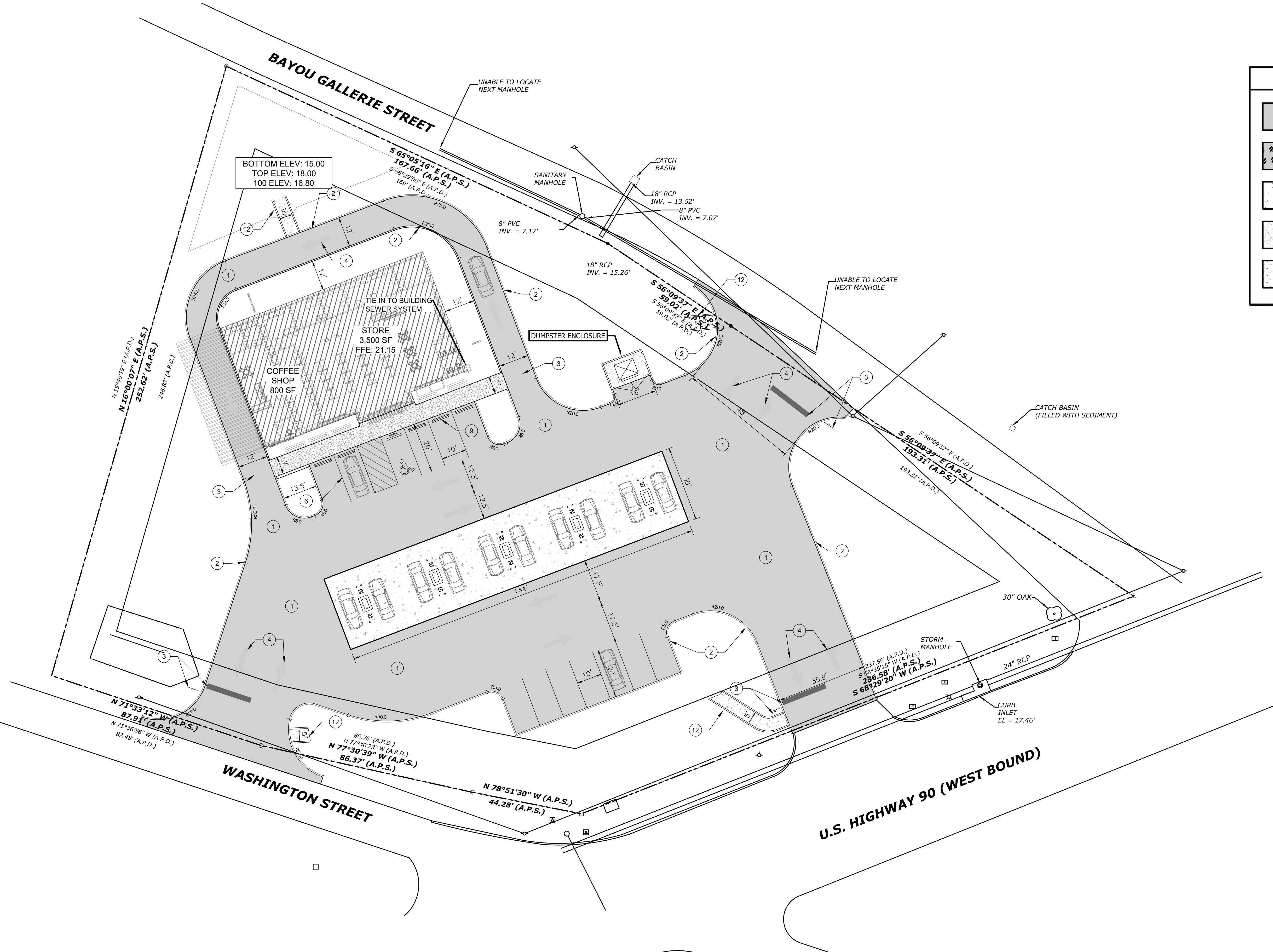
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SITE PLAN

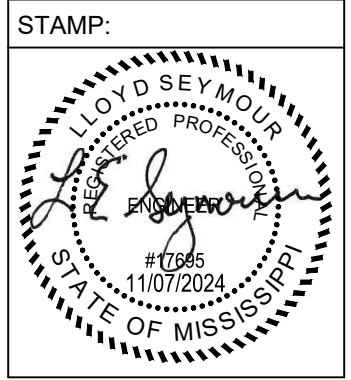
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SHEET NUMBER: 5 OF 13

C200



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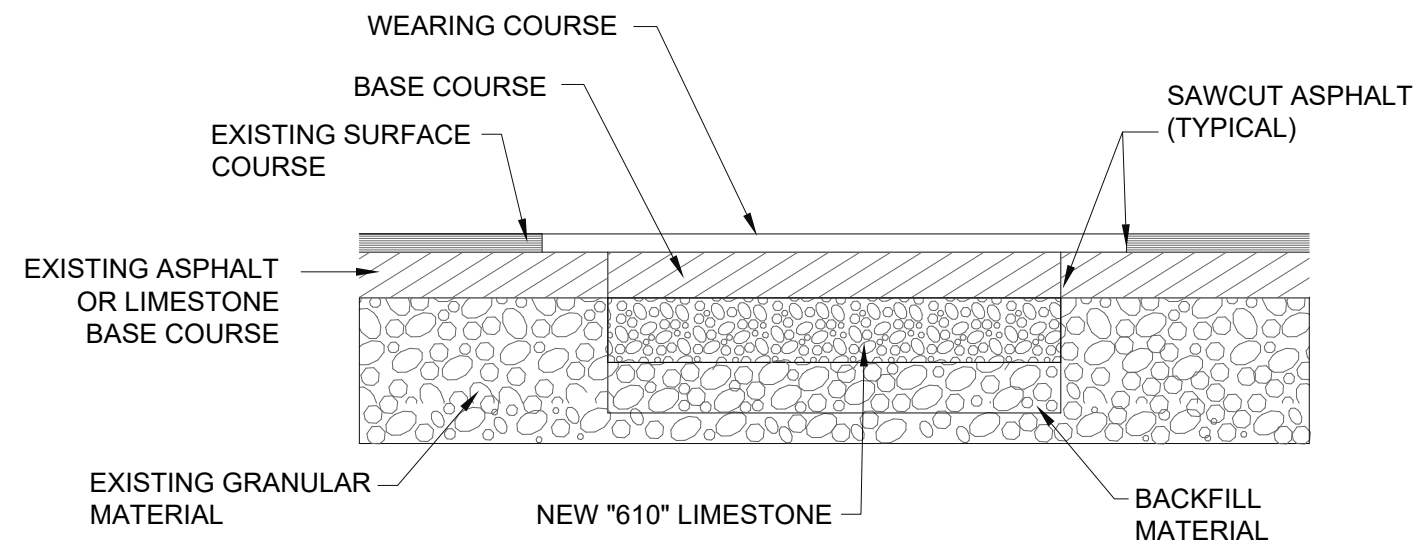


SHEET TITLE:

SITE DETAILS

DATE: 11-7-2024
SHEET NUMBER: 6 OF 13

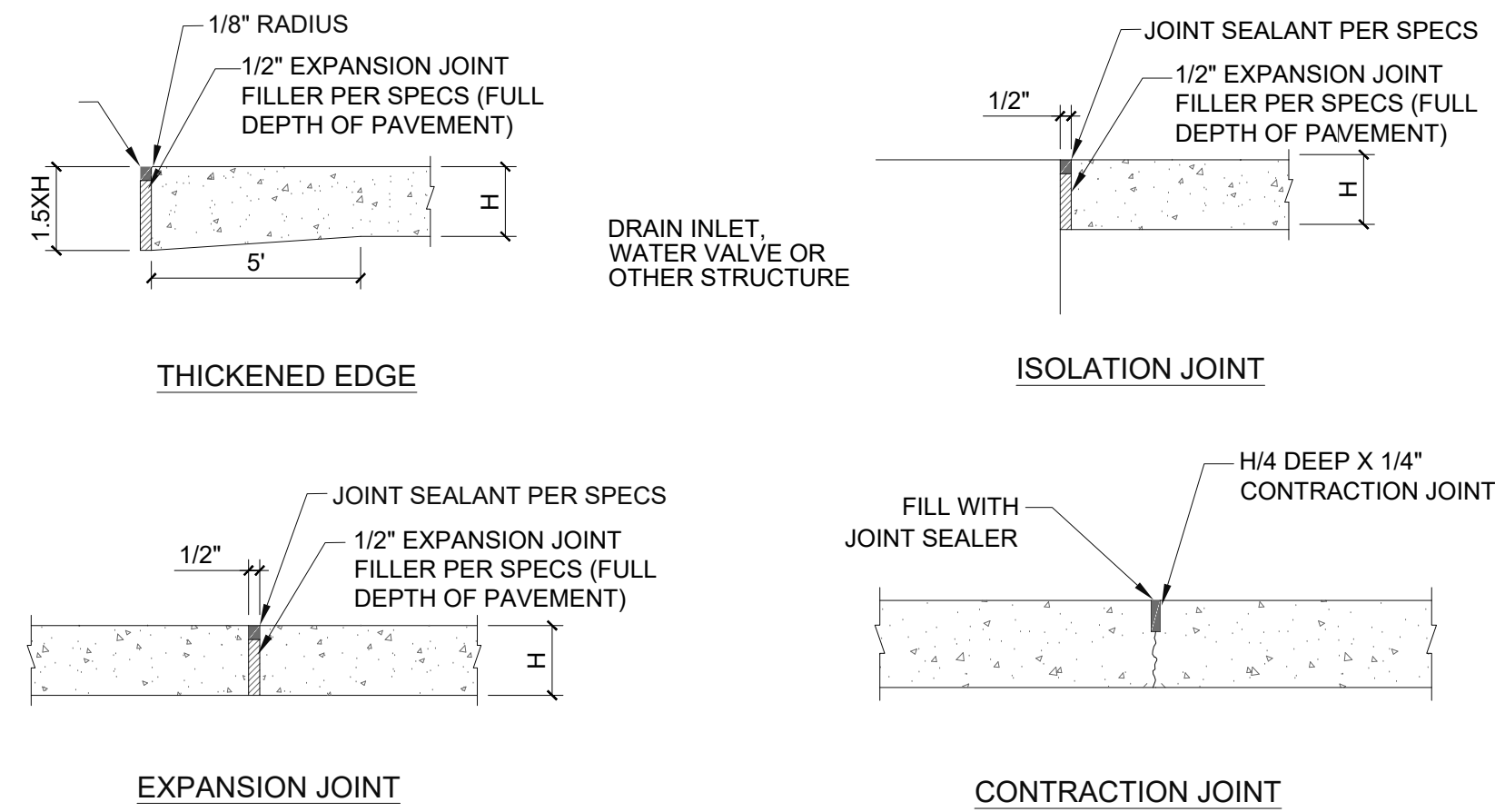
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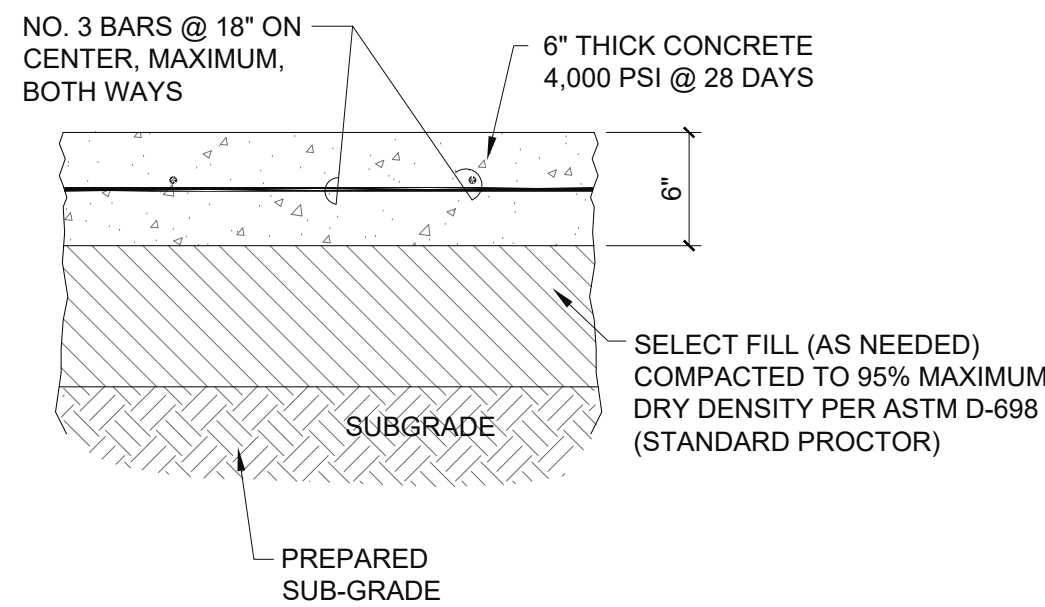
ASPHALT STREET REPAIR NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STATE OF MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARDS.
2. MIX DESIGNS: BASE COURSE: HMA, TYPE ST, 19 mm
WEARING COURSE: HMA, TYPE ST, 9.5 mm
3. EXISTING GRANULAR MATERIAL, NEW BACKFILL MATERIAL AND NEW "610" LIMESTONE SHALL BE COMPACTED TO 95% PROCTOR PER ASTM D1557.
4. TACK COAT SHALL BE APPLIED WHERE NEW ASPHALT MEETS EXISTING ASPHALT.
5. REFER TO OTHER DETAILS FOR UTILITY PLACEMENT AND PAVEMENT MARKINGS AS APPLICABLE.

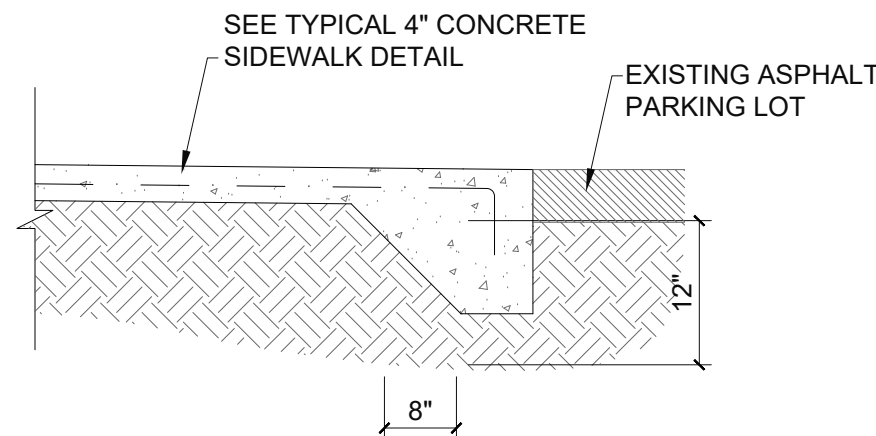
4 TYPICAL ASPHALT STREET PAVEMENT REPAIR SECTION C250 SCALE: NTS



7 TYPICAL CONCRETE JOINT DETAILS C250 SCALE: NTS



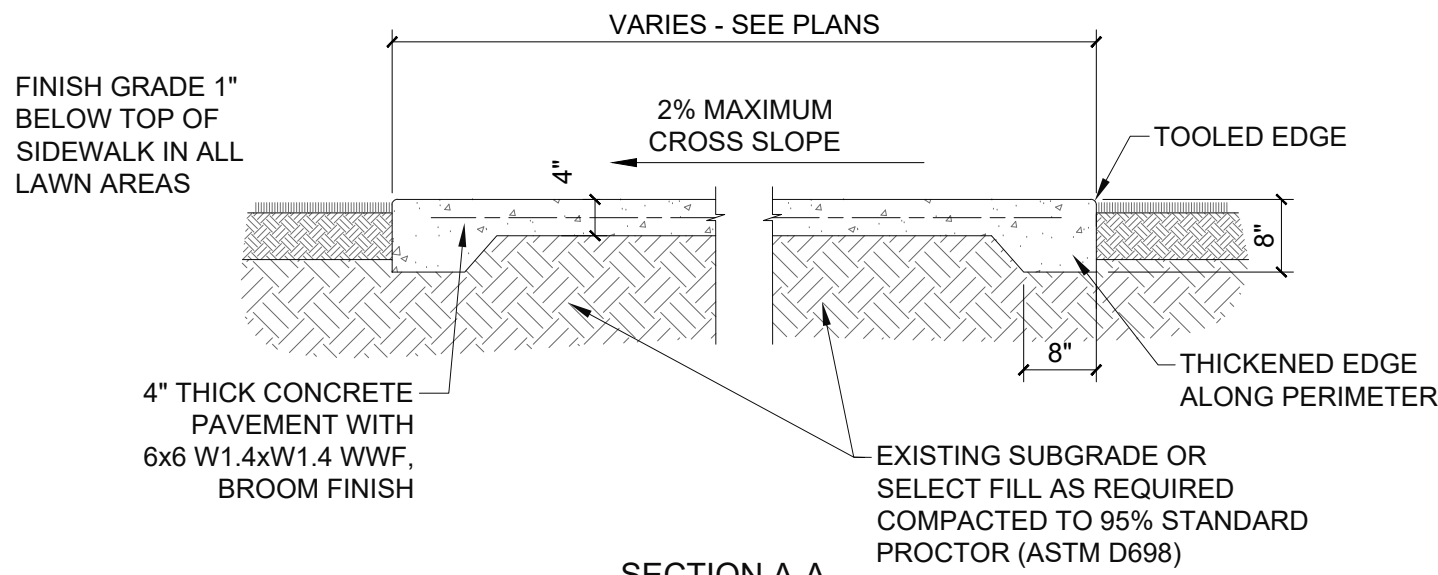
CONCRETE PAVEMENT SECTION



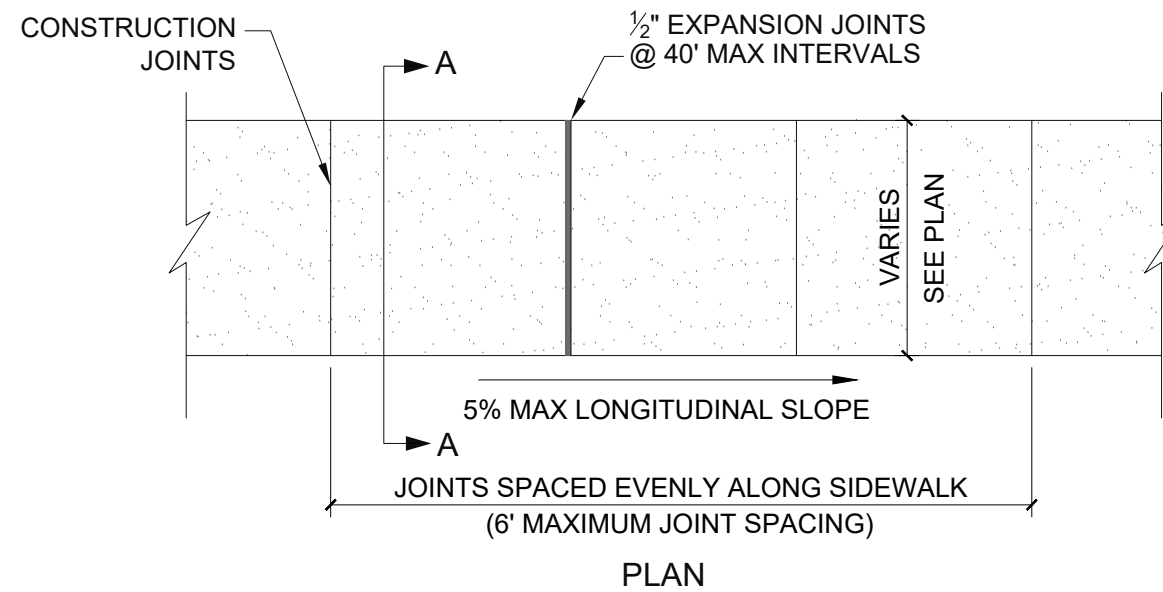
THICKENED EDGE

3 TYPICAL 6" CONCRETE PAVEMENT DETAILS C250 SCALE: NTS

4" CONCRETE PAVEMENT NOTES	
1. ALL JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 330R-08 OR SECTION 3.07 IN THE NRMCA GUIDE SPECIFICATIONS.	6. FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" RADIUS.
2. EXPANSION JOINTS SHALL BE LOCATED WHERE SIDEWALK ABUTS CONCRETE DRIVEWAYS, CURB OR OTHER ADJACENT STRUCTURES.	7. SCORED JOINTS SHALL BE 1/4" DEEP AND PLACED AT THE SPACING INDICATED FOR THE WIDTH OF SIDEWALK OR MATCH SCORED JOINTS OF ADJACENT CURB.
3. CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF APPROXIMATELY 5 FEET OR AT A SPACING THAT MATCHES THE ADJACENT CURB.	8. CONCRETE SHALL BE FINISHED BY MEANS OF A FLOAT, STEEL TROWELLED AND BROOMED WITH A FINE BRUSH IN A TRANSVERSE DIRECTION.
4. JOINTS SHALL BE PROVIDED WITHIN TWELVE (12) HOURS OF FINISHING CONCRETE.	9. CONTRACTOR SHALL INSTALL CONTRACTION JOINTS AT THE END OF ONE PLACEMENT AND THE BEGINNING OF A SECOND PLACEMENT.
5. CONTRACTION JOINT CUTS SHALL BE 1/4 OF THE PAVEMENT THICKNESS DEEP. THE WIDTH OF THE CUT SHOULD BE APPROXIMATELY 1/8 INCH FOR UNSEALED JOINTS AND 1/4 INCH FOR SEALED JOINTS.	10. CONTRACTOR SHALL CONTINUE CONTRACTION JOINTS THROUGH CURB AND CURB AND GUTTER TO HELP ELIMINATE SYMPATHY CRACKS.

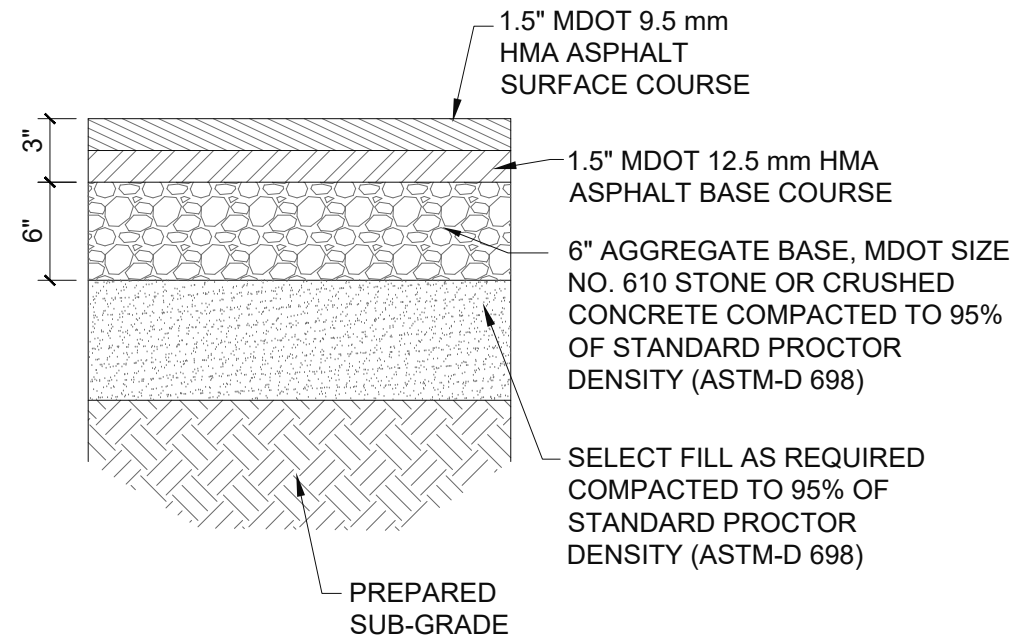


SECTION A-A

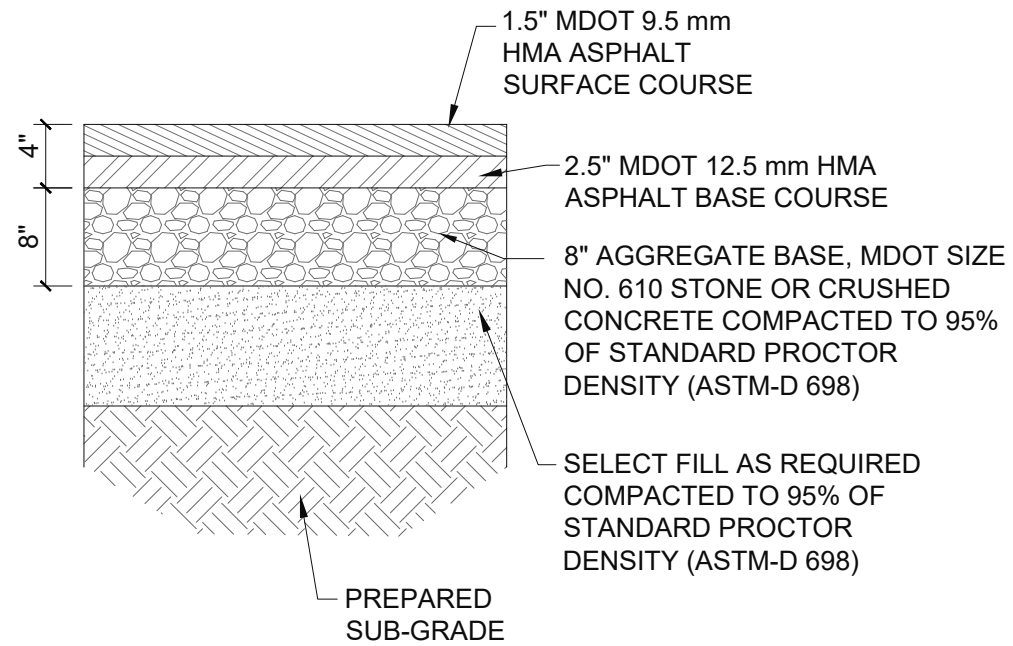


PLAN

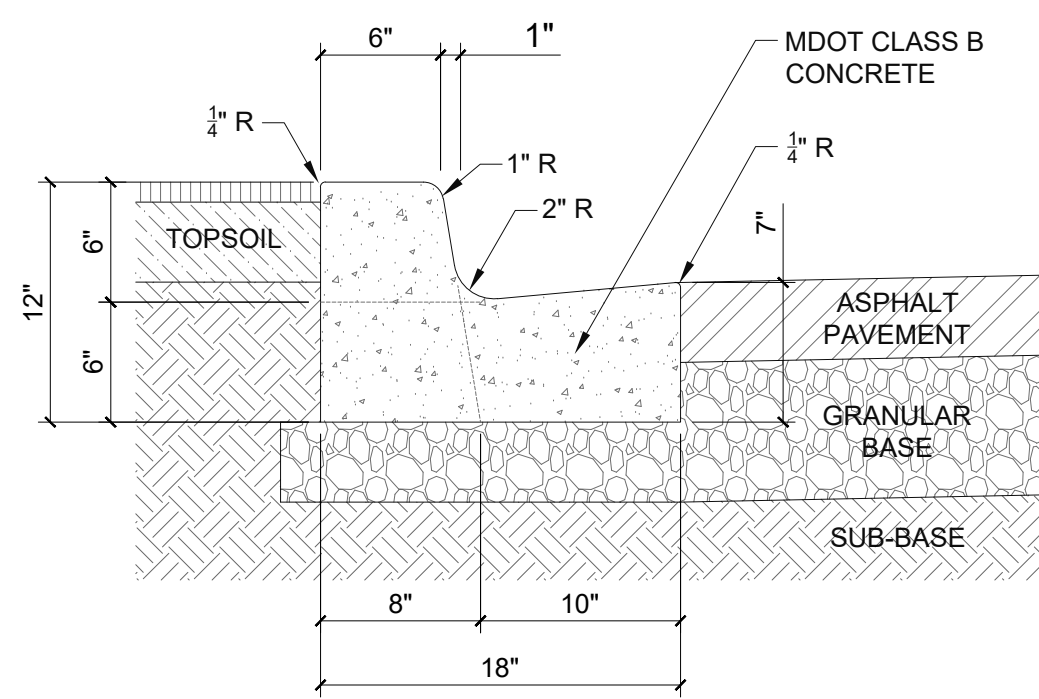
6 TYPICAL 4" CONCRETE SIDEWALK DETAILS C250 SCALE: NTS



1 TYPICAL LIGHT DUTY ASPHALT PAVEMENT SECTION C250 SCALE: NTS

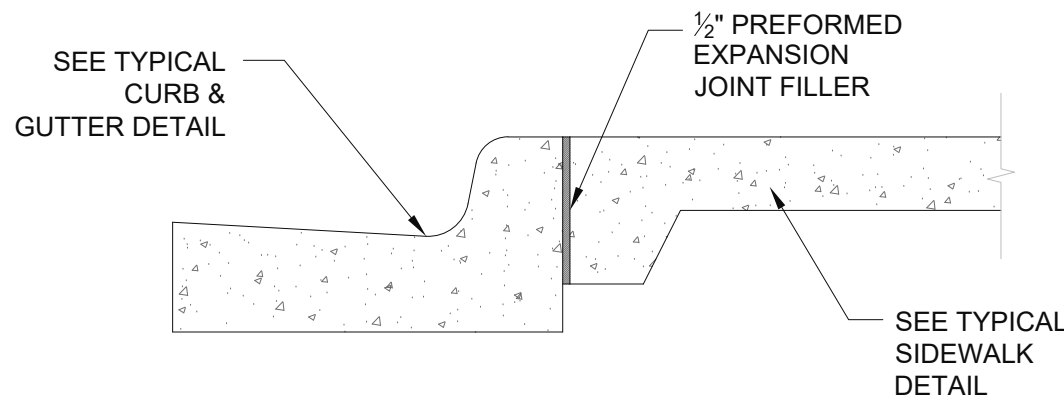


2 TYPICAL HEAVY DUTY ASPHALT PAVEMENT SECTION C250 SCALE: NTS

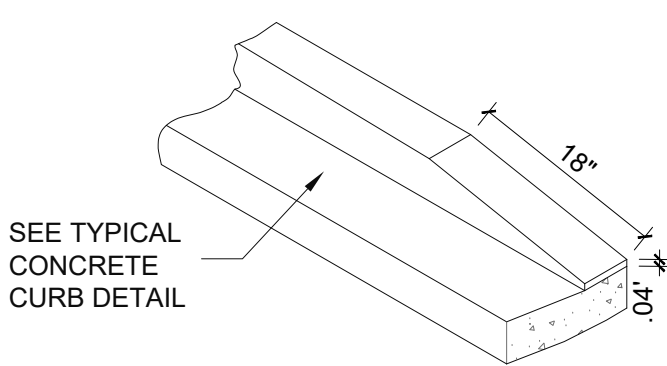


CURB SECTION

CURB & GUTTER NOTES	
1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH LATEST ADDITION OF ACI 330R.	
2. EXPANSION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 40' APART AND AT ALL RADIUS POINTS, PT'S, AND PC'S.	
3. EXPANSION JOINTS SHALL BE LOCATED WHERE CURB ABUTS CONCRETE DRIVEWAYS, SIDEWALKS OR OTHER ADJACENT STRUCTURES.	
4. CONTRACTION JOINTS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 10' APART.	
5. JOINTS SHALL BE PROVIDED WITHIN TWELVE (12) HOURS OF FINISHING CONCRETE.	
6. 1/2 INCH BITUMINOUS JOINT FILLER SHALL BE INSTALLED AT EXPANSION JOINT LOCATIONS AND SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.	
7. CONTRACTION JOINT SHALL BE TOOLED AND BE 1/4 OF THE PAVEMENT THICKNESS DEEP. THE WIDTH OF THE TOOL SHOULD BE APPROXIMATELY 1/8 INCH FOR UNSEALED JOINTS AND 1/4 INCH FOR SEALED JOINTS.	
8. FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" RADIUS.	

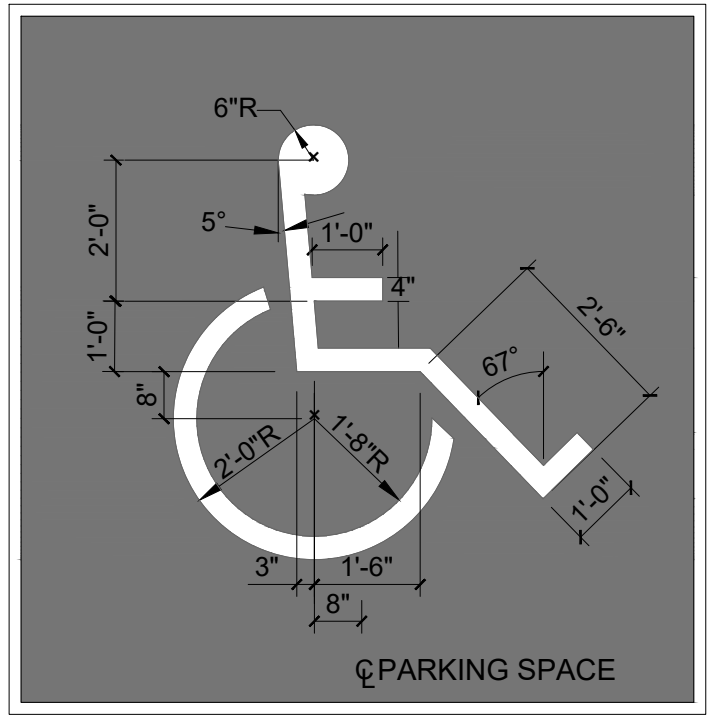


CURB AT SIDEWALK DETAIL



CURB TAPPER

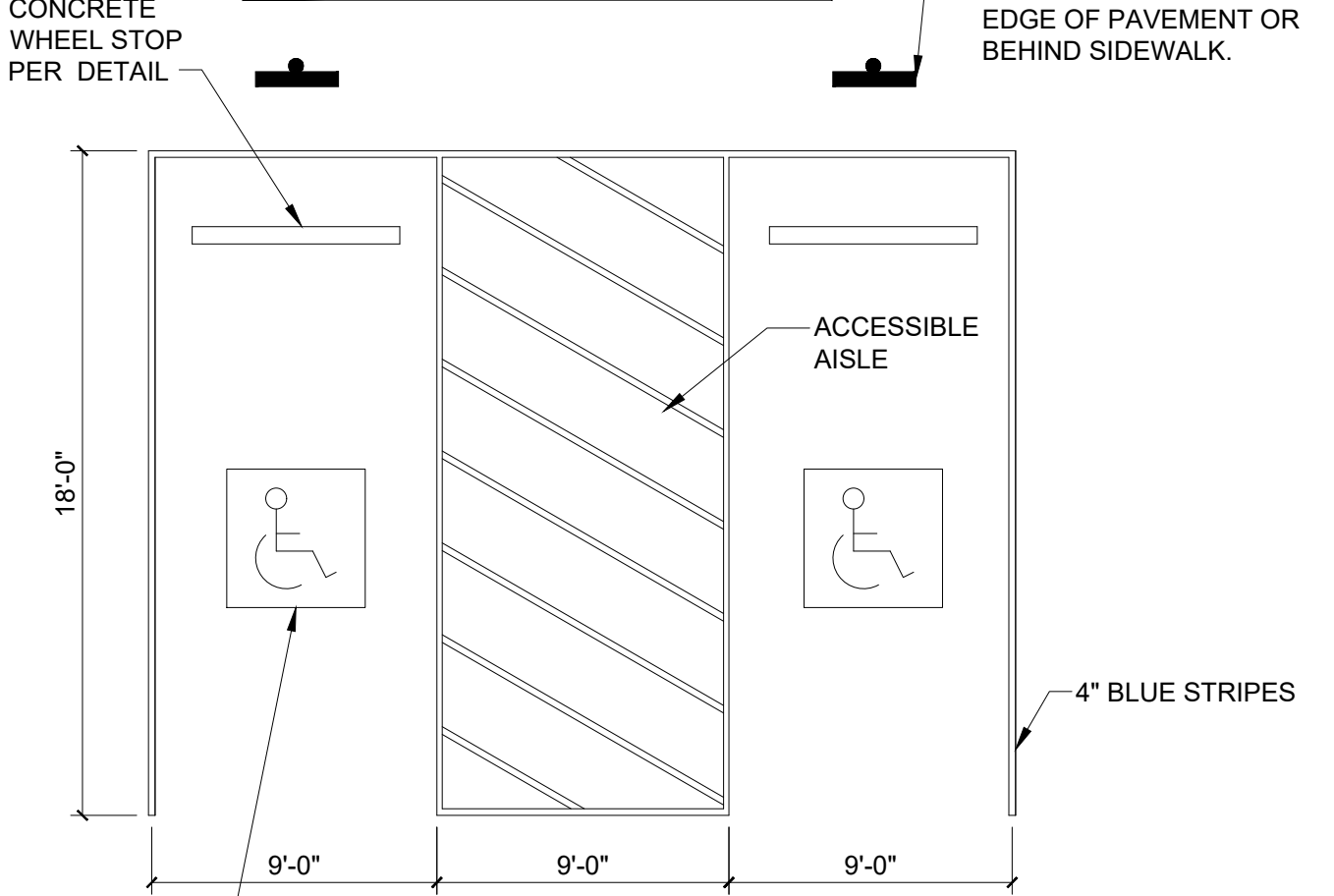
5 TYPICAL CONCRETE CURB DETAIL C250 SCALE: NTS



ACCESSIBLE SYMBOL

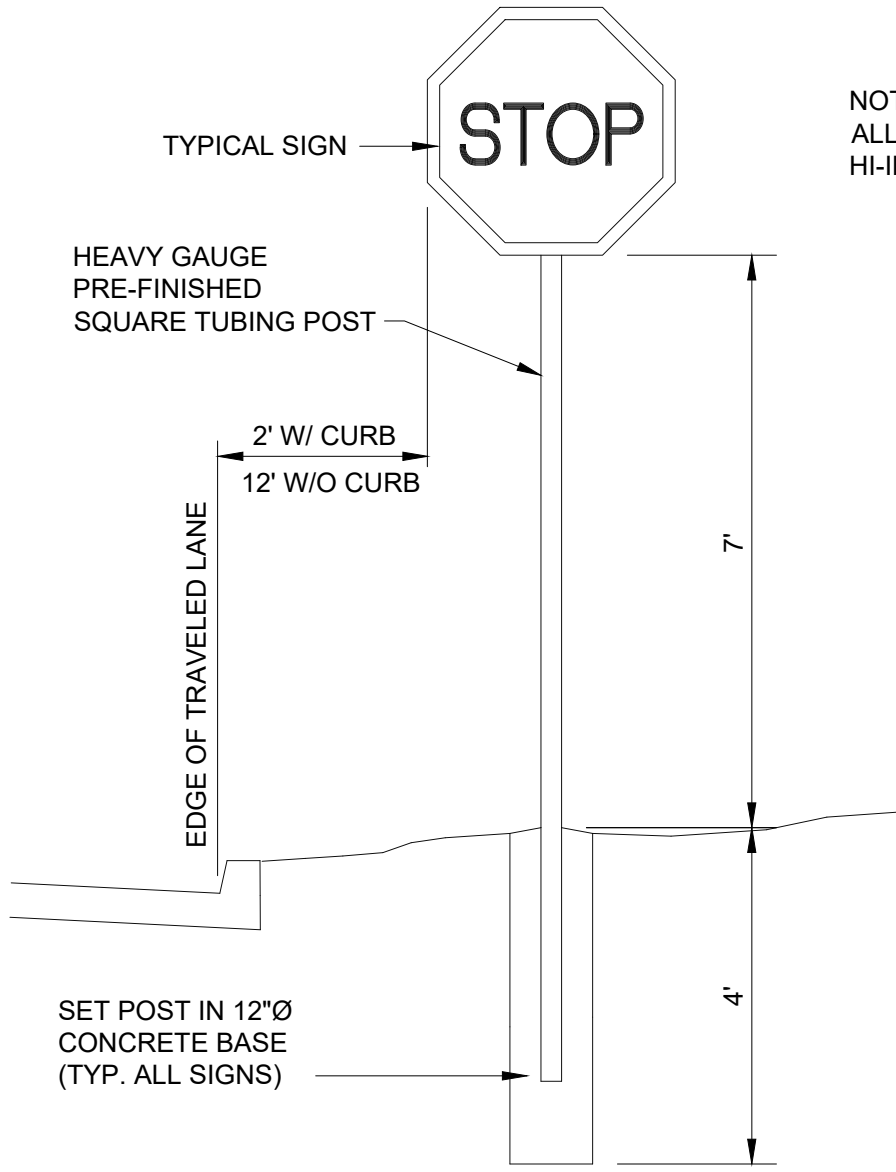
- HANDICAP SYMBOL DETAIL NOTES**
- PAVEMENT SYMBOL SHALL BE PAINTED WHITE ON A BLUE BACKGROUND.
 - BLUE COLOR SHALL MATCH NO. 15090 IN THE FEDERAL STANDARD 595B AS SPECIFIED IN SECTION 522(B)2.

- ACCESSIBLE STALL NOTES**
- ALL STRIPING CONTIGUOUS TO HANDICAPPED PARKING SPACES SHALL BE BLUE.
 - ALL ACCESSIBLE STALL MARKINGS SHALL BE THERMOPLASTIC.
 - ACCESSIBLE PARKING GRADES SHALL NOT EXCEED 1:50 IN ANY DIRECTION.

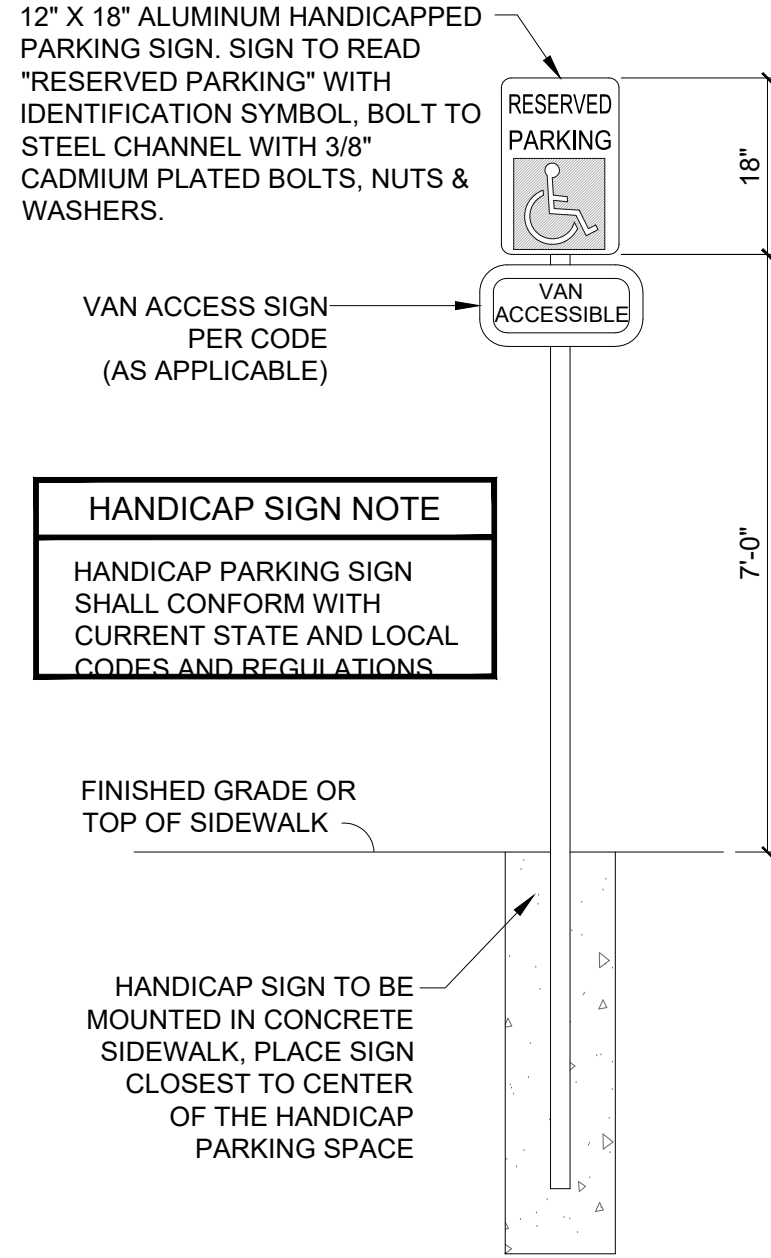


TYPICAL PAVEMENT SYMBOL
PER INTERNATIONAL
HANDICAP SYMBOL DETAIL

ACCESSIBLE STALL



NOTE:
ALL SIGNS SHALL BE
HI-INTENSITY SHEETING.

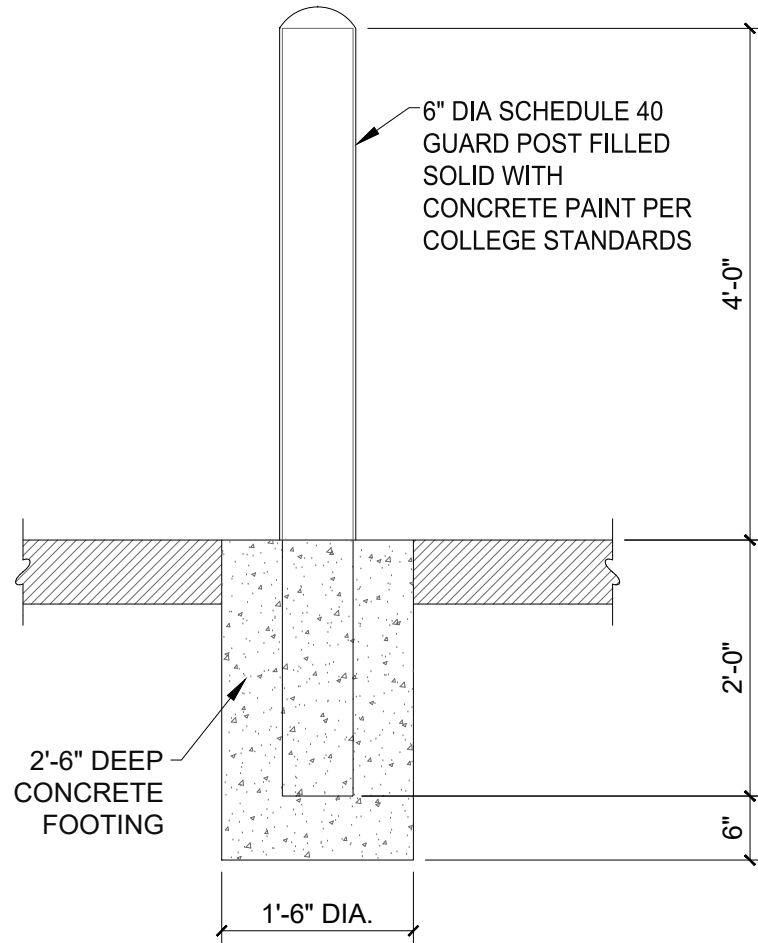
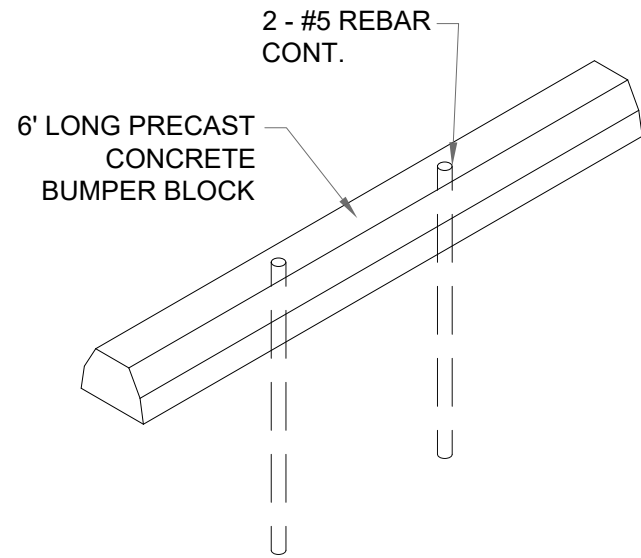
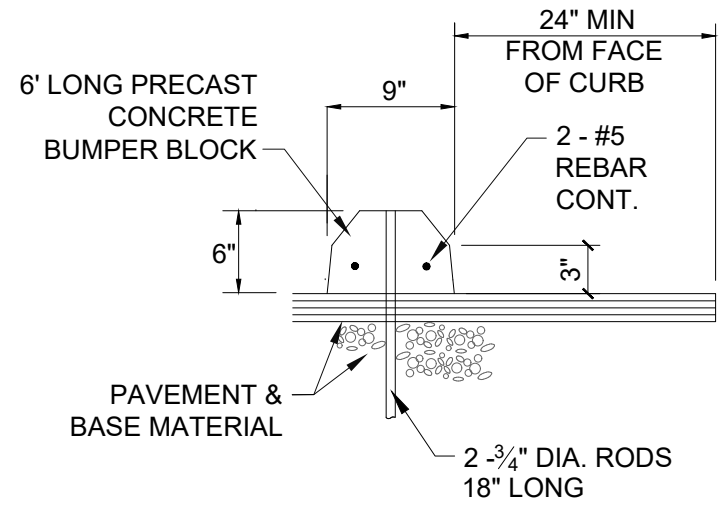


VAN ACCESSIBLE SIGN

1 TYPICAL ACCESSIBLE STALL DETAIL
C251 SCALE: NTS

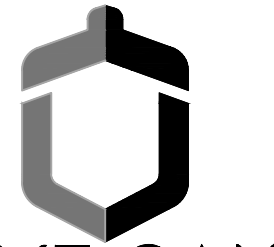
2 TYPICAL SIGN INSTALLATION DETAIL
C251 SCALE: NTS

3 TYPICAL ACCESSIBLE SIGN DETAIL
C251 SCALE: NTS



4 TYPICAL CONCRETE WHEEL STOP DETAIL
C251 SCALE: NTS

5 TYPICAL 6" BOLLARD DETAIL
C251 SCALE: NTS



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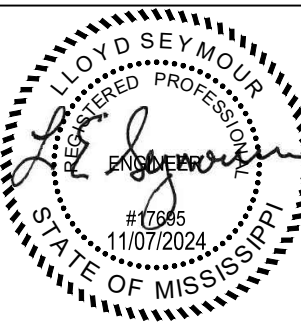
LOE JOB# 276-1

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1083 HIGHWAY 90, BAY SAINT LOUIS
HANCOCK COUNTY, MISSISSIPPI
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#	DATE/REFERENCE

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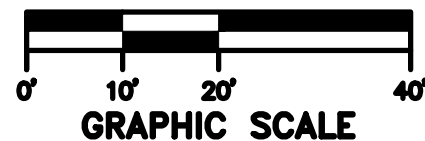
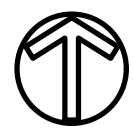
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SITE DETAILS

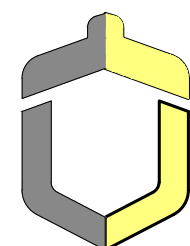
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SHEET NUMBER: 7 OF 13

C251



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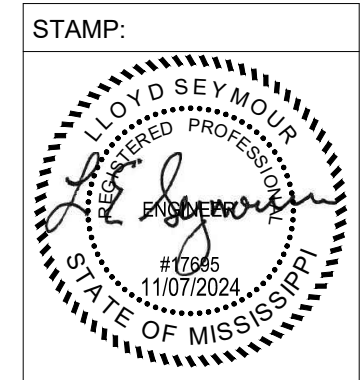


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#	DATE/REFERENCE

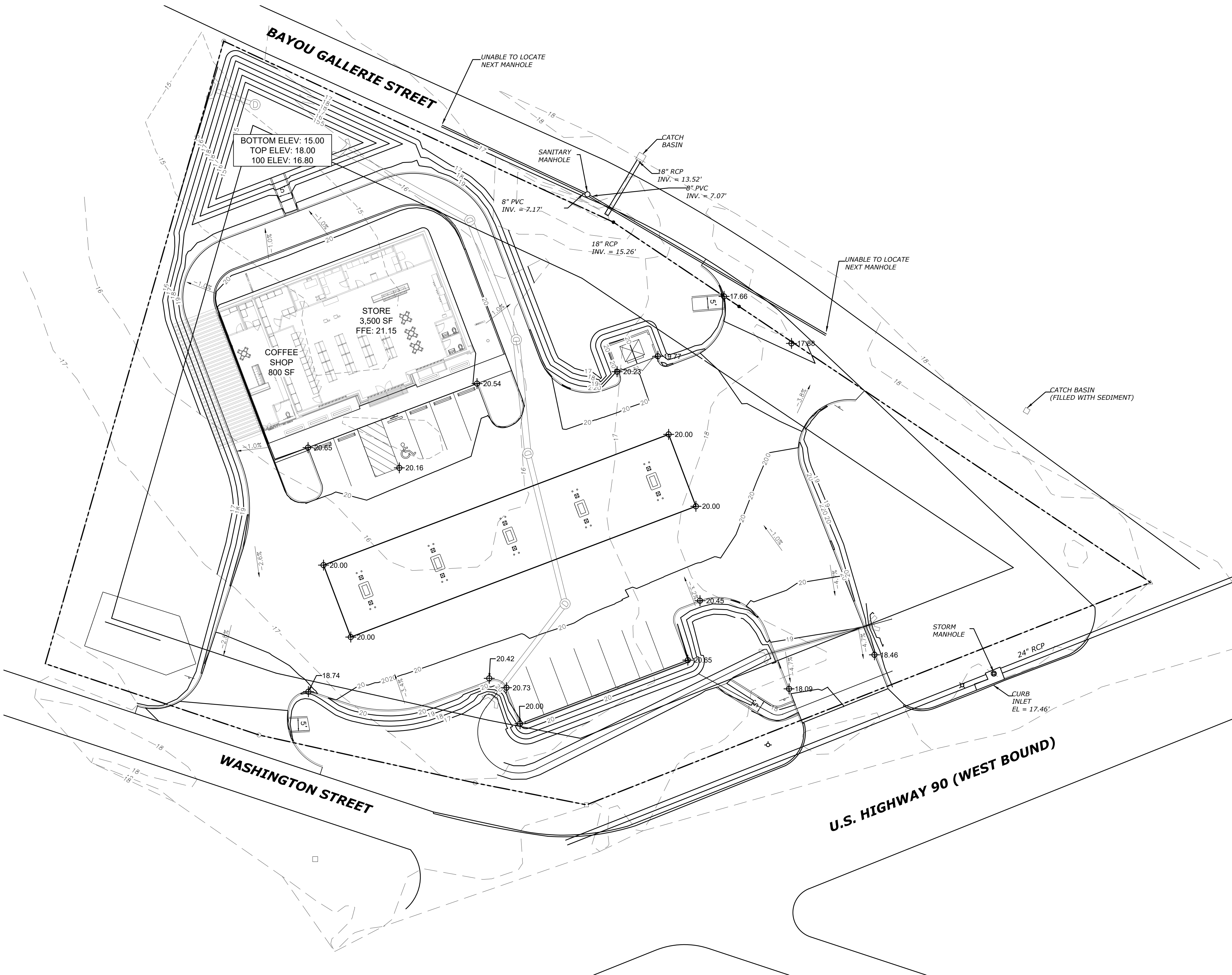


SHEET TITLE:

**SITE
GRADING
PLAN**

DATE: 11-7-2024
SHEET NUMBER: 8 OF 13

C300



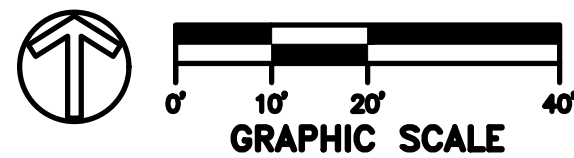
SITE GRADING AND DRAINAGE NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING TIE-IN POINTS, STRUCTURES, PIPES, ETC., PRIOR TO CONSTRUCTION.
- NO SIDEWALK CROSS SLOPE SHALL EXCEED 2%. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- NO ACCESSIBLE PARKING STALLS OR ADJACENT ACCESS AISLES SHALL EXCEED 2% SLOPE IN ANY DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- NO SIDEWALK CROSS SLOPE SHALL EXCEED 2% AND NO SIDEWALK LONGITUDINAL SLOPE SHALL EXCEED 5%. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION IF CONDITIONS CANNOT BE MET ON SITE.
- FINISH SURFACES TO BE SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. IF SPECIFIC GRADES AND SLOPES ARE NOT SHOWN FOR WORK IN ANY AREA, THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IS ACHIEVED AWAY FROM BUILDINGS AND STRUCTURES AND TIE INTO EXISTING CONDITIONS.
- DRAIN BASIN AND INLINE DRAIN TOP ELEVATIONS SHALL BE ADJUSTED AS REQUIRED TO ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED TOWARD THE DRAIN STRUCTURES.
- ALL ROOF AND CANOPY DRAINAGE SHALL BE CONNECTED TO THE SUBSURFACE DRAINAGE SYSTEM. CONTRACTOR SHALL CONSULT AND VERIFY ROOF AND CANOPY DRAINAGE SIZE AND LOCATION WITH ARCHITECTURAL/PLUMBING DRAWINGS.

LEGEND

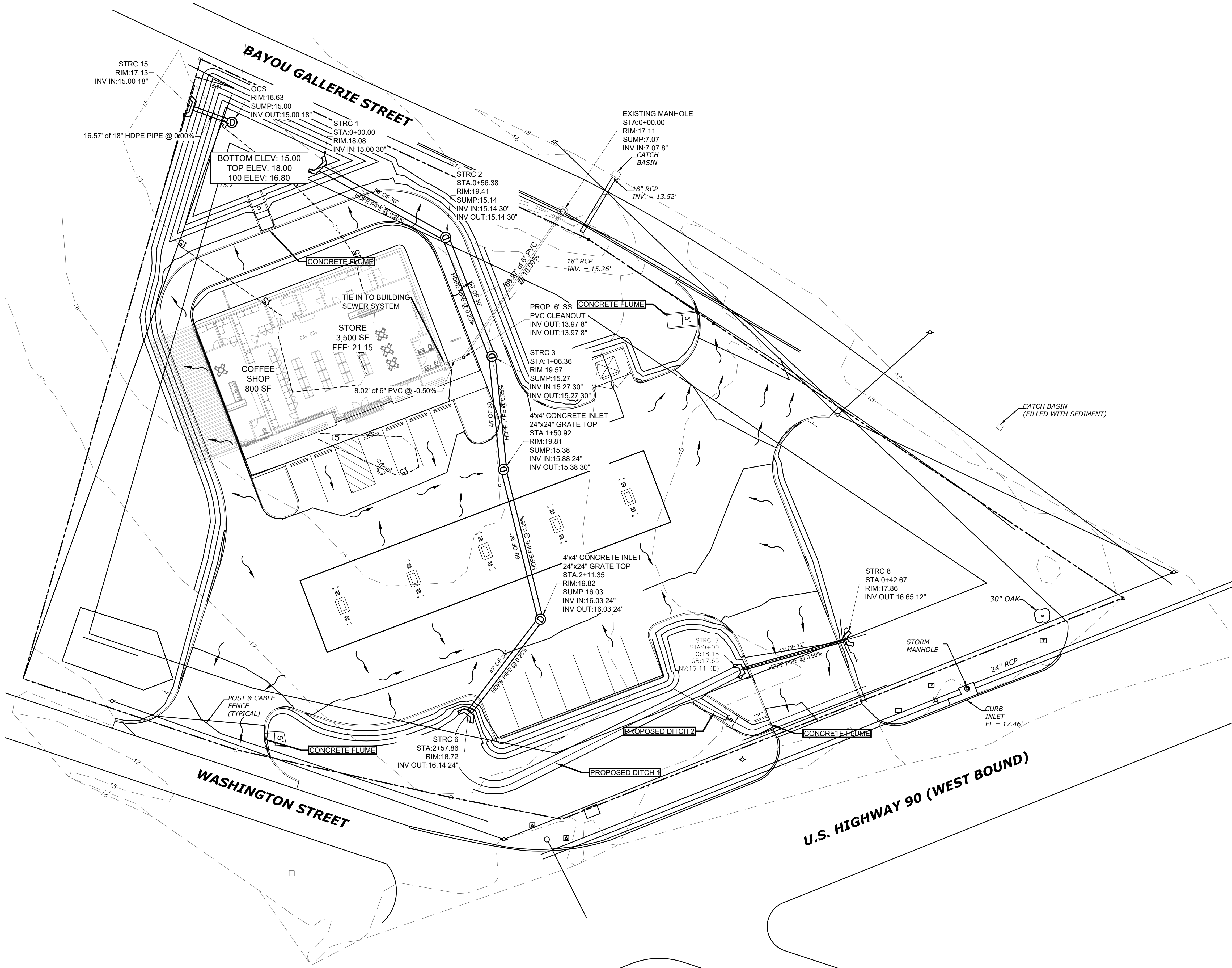
- 10--- DENOTES EXISTING GRADE CONTOUR
- 10--- DENOTES PROPOSED GRADE CONTOUR
- 8.00 DENOTES PROPOSED SPOT ELEVATION
- DENOTES WATERSHED FLOW DIRECTION
- DS - DRAIN STRUCTURE
RCP - REINFORCED CONCRETE PIPE
RCAP - REINFORCED CONCRETE ARCH PIPE
HP - HIGH PERFORMANCE POLYPROPYLENE STORM PIPE

1 GRADING PLAN
C300 SCALE: 1" = 20'



ELEV =	:
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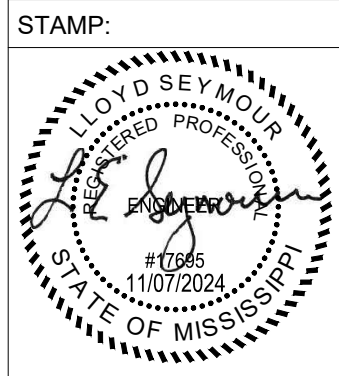


DRAINAGE FLOW SUMMARY		
DRAINAGE AREA	Pre Peak Run-Off	Post Peak Run-Off
Total Area (Pre)	6.350	
South Area (Post)*		1.680
North Area (Post)		4.560
TOTAL	6.350	6.240
* ROUTED THROUGH POND		

- STORM WATER MANAGEMENT NOTES**
- DRAINAGE SYSTEM SHOWN WILL BE PRIVATELY OWNED AND MAINTAINED.
 - IN THE EVENT OF CONFLICT BETWEEN CITY OF OXFORD STORM WATER REQUIREMENTS AND THE PLANS, THE CITY OF OXFORD LATEST STORM WATER MANAGEMENT ORDINANCE SHALL GOVERN.
 - TRASH RACKS ARE REQUIRED TO PROTECT DISCHARGE STRUCTURE ORIFICES AND CONTAIN GARBAGE FROM EXISTING THE PROPERTY.
 - ALL FLUMES AND OUTLET STRUCTURES ARE REQUIRED TO BE PROTECTED BY RIP-RAP.

LEGEND	
	DENOTES EXISTING GRADE CONTOUR
	DENOTES PROPOSED GRADE CONTOUR
	DENOTES PROPOSED SPOT ELEVATION
	DENOTES WATERSHED FLOW DIRECTION
DS - DRAIN STRUCTURE	
RCP - REINFORCED CONCRETE PIPE	
RCAP - REINFORCED CONCRETE ARCH PIPE	
HP - HIGH PERFORMANCE POLYPROPYLENE STORM PIPE	

SHEET REVISIONS:	
#	DATE/REFERENCE

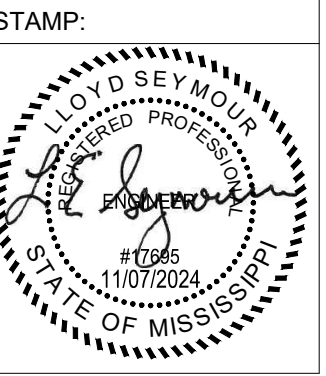


SHEET TITLE:
DRAINAGE PLAN

DATE: 11-7-2024
SHEET NUMBER: 9 OF 13

C310

SHEET REVISIONS:	
#	DATE/REFERENCE



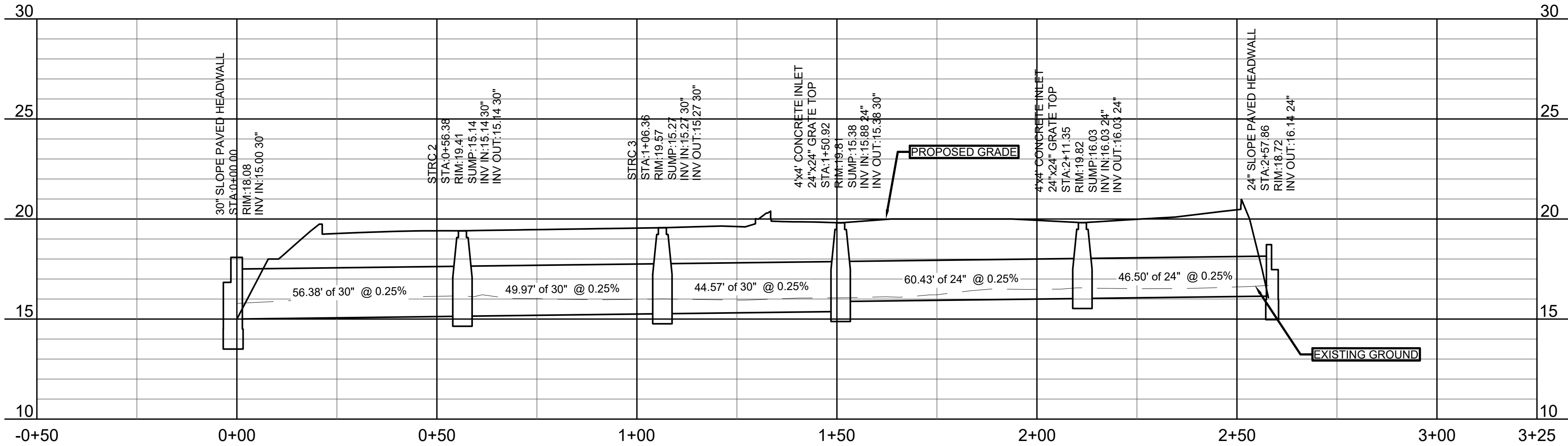
SHEET TITLE:

**DRAINAGE
PROFILES**

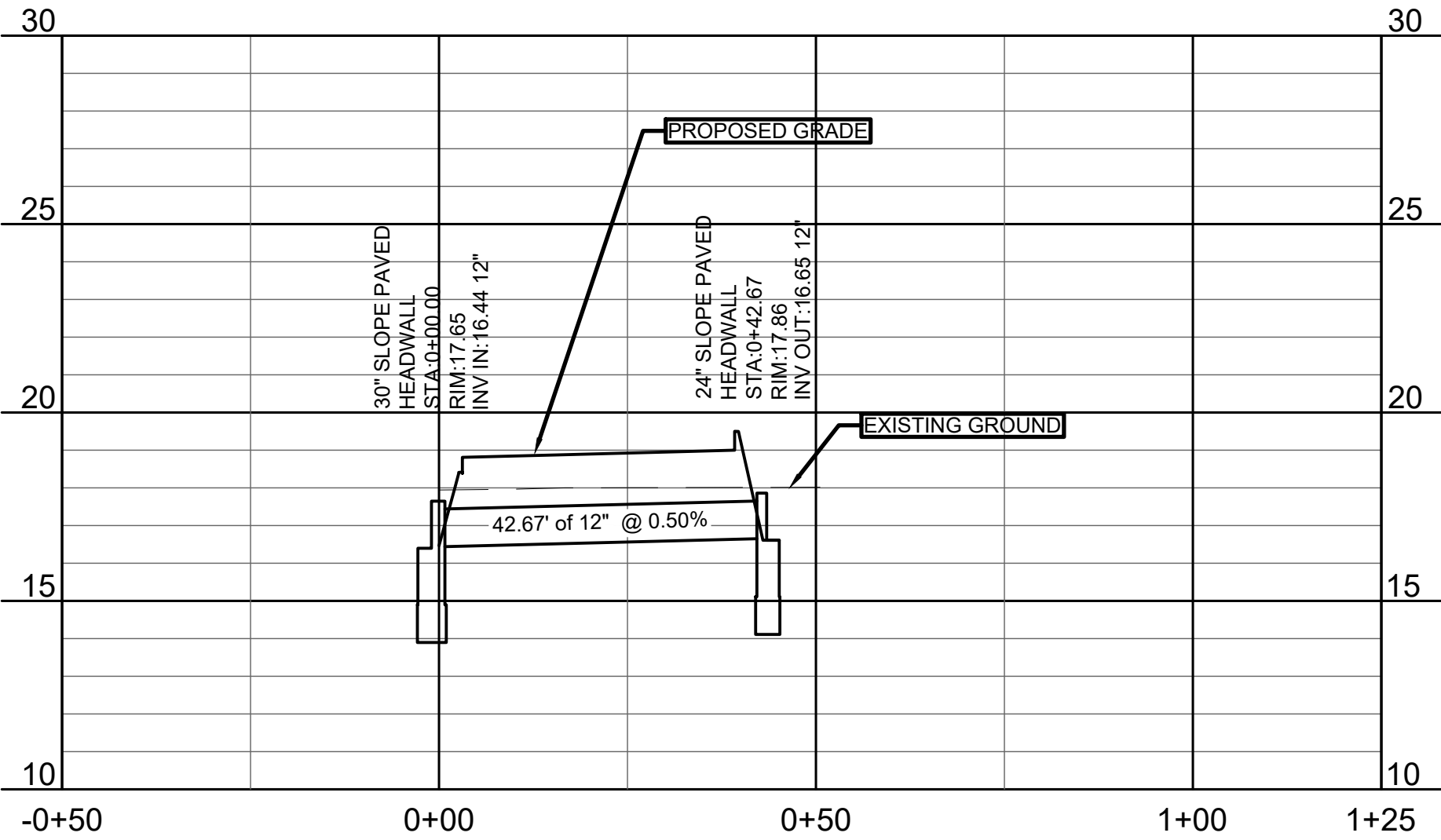
DATE: 11-7-2024
SHEET NUMBER: 10 OF 13

C320

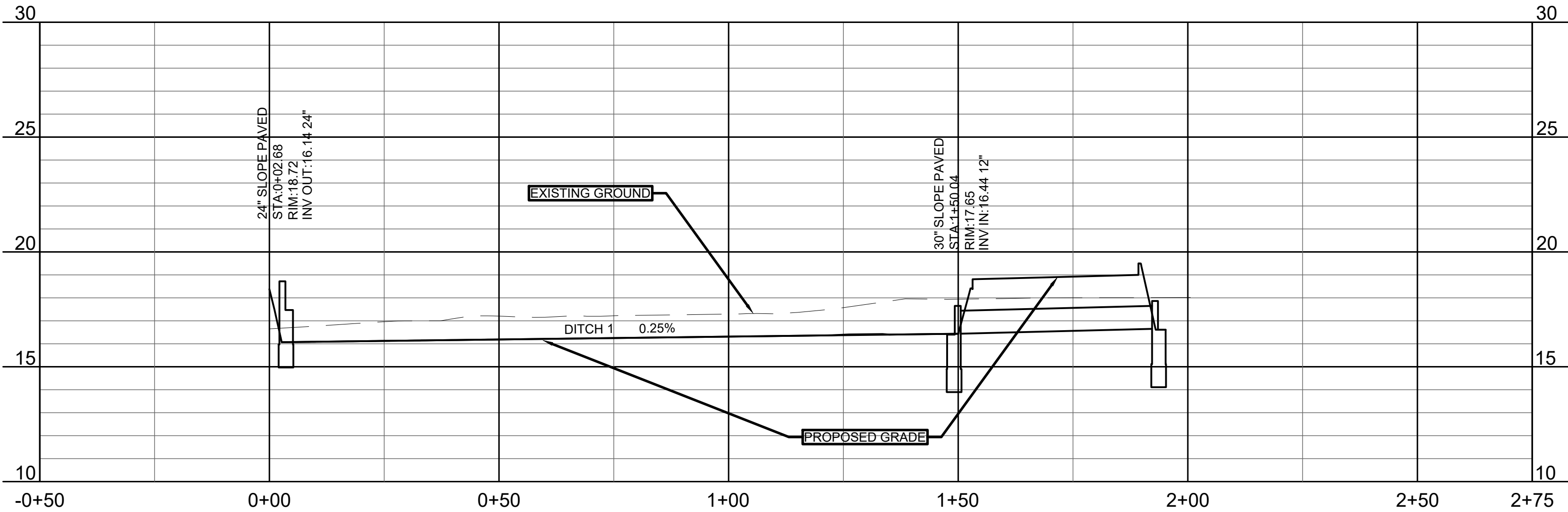
STORM LINE 1 PROFILE



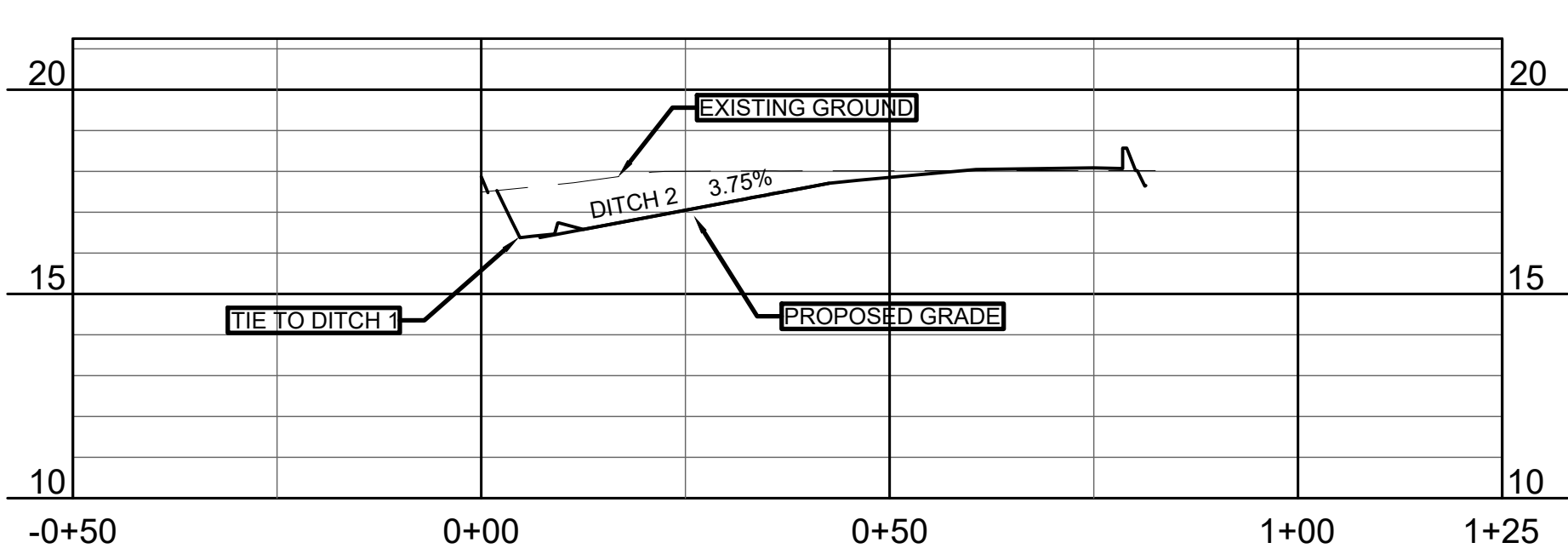
STORM LINE 2 PROFILE



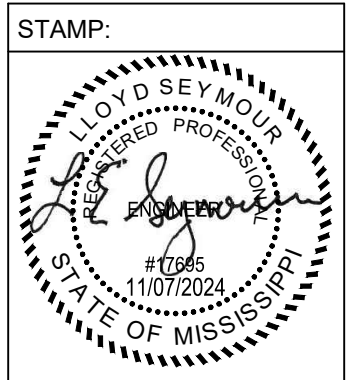
DITCH 1 PROFILE



DITCH 2 PROFILE



SHEET REVISIONS:	
#	DATE/REFERENCE

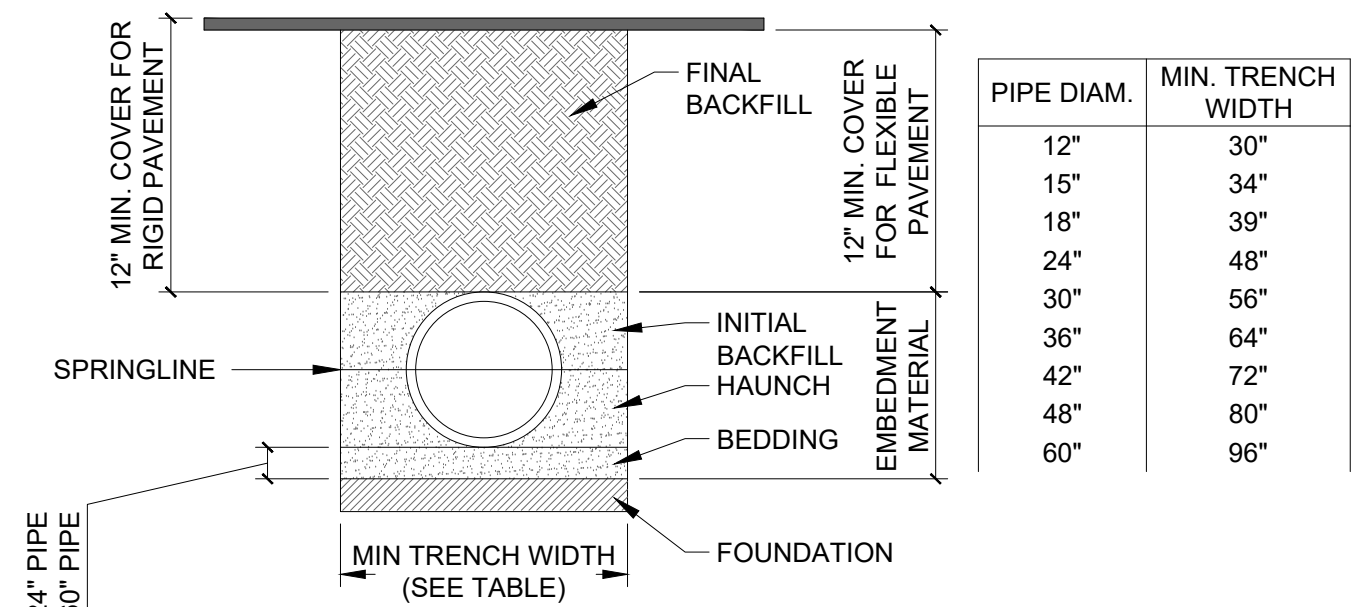


SHEET TITLE:

**DRAINAGE
DETAILS**

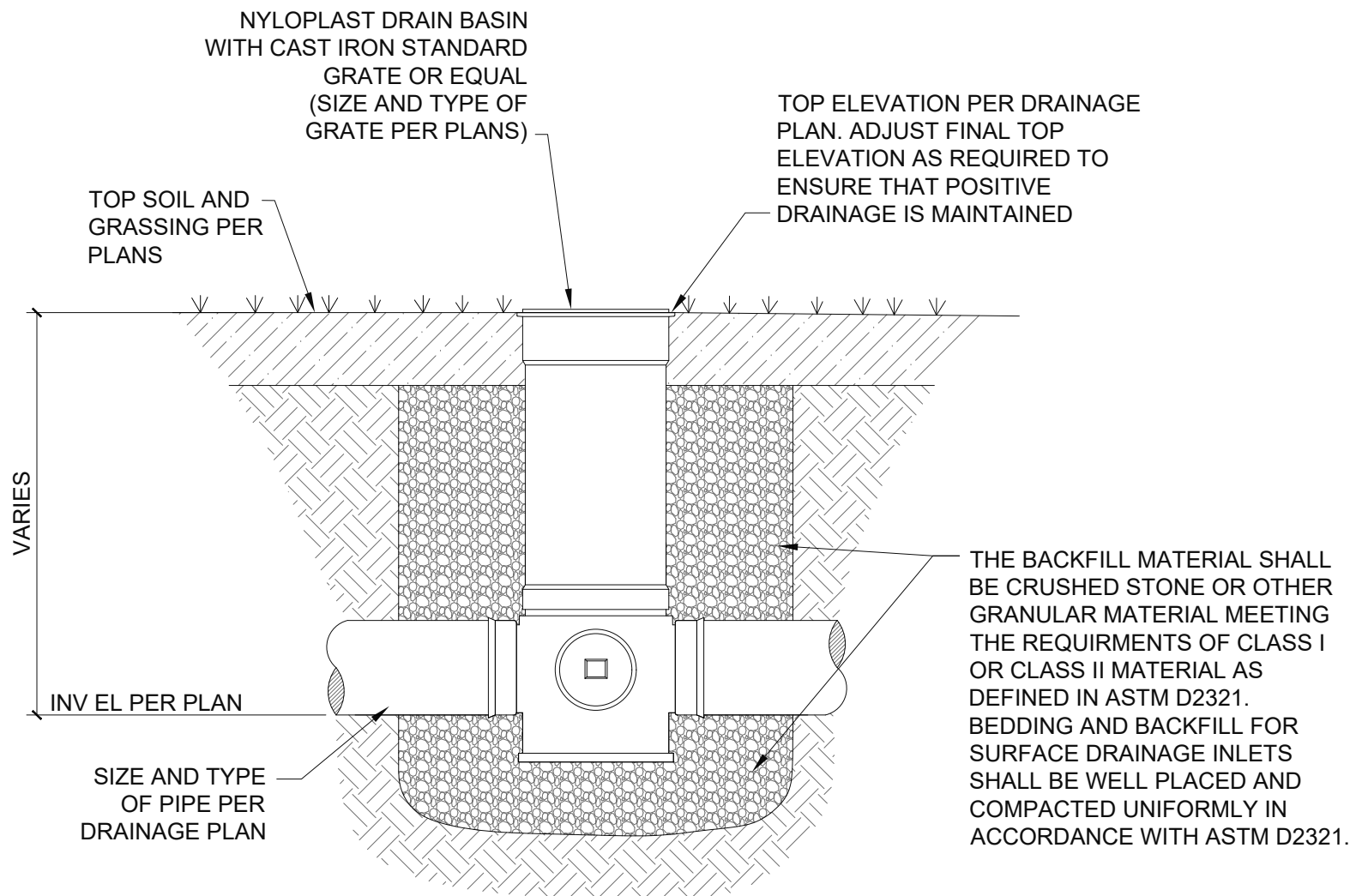
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SHEET NUMBER: 11 OF 13

C350

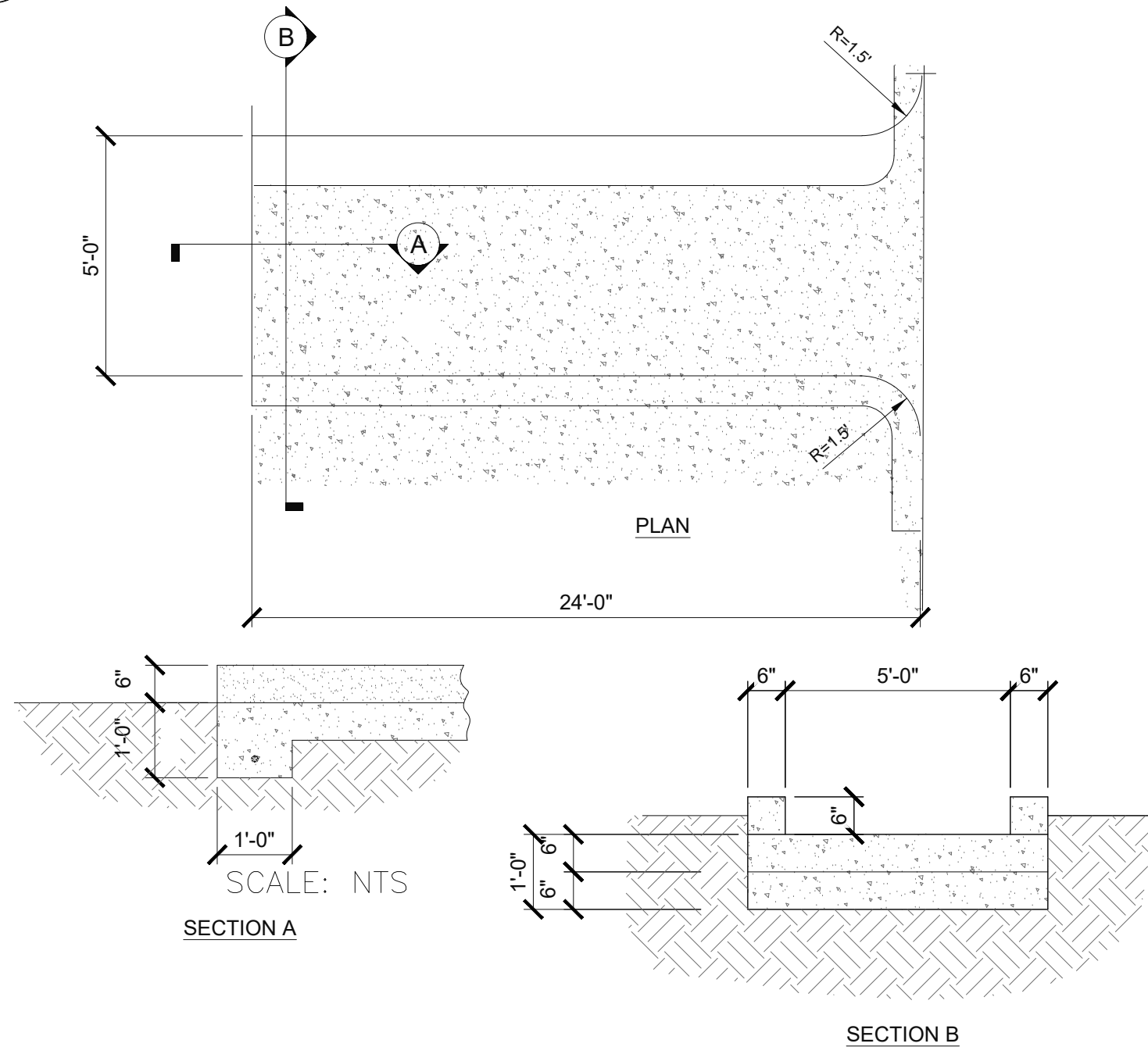


- HP STORM PIPE INSTALLATION NOTES**
- ALL HP STORM PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH LATEST VERSION OF ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS".
 - SUITABLE EMBEDMENT MATERIALS, EITHER ON-SITE OR IMPORTED, SHALL MEET THE REQUIREMENTS FOR CLASS I, II, OR III PER THE LATEST VERSION OF ASTM D2321. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO THE ENGINEER FOR EMBEDMENT MATERIAL TO BE USED FOR PIPE INSTALLATION. SEE THE EMBEDMENT MATERIAL TABLE FOR COMPACTION AND LIFT PLACEMENT REQUIREMENTS.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER.
 - BEDDING: BEDDING IS REQUIRED TO ESTABLISH LINE AND GRADE AND TO PROVIDE FIRM PIPE SUPPORT. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR UP TO 24" DIAMETER PIPE AND 6" FOR 30"-60" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED, WHILE THE REMAINDER SHALL BE THOROUGHLY COMPACTED.
 - HAUNCHING: THE HAUNCHING MATERIAL SHALL BE INSTALLED UNIFMLY IN LIFTS ON EACH SIDE OF THE PIPE AND SHOVELED UNDER THE PIPE ENSURING TO FILL VOIDS. THE MATERIAL SHALL BE THOROUGHLY COMPACTED TO THE SPRING LINE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH ENSURING THAT THE PIPE ALIGNMENT IS NOT DISTURBED.
 - INITIAL BACKFILL: THE INITIAL BACKFILL SHALL PROCEED TO THE TOP OF THE PIPE. THE MATERIAL SHALL BE THOROUGHLY COMPACTED INSTALLED IN UNIFORMED LIFTS ON EACH SIDE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH.
 - FINAL BACKFILL (NON-TRAFFIC): SUITABLE MATERIAL IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) SHALL BE GENERAL FILL MATERIAL. BACKFILL SHALL PROCEED TO FINISHED GRADE IN 12 INCH LIFTS COMPACTED TO ELIMINATE AIR VOIDS.
 - FINAL BACKFILL (TRAFFIC): SUITABLE MATERIAL IN TRAFFIC APPLICATIONS SHALL BE SELECT FILL COMPACTED IN 8 INCH LOOSE LIFTS TO NOT LESS THAN 95 PERCENT STANDARD PROCTOR.
 - MINIMUM COVER (NON-TRAFFIC): FOR NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS), MINIMUM COVER IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE.
 - MINIMUM COVER (TRAFFIC): FOR TRAFFIC APPLICATIONS THE MINIMUM COVER IS 12" FOR UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
 - CONTRACTOR SHALL MAINTAIN TRENCH BACKFILL AT GROUND SURFACE UNTIL FINAL ACCEPTANCE OF THE WORK. ALL SURPLUS MATERIALS NOT USED IN BACKFILLING SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR AT HIS OWN EXPENSE.

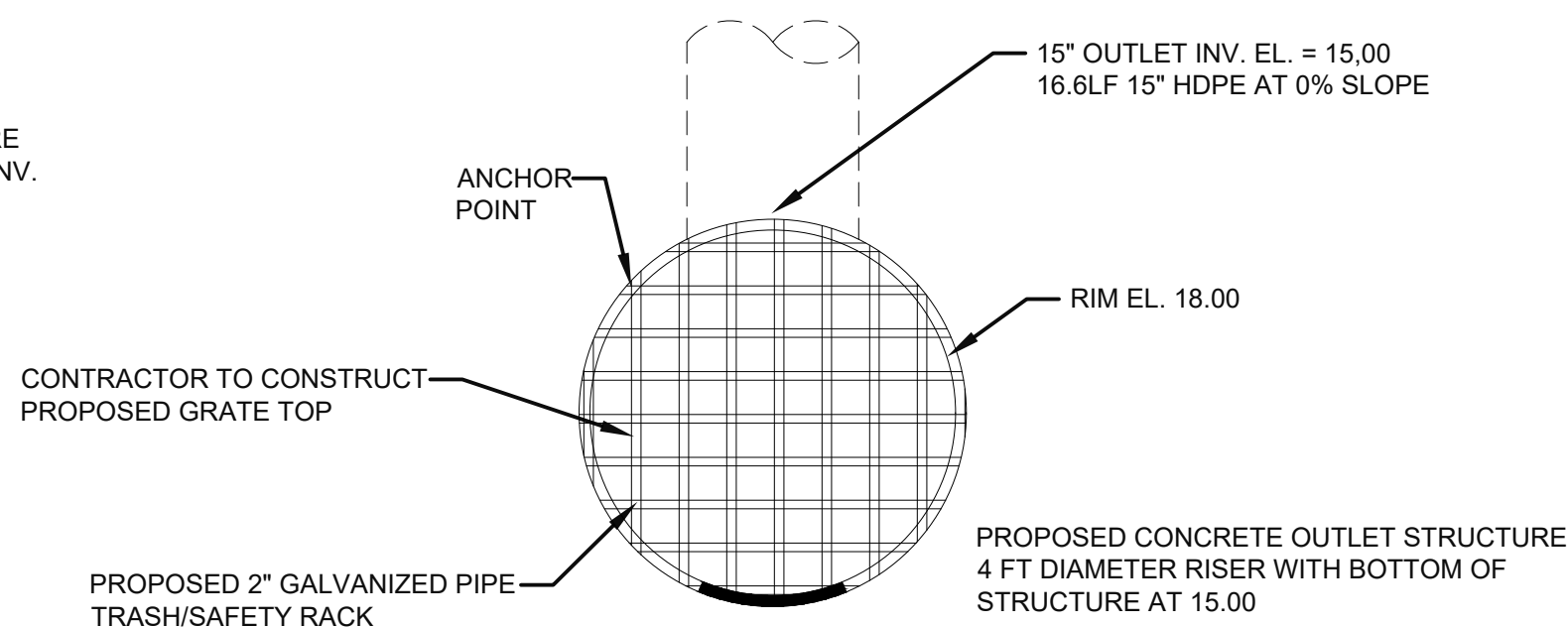
5 HP STORM PIPE TRENCH INSTALLATION DETAIL
SCALE: NTS



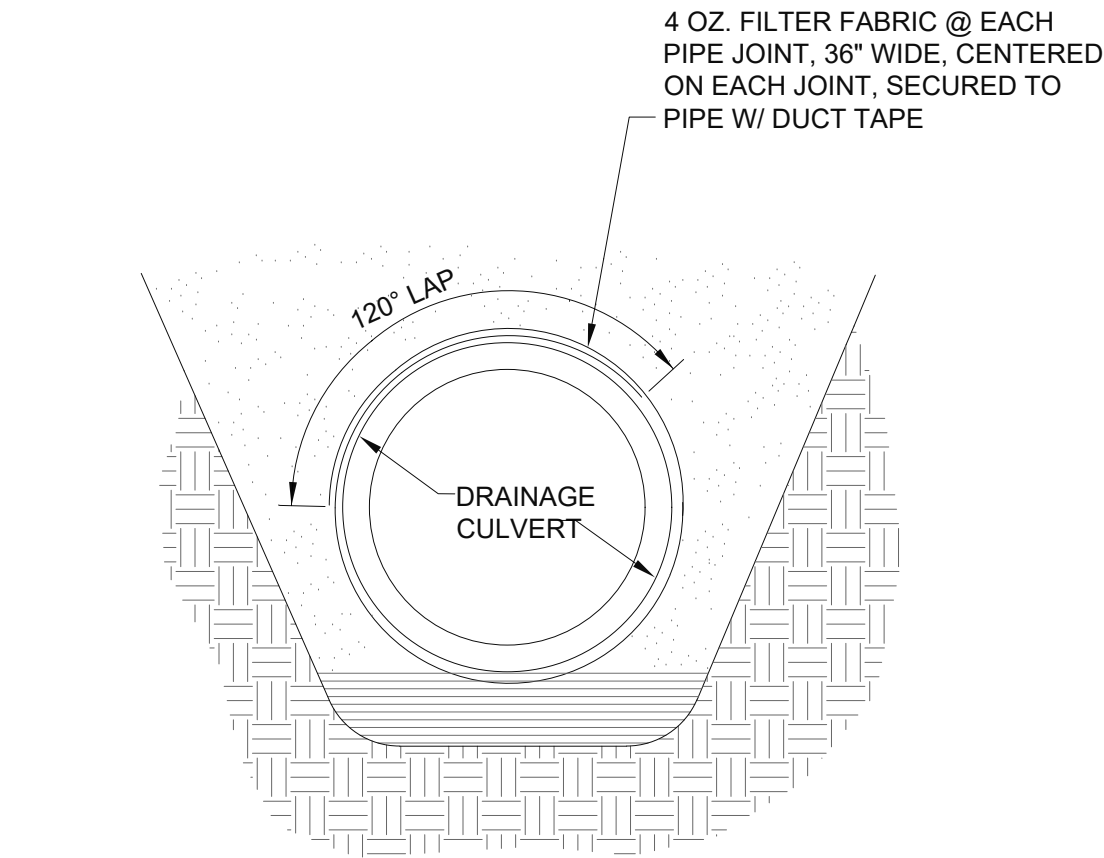
2 TYPICAL DRAIN BASIN DETAIL
SCALE: NTS



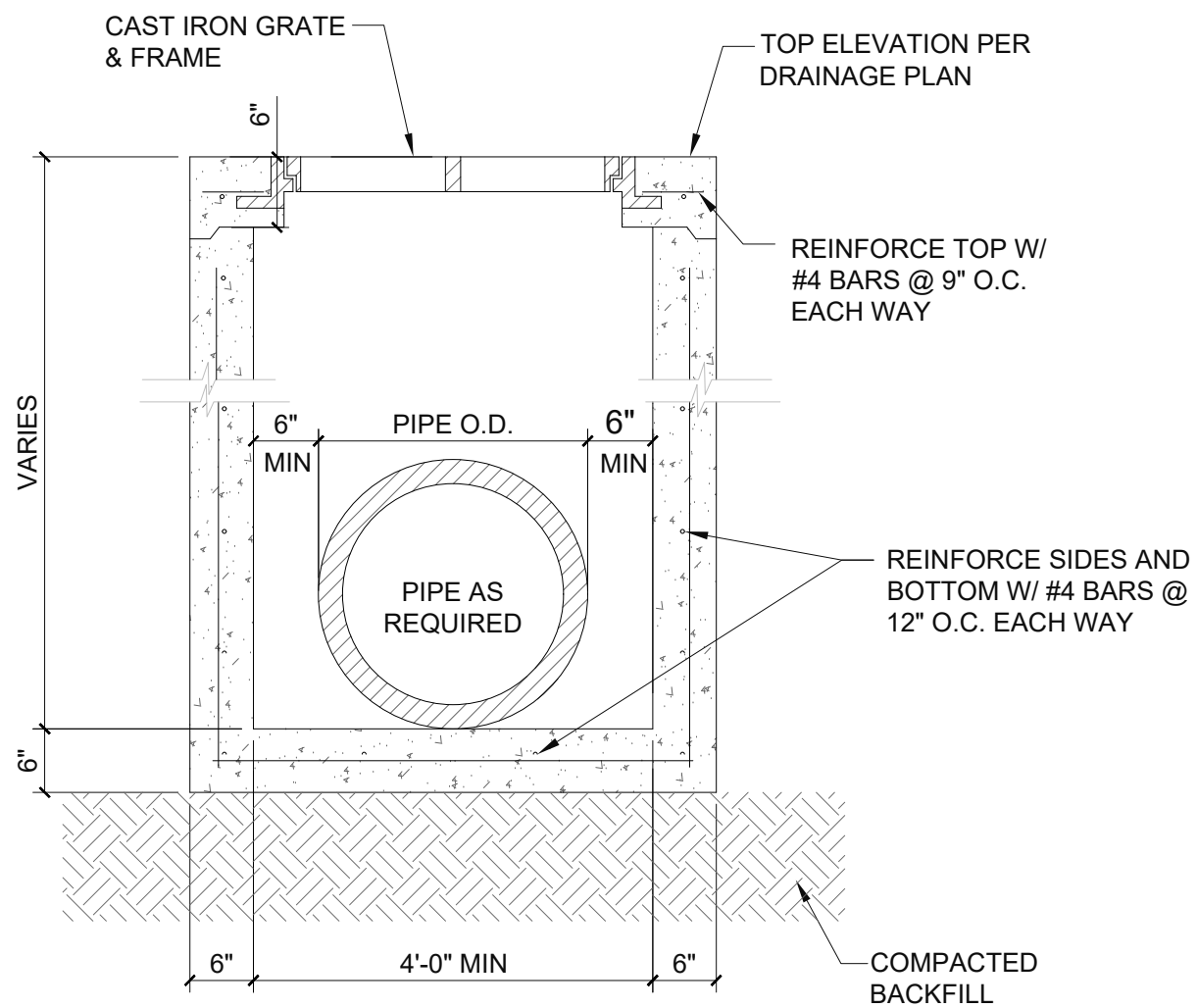
4 TYPICAL CONCRETE FLUME DETAIL
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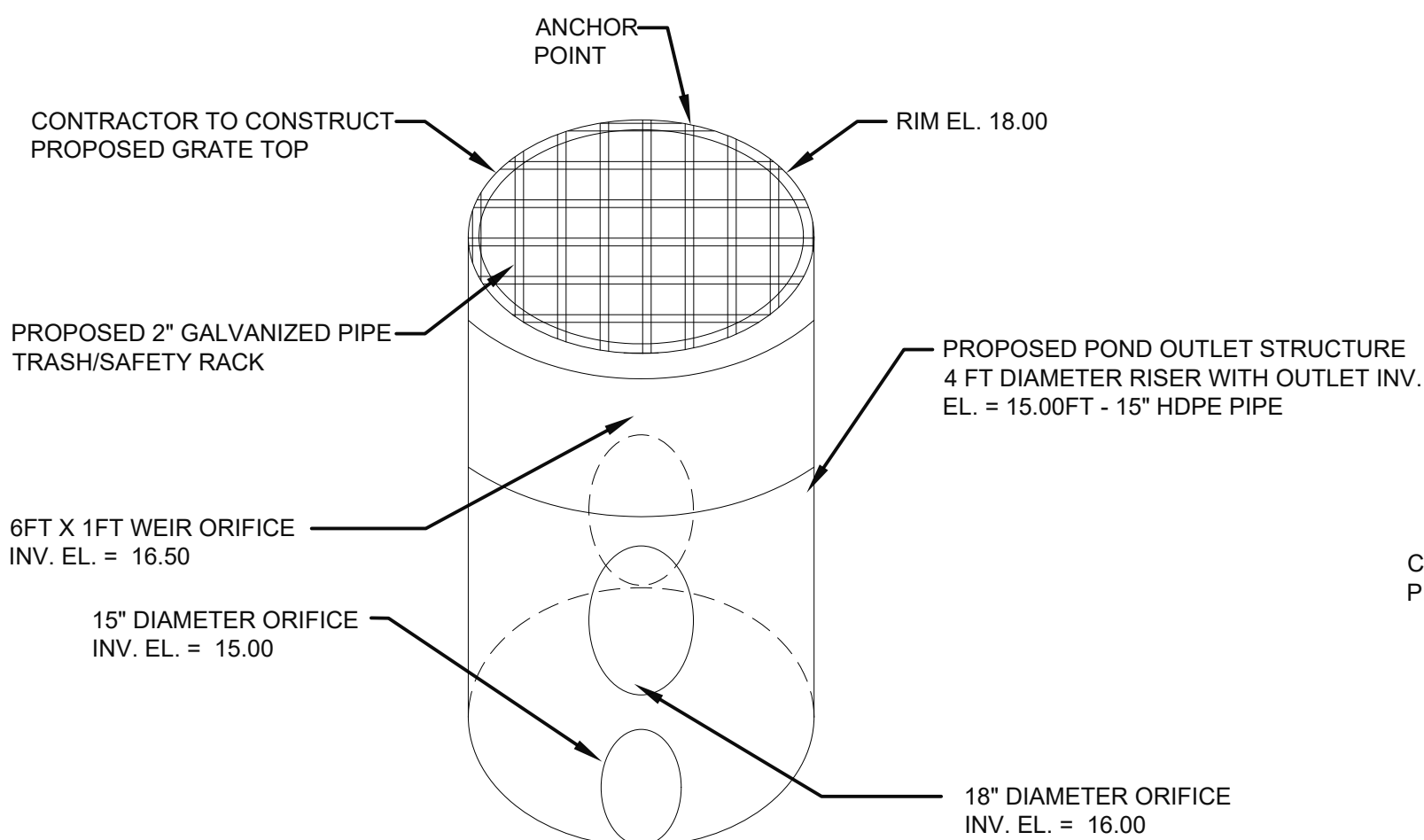
1 TYPICAL STORM DRAIN PIPE WRAP DETAIL
SCALE: NTS

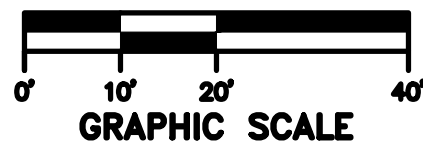
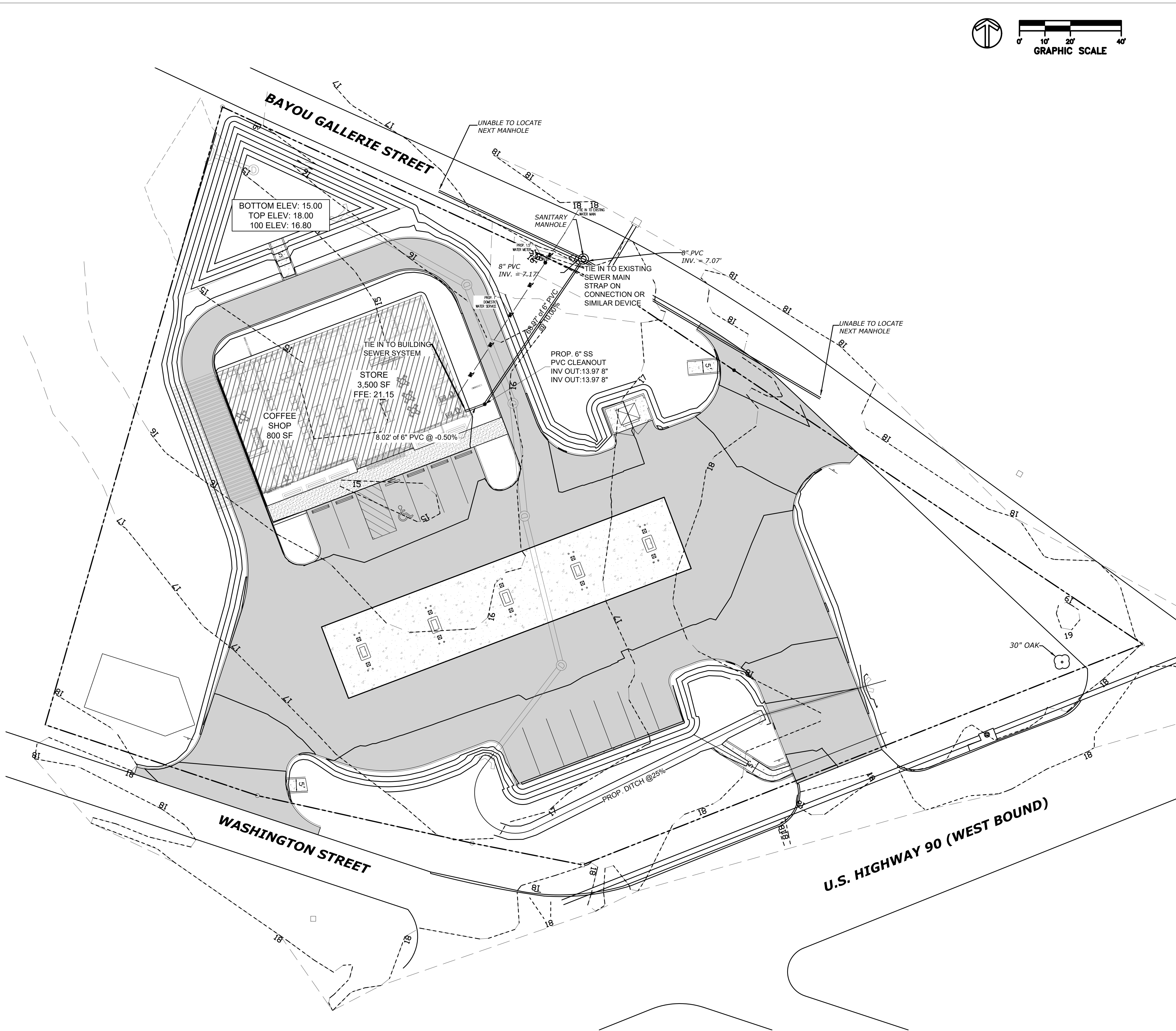


3 TYPICAL DRAIN INLET DETAIL
SCALE: NTS

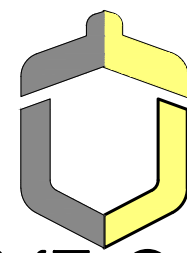


6 BASIN OUTLET DETAIL - ISOMETRIC VIEW
SCALE: NTS





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ELEV =	.



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UNDERGROUND UTILITY NOTES

- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL PROJECT RELATED UTILITIES, BURIED AND ABOVE GROUND, REGARDLESS OF INCLUSION ON THESE PLANS. THE LOCATIONS OF ANY EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- ALL CONTRACTOR DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

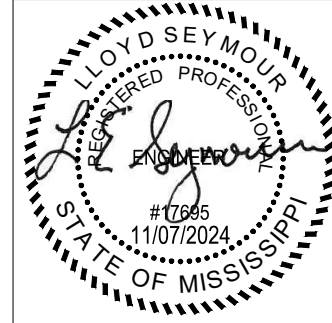
SITE UTILITY NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL PROJECT RELATED UTILITIES, BURIED AND ABOVE GROUND, REGARDLESS OF INCLUSION ON THESE PLANS. THE LOCATIONS OF ANY EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ALL CONTRACTOR DAMAGED UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR CONNECTION TO EXISTING WATER MAIN.
- CONTRACTOR IS RESPONSIBLE FOR PERFORMING GAS LINE TAP, PROVIDING GAS VALVE, AND PROVIDING GAS SERVICE TO THE BUILDING.
- CONTRACTOR SHALL FURNISH AND INSTALL 750 LINEAR FEET OF 4" SDR-21 CL200 PVC AND ASSOCIATED CAPS FOR USE AS IRRIGATION SLEEVES. LOCATIONS OF IRRIGATION SLEEVES SHALL BE COORDINATED WITH THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH OTHER TRADES FOR TIE IN LOCATION AND SIZE REQUIREMENTS FOR UTILITY TIE IN POINTS.
- CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION HAVING POTENTIAL IMPACT TO THE UTILITY'S STRUCTURE.
- CONTRACTOR SHALL INSTALL FITTINGS, THRUST BLOCKS, AND OTHER REQUIRED COMPONENTS TO ESTABLISH THE PROPER ALIGNMENT OF UTILITY MAINS AND SERVICES AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL INSTALL ALL WATER MAINS AND SERVICES AT AN ELEVATION WHICH WILL AVOID ALL CONFLICTS WITH SEWER, DRAINAGE, AND OTHER UNDERGROUND UTILITIES. WATER MAINS SHALL BE LAID WITH A MINIMUM OF 30" COVER UNLESS APPROVED BY THE ENGINEER TO AVOID A CONFLICT.
- ALL VALVES BOXES, CLEANOUTS, SEWER MANHOLE TOPS, AND OTHER UTILITY STRUCTURE TOPS SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FINAL GRADES IN ALL AREAS.

SHEET REVISIONS:

#	DATE/REFERENCE

STAMP:



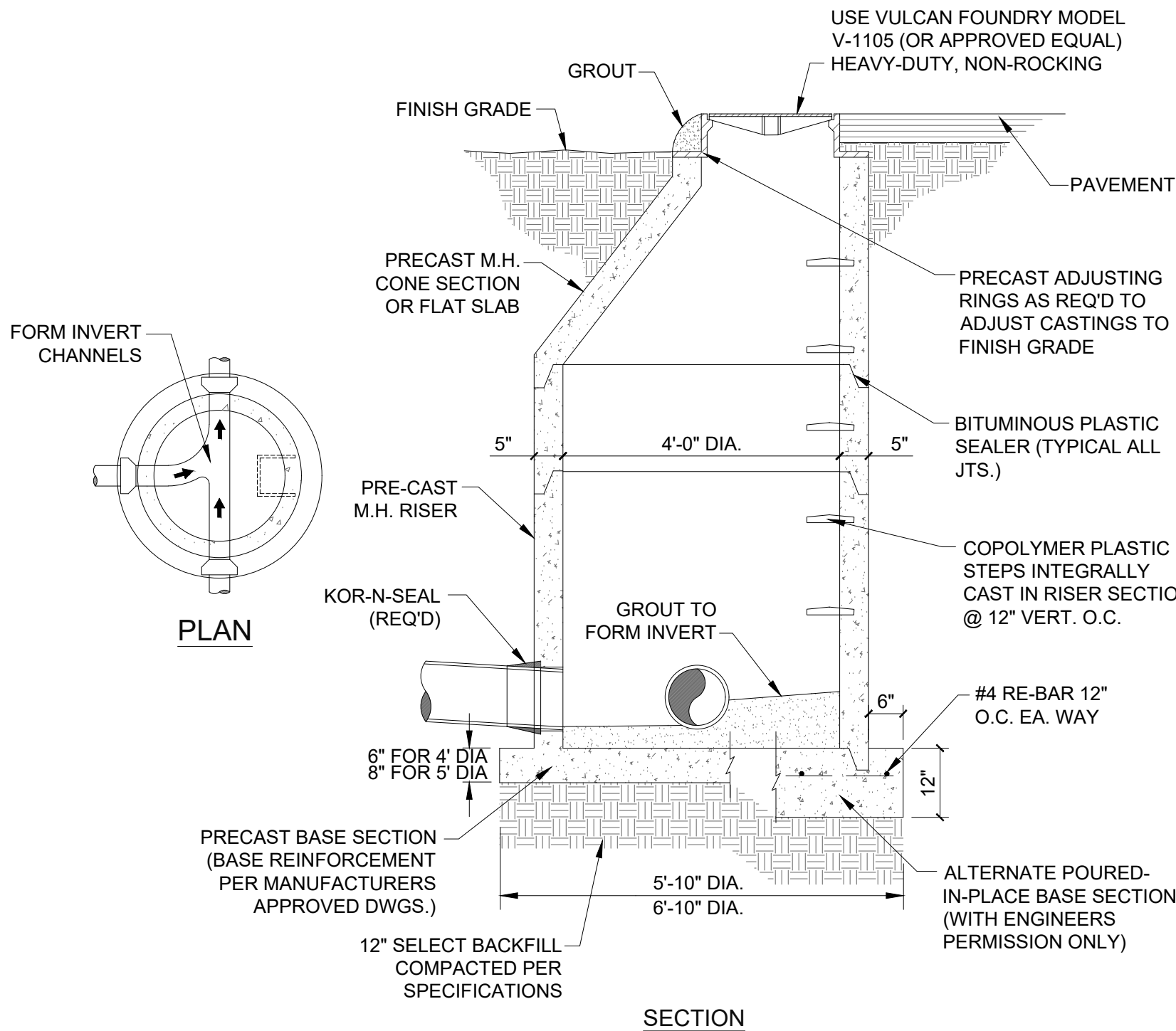
SHEET TITLE:

UTILITY PLAN

DATE: 11-7-2024

SHEET NUMBER 12 OF 13

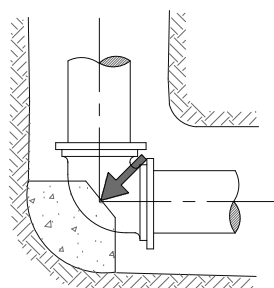
C400



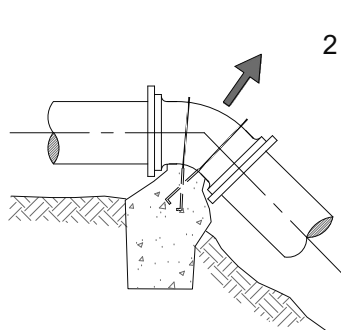
1 **TYPICAL SEWER MANHOLE DETAIL**
C450 SCALE: NTS

BEARING AREAS FOR THRUST BLOCKING IN SQUARE FEET						
FITTING:	4" DIA.	6" DIA.	8" DIA.	10" DIA.	12" DIA.	14" DIA.
TEES	2.0	2.5	4.7	5.0	7.0	9.0
90°	2.0	2.7	6.7	7.2	10.4	12.7
45°	1.0	1.5	3.6	3.9	5.6	6.9
22 1/2°	1.0	1.0	1.8	2.0	2.9	3.5

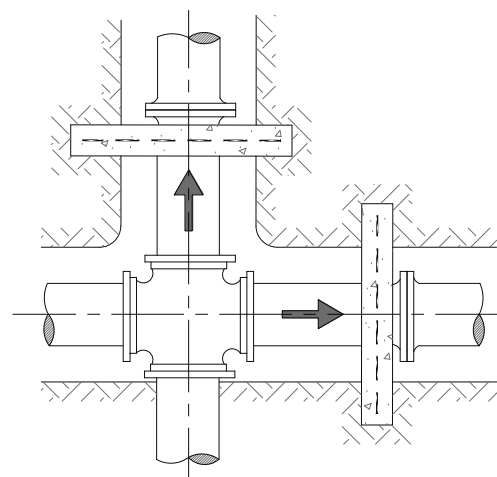
NOTE: ALL FITTINGS SHALL BE COVERED WITH A GEOTEXTILE FABRIC PRIOR TO POURING CONCRETE THRUST BLOCKING



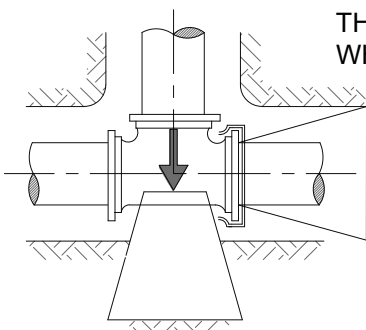
HORIZONTAL BEND



VERTICAL BEND



CROSS



TEE

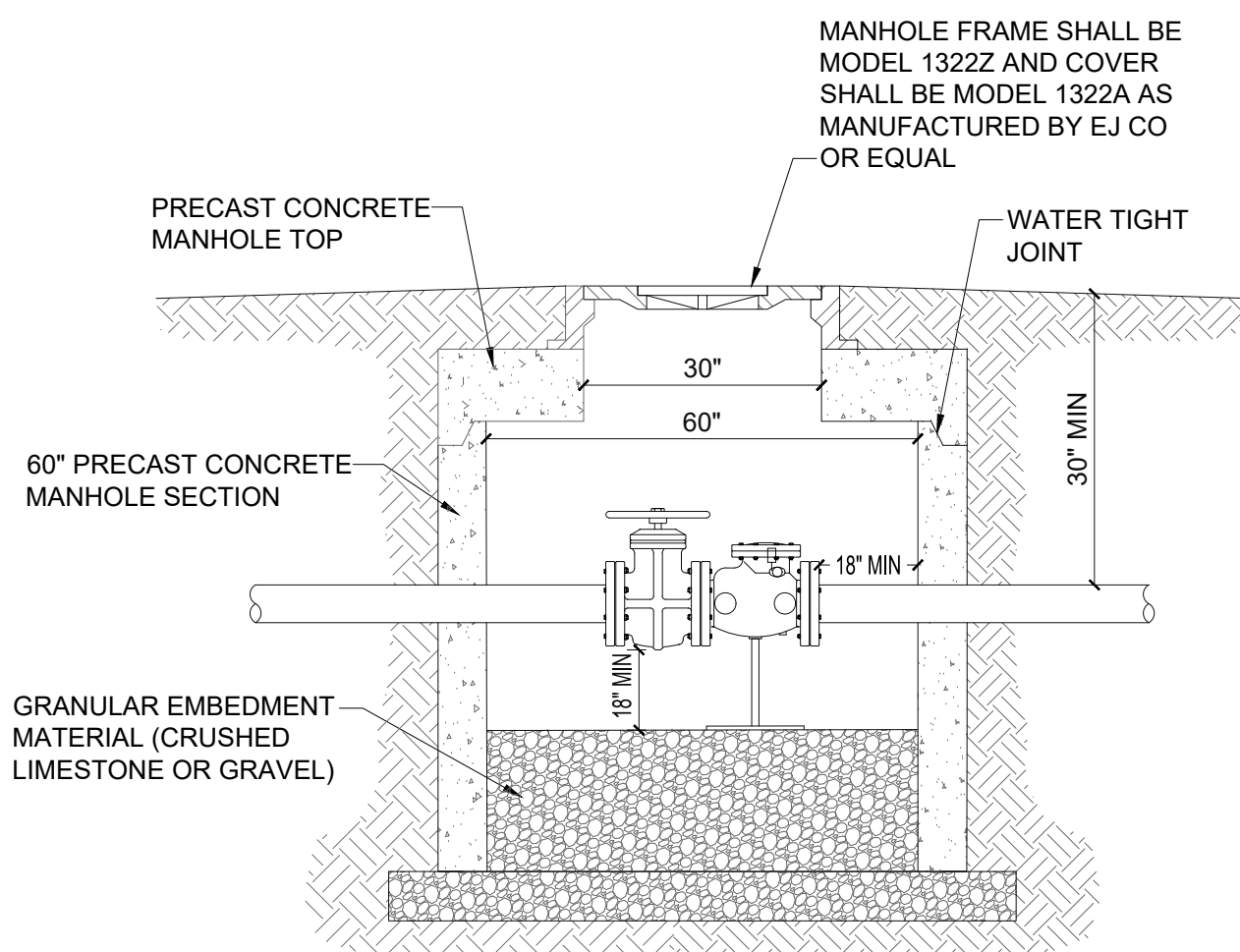
THRUST BLOCK REQ'D WHEN TEE IS PLUGGED.

2 - #4 BARS

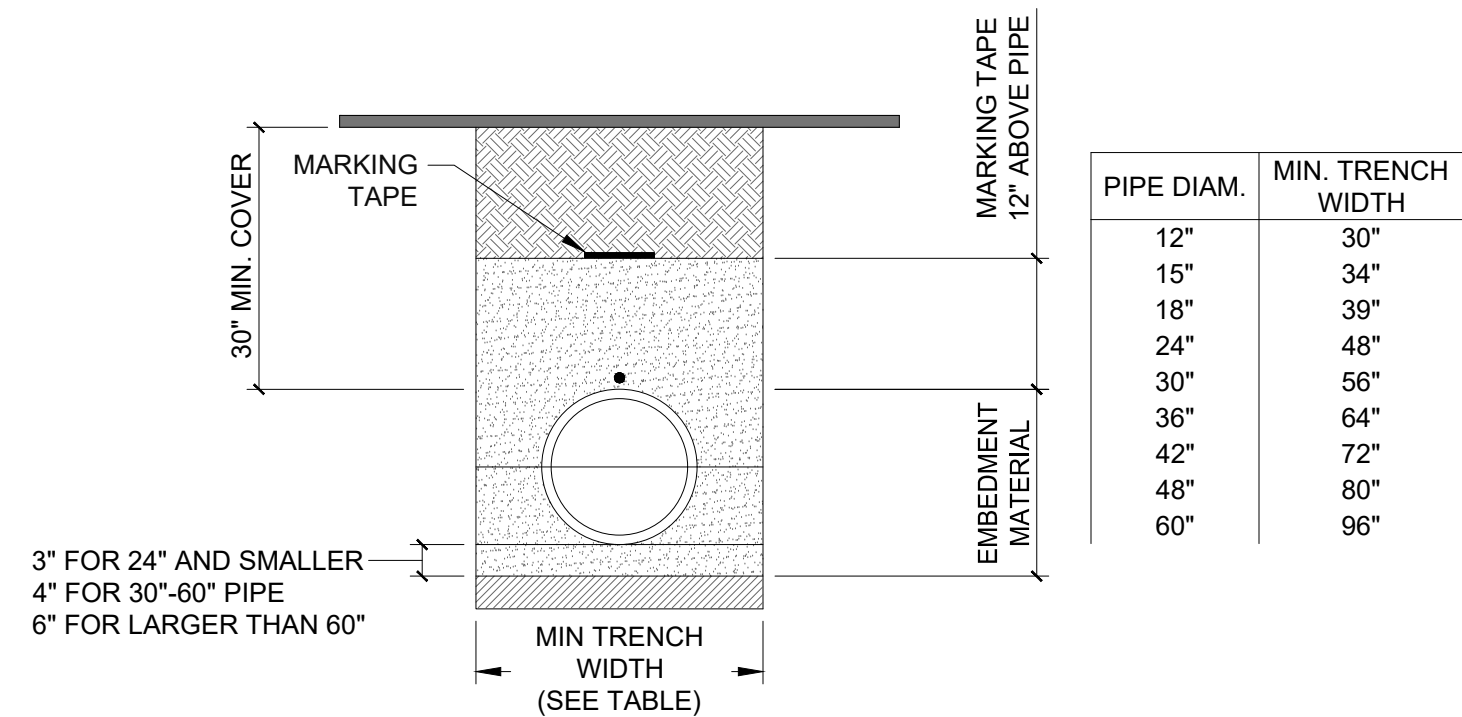
4 **TYPICAL WATER MAIN THRUST BLOCK DETAIL**
C450 SCALE: NTS

ASTM D2321 CLASS DESCRIPTION		ASTM D2487 DESCRIPTION		NOTATION	MINIMUM STANDARD PROCTOR DENSITY (%)	MAXIMUM LIFT PLACEMENT DEPTH
I	CRUSHED ROCK, ANGULAR	N/A	ANGULAR CRUSHED STONE OR ROCK, CRUSHED GRAVEL, CRUSHED SLAG; LARGE VOIDS WITH LITTLE OR NO FINES		DUMPED	18"
II	CLEAN, COARSE-GRAINED SOILS	GW	WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES; LITTLE OR NO FINES		85%	12"
		GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES; LITTLE OR NO FINES			
		SW	WELL-GRADED SANDS, GRAVELLY SANDS; LITTLE OR NO FINES			
		SP	POORLY-GRADED SANDS, GRAVELLY SAND; LITTLE OR NO FINES			
III	COARSE-GRAINED SOILS, BORDERLINE CLEAN TO W/FINES	GW-GC, SP-SM	SANDS AND GRAVELS WHICH ARE BORDERLINE BETWEEN CLEAN AND WITH FINES		90%	9"
		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES			
	COURSE-GRAINED SOILS WITH FINES	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES			
		SM	SILTY SANDS, SAND-CLAY MIXTURES			
		SC	CLAYEY SANDS, SAND-CLAY MIXTURES			
	INORGANIC FINE-GRAINED SOILS	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY			
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY; GRAVELLY, SANDY, OR SILTY CLAYS; LEAN CLAYS			

2 **EMBEDMENT MATERIAL TABLE**
C450 SCALE: NTS



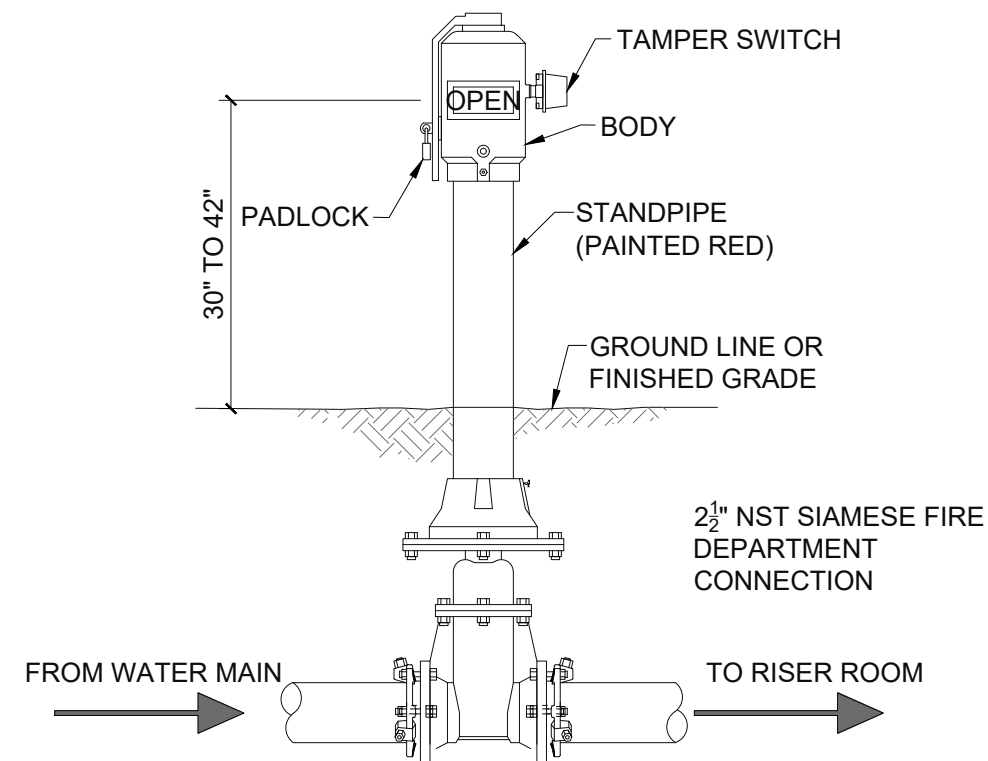
5 **TYPICAL CHECK VALVE DETAIL**
C450 SCALE: NTS



PIPE DIAM.	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"

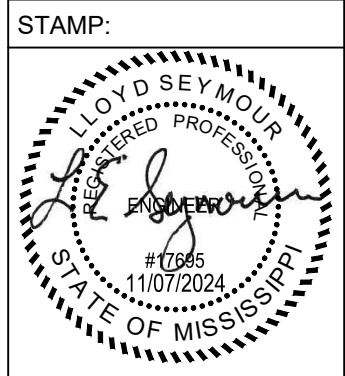
- WATER AND SEWER PIPE INSTALLATION NOTES**
- SUITABLE EMBEDMENT MATERIALS, EITHER ON-SITE OR IMPORTED, SHALL MEET THE REQUIREMENTS FOR CLASS I, II, OR III PER THE LATEST VERSION OF ASTM D2321. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO THE ENGINEER FOR EMBEDMENT MATERIAL TO BE USED FOR PIPE INSTALLATION. SEE THE EMBEDMENT MATERIAL TABLE FOR COMPACTION AND LIFT PLACEMENT REQUIREMENTS.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER.
 - BEDDING: BEDDING IS REQUIRED TO ESTABLISH LINE AND GRADE AND TO PROVIDE FIRM PIPE SUPPORT. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR UP TO 24" DIAMETER PIPE AND 6" FOR 30"-60" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED, WHILE THE REMAINDER SHALL BE THOROUGHLY COMPACTED.
 - HAUNCHING: THE HAUNCHING MATERIAL SHALL BE INSTALLED UNIFORMLY IN LIFTS ON EACH SIDE OF THE PIPE AND SHOVELED UNDER THE PIPE ENSURING TO FILL VOIDS. THE MATERIAL SHALL BE THOROUGHLY COMPACTED TO THE SPRING LINE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH ENSURING THAT THE PIPE ALIGNMENT IS NOT DISTURBED.
 - INITIAL BACKFILL: THE INITIAL BACKFILL SHALL PROCEED TO THE TOP OF THE PIPE. THE MATERIAL SHALL BE THOROUGHLY COMPACTED INSTALLED IN UNIFORMED LIFTS ON EACH SIDE OF THE PIPE EXTENDING TO THE SIDE WALLS OF THE TRENCH.
 - FINAL BACKFILL (NON-TRAFFIC): SUITABLE MATERIAL IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) SHALL BE GENERAL FILL MATERIAL. BACKFILL SHALL PROCEED TO FINISHED GRADE IN 12 INCH LIFTS COMPACTED TO ELIMINATE AIR VOIDS.
 - FINAL BACKFILL (TRAFFIC): SUITABLE MATERIAL IN TRAFFIC APPLICATIONS SHALL BE SELECT FILL COMPACTED IN 8 INCH LOOSE LIFTS TO NOT LESS THAN 95 PERCENT STANDARD PROCTOR.
 - MINIMUM COVER (NON-TRAFFIC): FOR NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS), MINIMUM COVER IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE.
 - MINIMUM COVER (TRAFFIC): FOR TRAFFIC APPLICATIONS THE MINIMUM COVER IS 12" FOR UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
 - CONTRACTOR SHALL MAINTAIN TRENCH BACKFILL AT GROUND SURFACE UNTIL FINAL ACCEPTANCE OF THE WORK. ALL SURPLUS MATERIALS NOT USED IN BACKFILLING SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR AT HIS OWN EXPENSE.

3 **WATER AND SEWER PIPE INSTALLATION DETAIL**
C450 SCALE: NTS



6 **TYPICAL POST INDICATOR VALVE DETAIL**
C450 SCALE: NTS

SHEET REVISIONS:	
#	DATE/REFERENCE



SHEET TITLE:
UTILITY DETAILS

DATE: 11-7-2024
SHEET NUMBER: 13 OF 13