

CONSTRUCTION PLANS FOR OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES

PARCEL ID'S: U-03-28-17-ZZZ-000000-26610.0
HILLSBOROUGH COUNTY, FLORIDA

PREPARED FOR

CLIENT
Client Address
City, State Zip Code
Phone Number

PROJECT
LOCATION



VICINITY MAP

PREPARED BY



Engineering ~ Environmental
Water Resource ~ Survey

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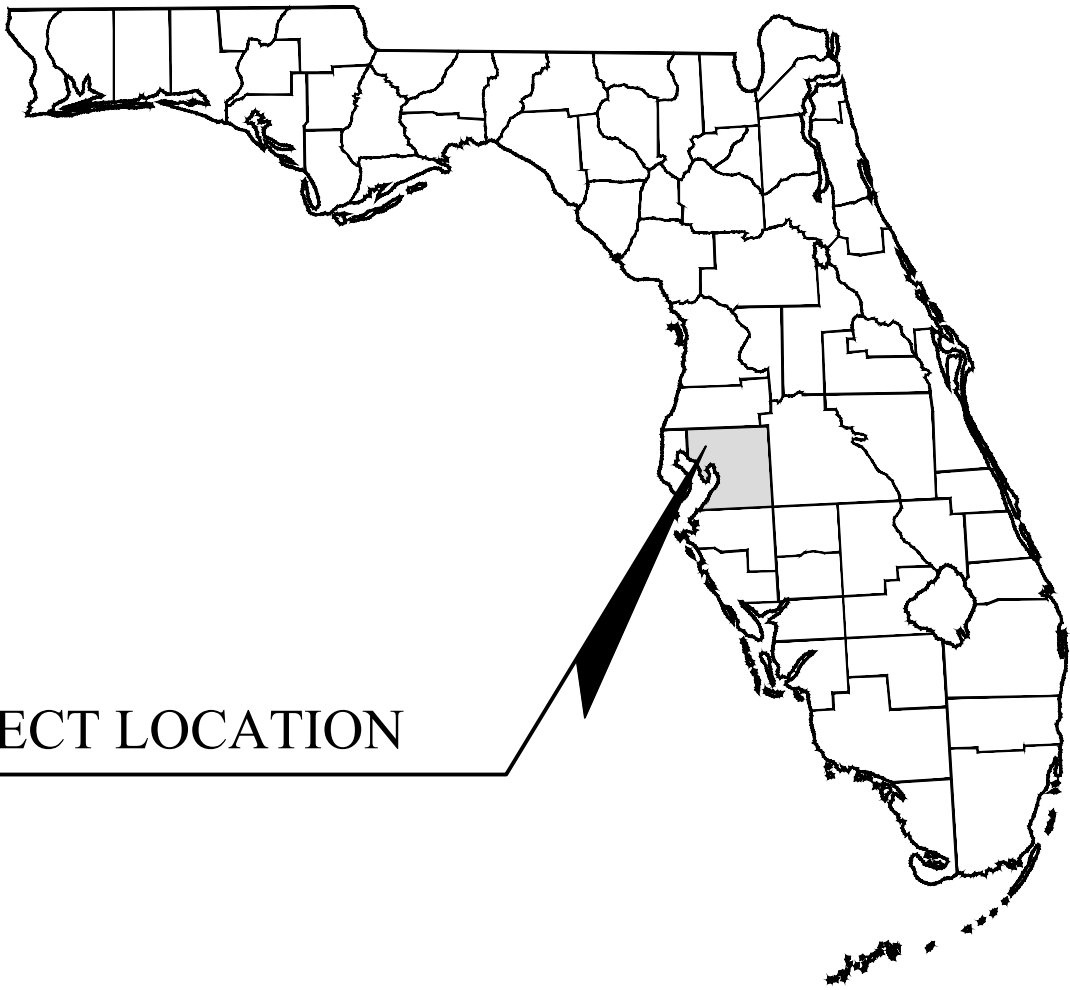
ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THE DESIGN OF THIS PROJECT, AS PREPARED UNDER MY PERSONAL DIRECTION AND CONTROL, COMPLIES WITH ALL APPLICABLE STANDARDS, INCLUDING THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO 334.044(10)(a) AND 336.045, FLORIDA STATUTE.

PROJECT TEAM

OWNER/APPLICANT:	Applicant Applicant Address City, State Zip Code Phone Number Email Address
SURVEYOR (FIELD):	Surveyor Surveyor Address City, State Zip Code Phone Number Email Address
SURVEYOR (PLAT):	Surveyor Surveyor Address City, State Zip Code Phone Number Email Address
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LANDSCAPE ARCH.	Landscape Arch. LandscapeArch. Address City, State Zip Code Phone Number Email Address

DRAINAGE FACILITIES NOTE:
DRAINAGE PLANS ARE BASED ON EXISTING FIELD
CONDITIONS OF THE ABUTTING PROPERTIES.



PROJECT LOCATION

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COVER SHEET

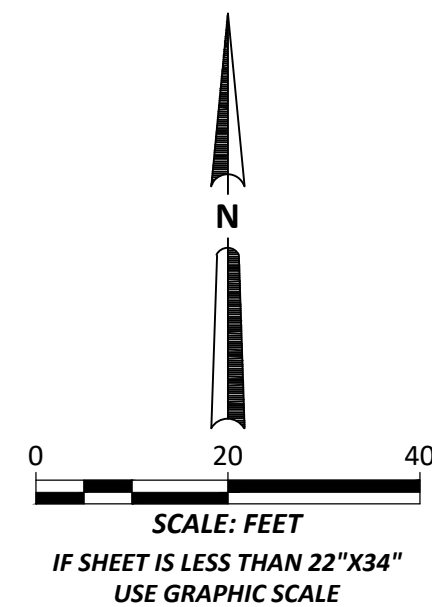
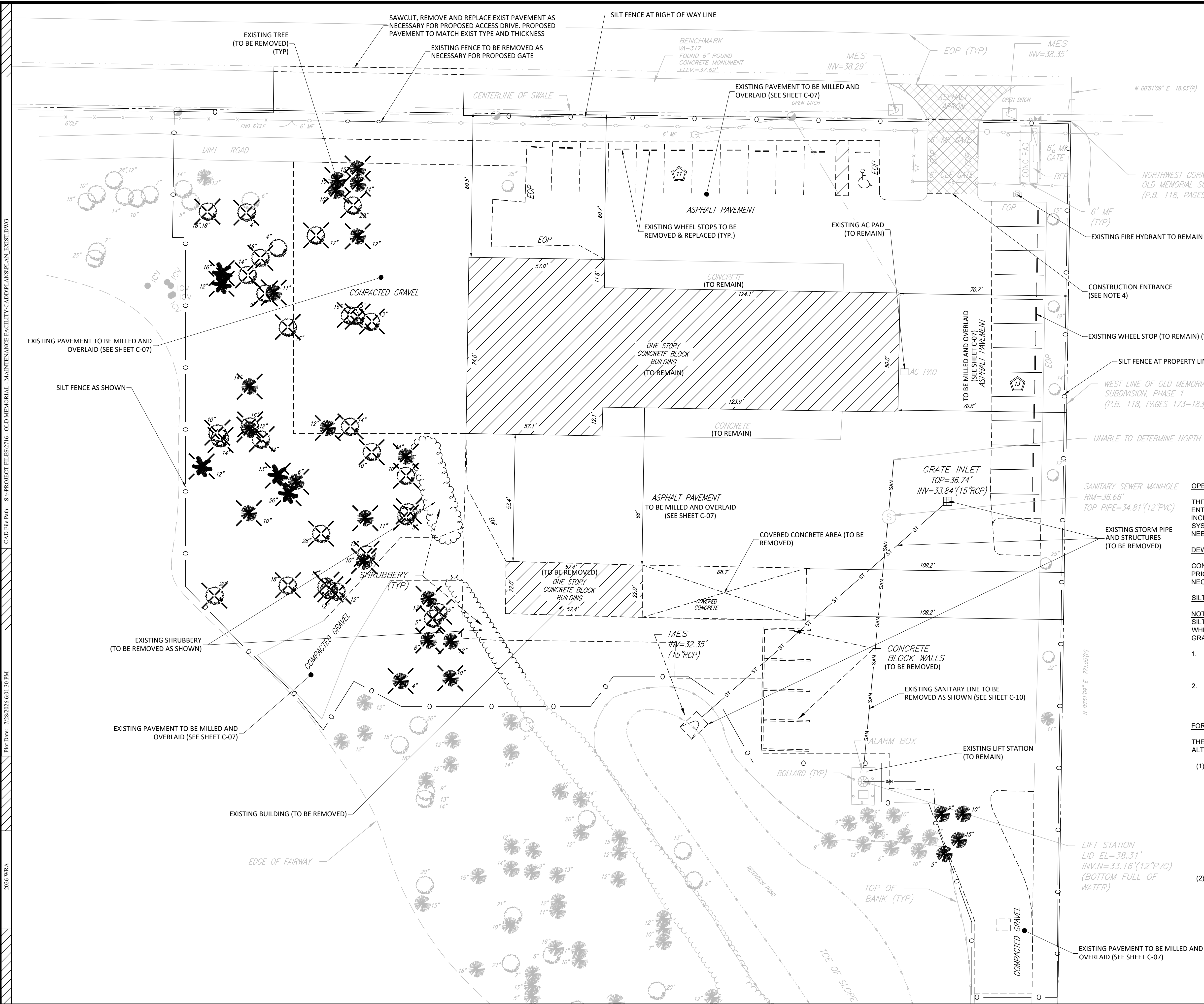
OLD MEMORIAL GOLF CLUB
MAINTENANCE UPGRADES

ISSUED FOR: PERMITTING
JOB #2716 - SEC. 3
TWN: 28S
RNG: 17E
DESIGNED: MWODRAWN: MWG APPROVED: CGC

Datum: NAVD 1988

C-00

2026 WRA	Plot Date: 7/28/2026 6:01:46 PM	CAD File Path: S:\PROJECT FILES\2716 - OLD MEMORIAL - MAINTENANCE FACILITY\CADD\PLANS\PLAN NOTES.DWG	GENERAL CONSTRUCTION NOTES	HISTORICAL PRESERVATION NOTE	National Pollution Discharge Elimination System (NPDES) Requirements	CLEARING/DEMOLITION	Engineering ~ Environmental Water Resource ~ Survey 12363 Hampton Park Blvd. Tampa, FL 33624 7978 Cooper Creek Blvd. University Park, Florida 34201 www.wraengineering.com CA 00007652 LB 9274 L 16667181 Phone: 813.265.3130 941.275.9721	R E V I S I O N S		GENERAL NOTES	OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES	ISSUED FOR: PERMITTING JOB # 2716 SEC. 3 TWN-28S RNG-17E DESIGNED: MWO DRAWN: MWO APPROVED: CRC
			1. UNLESS OTHERWISE NOTED HEREIN, THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS: A. HILLSBOROUGH COUNTY LAND DEVELOPMENT CODE. B. CURRENT WATER AND WASTEWATER STANDARDS OF HILLSBOROUGH COUNTY. THE WATER AND WASTEWATER SYSTEMS SHALL BE DEDICATED TO HILLSBOROUGH COUNTY FOR OWNERSHIP AND MAINTENANCE. C. THE STORMWATER DRAINAGE COLLECTION SYSTEM AND PROPOSED ROADWAY SHALL MEET HILLSBOROUGH COUNTY CURRENT SPECIFICATION FOR DESIGN. WHERE INDICATED ON THE PLANS, THE RIGHT-OF-WAY SHALL BE DEDICATED TO THE COUNTY FOR OWNERSHIP AND MAINTENANCE. ACCORDINGLY, THE ABOVE NOTED DOCUMENTS SHALL BE THE TECHNICAL SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT AND THE CONTRACTOR SHALL OBTAIN AND FULLY FAMILIARIZE HIMSELF WITH THE CONTENTS OF SAID SPECIFICATIONS. IN THE EVENT THAT A DISCREPANCY OCCURS BETWEEN THESE PLANS AND THE AFOREMENTIONED SPECIFICATIONS, THE SPECIFICATIONS SHALL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL HAVE A SET OF THESE PLANS MARKED "APPROVED FOR CONSTRUCTION" ALONG WITH A COPY OF ALL THE DOCUMENTS NOTED ABOVE ON THE PROJECT SITE AT ALL TIMES. 2. ALL SUBSURFACE CONSTRUCTION SHALL COMPLY WITH THE "TRENCH SAFETY ACT". IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL CONSTRUCTION IS IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS. 3. PRIOR TO CONSTRUCTION COMMENCEMENT, THE CONTRACTOR SHALL OBTAIN FROM THE ENGINEER AND/OR THE DEVELOPER COPIES OF ALL PERTINENT PERMITS AND APPROVALS RELATED TO THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY POST ALL PERMITS ON-SITE AND TO ASSURE ALL CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THE CONDITIONS OF ALL PERMITS AND APPROVALS. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES WHETHER OR NOT THEY ARE INDICATED ON THESE PLANS AND SHALL NOTIFY ALL UTILITY OWNERS A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPLAINTS AND GOVERNING AGENCY NECESSARY FOR CONSTRUCTION OF THE PROJECT. CALL SUNSHINE ONE (1-800-432-4770) PRIOR TO ANY EXCAVATION. 5. THE CONTRACTOR SHALL ASSURE AND BE RESPONSIBLE FOR THE PROPER PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT. 6. THE CONTRACTOR SHALL ASSURE AND BE RESPONSIBLE FOR THE PROPER PLACEMENT OF TREE BARRICADES PRIOR TO COMMENCING CONSTRUCTION AND SHALL MAINTAIN THE TREE BARRICADES THROUGHOUT THE DURATION OF CONSTRUCTION. TREE BARRICADES SHALL BE PLACED IN ACCORDANCE WITH HILLSBOROUGH COUNTY REQUIREMENTS AND THE SITE SPECIFIC PERMIT ISSUED BY THE COUNTY. 7. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL, DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIP LINE OF TREES TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY HILLSBOROUGH COUNTY. 8. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE CONSTRUCTION SITE SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION; THIS INCLUDES LANDS OWNED BY THE DEVELOPER. 9. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO GUARD AGAINST FUGITIVE DUST DURING CONSTRUCTION. 10. ALL PRACTICAL AND NECESSARY EFFORTS SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS, SURFACE WATERS OR ONTO ADJACENT PROPERTIES. THESE EFFORTS SHALL INCLUDE THE PLACEMENT AND MAINTENANCE OF SILT SCREENS AS INDICATED ON THESE PLANS AND/OR AS REQUIRED BY CONSTRUCTION PERMITS AND APPROVALS. RE-VEGETATION AND STABILIZATION OF DISTURBED GROUND SURFACES SHALL BE ACCOMPLISHED AS RAPIDLY AS POSSIBLE TO PREVENT EROSION FROM OCCURRING AND TO REDUCE SEDIMENTATION IN RUN-OFF. 11. THE CONTRACTOR SHALL NOT UNDERTAKE ANY WORK HE FEELS WILL CONSTITUTE A CHANGE ORDER WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER AND THE DEVELOPER. 12. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOR HIS REVIEW, ALL SHOP DRAWINGS A MINIMUM OF SEVEN (7) WORKING DAYS IN ADVANCE OF THE CONTRACTOR'S NEED FOR SAME. 13. ALL EXISTING WELLS TO BE ABANDONED SHALL BE PROPERLY ABANDONED BY A LICENSED WATER WELL CONTRACTOR IN ACCORDANCE WITH SWFWMD RULES 40D-3 AND 17-21.10(4) F.A.C. 14. PRIOR TO BIDDING, CONTRACTOR SHALL VERIFY THE TOPOGRAPHICAL INFORMATION AS SHOWN ON THE CONSTRUCTION DRAWINGS AND ACCEPT THE SITE (ACCURATE TO 0.5 FEET OF THE CONTOUR INTERVAL AND 0.2 FEET OVERALL) AS REPRESENTED. COMMENCEMENT OF SITE IMPROVEMENTS SHALL BE INTERPRETED AS ACCEPTANCE BY CONTRACTOR OF ALL REPRESENTATIONS IN CONTRACT DOCUMENTS. 15. CONTRACTOR SHALL PERFORM ALL CLEARING AND GRUBBING OPERATIONS IN ACCORDANCE WITH STANDARD CONSTRUCTION PROCEDURES AS REQUIRED TO CONSTRUCT ALL FACILITIES SHOWN ON THE CONSTRUCTION DRAWINGS. 16. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BY CONTRACTOR FROM STRUCTURAL AREAS AND PLACED ON SITE IN NON STRUCTURAL AREAS OR AS SPECIFIED BY THE DEVELOPER. ALL EXCESS FILL MATERIAL EXCAVATED FROM THE SITE SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE DEVELOPER AND SHALL REMAIN THE PROPERTY OF THE DEVELOPER. 17. THE DEVELOPER SHALL PROVIDE 2 BENCH MARKS AND A COORDINATE CONTROL SHEET FROM THE ENGINEER FOR THE CONSTRUCTION OF THE FACILITIES SHOWN ON THE PLANS. THE PLANS SHOWN ON THE CONSTRUCTION DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN A SET OF FIELD "AS BUILT" FOR ALL IMPROVEMENTS NOTING ANY FIELD ADJUSTMENTS. THE "AS BUILT" SHALL ALSO INCLUDE LOT, POND AND MITIGATION AREA GRADING. PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL BE RESPONSIBLE TO SUBMIT A CERTIFIED SET OF "AS BUILT" TO THE ENGINEER. EACH SHEET OF THE PLANS SHALL BE SIGNED, SEALED AND DATED BY A PROFESSIONAL LAND SURVEYOR LICENSED TO SURVEY IN THE STATE OF FLORIDA. THE ENGINEER SHALL REVIEW THE "AS BUILT" AND CONVERT THEM INTO RECORD DRAWINGS. 18. CONTRACTOR TO CONSTRUCT ALL BUILDING PADS IN A LINEAR GRADING FASHION AS SHOWN ON THE CONSTRUCTION DRAWINGS. ALL BUILDINGS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR VALUE (ASTM D-1557). AS PART OF THE AS BUILT REQUIREMENTS UNDER #18 (ABOVE), THE CONTRACTOR SHALL ALSO AS BUILT THE BUILDING PADS AS SHOWN ON THE CONSTRUCTION DRAWINGS. 19. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR BURNING ON SITE. 20. DEVELOPER SHALL PROVIDE SOILS AND MATERIALS TESTING SERVICES FROM A LICENSED GEOTECHNICAL ENGINEER AT HIS OWN EXPENSE. CONTRACTOR SHALL COOPERATE WITH THE OWNER'S GEOTECHNICAL ENGINEER AND SHALL NOTIFY THE GEOTECHNICAL ENGINEER AT LEAST 24 HOURS PRIOR TO ANY TESTING REQUIRED BY THE DEVELOPER, GOVERNMENTAL AGENCY OR AS RECOMMENDED BY GEOTECHNICAL ENGINEER. IF A FAILURE IN ANY OF THE CONTRACTOR'S ACTIVITIES RELATED TO SOILS OR MATERIALS TESTING OCCURS, THE CONTRACTOR SHALL IMMEDIATELY REMEDY THE FAILURE AT HIS EXPENSE AND RE-SCHEDULE THE RE-TESTING AS NECESSARY. ALL RE-TESTING FEES FROM THE GEOTECHNICAL ENGINEER RESULTING FROM THE AFORESAID FAILURES SHALL BE AT THE CONTRACTOR'S EXPENSE. 21. WORK PERFORMED BY THE CONTRACTOR SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE OR ADJACENT TO THE SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY, WITH OTHER CONTRACTORS AND UTILITY COMPANIES. 22. OVERALL CLEAN-UP SHALL BE ACCOMPLISHED BY THE CONTRACTOR IN ACCORDANCE WITH HILLSBOROUGH COUNTY STANDARDS OR AS DIRECTED BY THE ENGINEER AND OWNER. 23. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ACCESS TO PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF HIS WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AND THE OWNER AT THE CONTRACTOR'S EXPENSE. 24. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS CAUSED BY THE CONTRACTOR'S HAULING OR EXCAVATION EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, THE OWNER, AND THE APPLICABLE GOVERNMENTAL AGENCY. 25. ANY U.S.C. & G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED BY THE CONTRACTOR. 26. GATED ENTRIES REQUIRE SIREN OPENING SYSTEM, (SQS), OR 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS. 27. FINAL AS-BUILD DRAWINGS SHALL BE SUBMITTED TO HILLSBOROUGH COUNTY FOR APPROVAL IN THE REQUESTED FORMAT AT THE TIME OF SUBMITTAL.	IF DURING CONSTRUCTION ACTIVITIES, ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC Stone TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC POTTERY, FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND HILLSBOROUGH COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.	THE ENGINEER WILL COMPLETE APPROPRIATE SECTIONS OF THE NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) APPLICATIONS AVAILABLE FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE ENGINEER WILL SUBMIT THE NOI AND THE NOT TO THE OWNER OR THE CONTRACTOR FOR COMPLETION, SIGNATURE AND TRANSMITTAL TO THE FDEP. THE ENGINEER WILL ALSO PREPARE A SUGGESTED DRAFT STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE SITE. THE ENGINEER WILL SUBMIT THE SUGGESTED DRAFT SWPPP TO THE OWNER OR THE CONTRACTOR FOR USE ONLY AS A GUIDE IN PREPARING THE FINAL SWPPP. THE FINAL SWPPP, AS PREPARED BY THE OWNER OR THE CONTRACTOR, WILL BE LOCATED ON SITE AND MONITORED AS DESCRIBED IN THE NOI. THE OWNER OR THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE FOLLOWING: 1. SIGNING THE NOI, NOT, AND THE FINAL SWPPP AS THE "OPERATOR AND/OR RESPONSIBLE AUTHORITY" FOR THE PROJECT. 2. IMPLEMENTING THE "BEST MANAGEMENT PRACTICES" AS SHOWN IN THE FINAL SWPPP PREPARED BY OTHERS. 3. MAINTAINING THE "BEST MANAGEMENT PRACTICES" AS SHOWN IN THE SWPPP PREPARED BY OTHERS AS REQUIRED TO ACCOMMODATE CONDITIONS IN THE FIELD. 4. MONITORING THE SITE CONDITIONS AND PREPARING ALL REPORTS AS REQUIRED BY THE CONDITIONS OF THE GENERAL NPDES PERMIT.	1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN AS INDICATED ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREE SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM HILLSBOROUGH COUNTY AND THE OWNER. 2. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS, NOT OTHERWISE STABILIZED, WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION. 3. REMAINING MATERIAL THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE. 4. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.						
			CONSTRUCTION SEQUENCE & MAINTENANCE SCHEDULE OF EROSION CONTROL 1. SEE BMP PLAN FOR SILT SCREEN BARRIER DETAILS & NOTES. 2. ALL EROSION CONTROL DEVICES AS INDICATED ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION. 3. DAILY INSPECTION OF THE EROSION CONTROL WILL BE REQUIRED BY THE CONTRACTOR. ANY DISTURBANCE OF THESE DEVICES SHALL BE REPAIRED IMMEDIATELY. 4. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS. 5. JURISDICTIONAL LINES SHALL BE MARKED IN THE FIELD FOR IDENTIFICATION AND LIMITS OF CONSTRUCTION. 6. MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE LIFE OF THE PROJECT OR UNTIL APPROVED FOR REMOVAL BY THE ENGINEER. 7. SEE NOTE 9 & 10 OF THE GENERAL NOTES THIS DWG.	DRAINAGE 1. STANDARD INDICES REFER TO THE LATEST EDITION OF HILLSBOROUGH COUNTY & FDOT SPECIFICATIONS. 2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM 6-76-72A) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH HILLSBOROUGH COUNTY AND FDOT DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS. 3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURE WITH THE EXCEPTION OF MITERED AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS. 4. ALL DRAINAGE STRUCTURE TOPS AND COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. 5. ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION. 6. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO CLEAN PIPES AND INLETS PRIOR TO FINAL ACCEPTANCE.	WATER, WASTEWATER & REUSE WATER SYSTEM NOTES 1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS SHALL BE AS FOLLOWS: A. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610. B. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER. C. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER. D. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.006(2)(f), F.S., AND RULE 64E-6.002, F.A.C. 2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES SHALL BE AS FOLLOWS: A. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSE GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY TWELVE INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. B. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE. C. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. 3. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES A. NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE, STORM SEWER MANHOLE, OR INLET STRUCTURE. 4. ALL UTILITY MATERIAL AND WORKMANSHIP MUST COMPLY WITH "HILLSBOROUGH COUNTY STANDARDS FOR DESIGN AND CONSTRUCTION OF WATER, WASTEWATER, AND RECLAIMED WATER FACILITIES", JUNE 1995 EDITION.T 5. ALL PVC WATER MAINS 4 - 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900. PIPE SHALL BE CLASS 200 AND MEET THE REQUIREMENTS OF DR-14. 6. ALL PVC WATER MAIN SMALLER THAN 4 INCHES SHALL BE CLASS 200 AND MEET THE REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241. 7. ALL PVC SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D-3034 WITH THICKNESS AS FOLLOWS: AT INVERTS FROM 0' TO 12' SHALL BE SDR-35, INVERT DEPTHS FROM 12' - 18' SHALL BE SDR 26. FOR INVERTS DEEPER THAN 18' SHALL BE SDR 18. DUCTILE IRON PIPE SHALL BE USED. 8. ALL DUCTILE IRON UTILITY WATER MAIN, SANITARY SEWER PIPE AND REUSE WATER MAINS SHALL BE CLASS 50 IN ACCORDANCE WITH ANSI A 21.52. 9. RECLAIMED WATER MAINS 4 - 12 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-900, DR18. RECLAIMED WATER MAINS 14 - 24 INCHES SHALL BE IN ACCORDANCE WITH AWWA C-905, DR25. ALL PIPE SHALL BE CLASS 150. 10. ALL PVC REUSE WATER MAINS SMALLER THAN 4" SHALL BE CLASS 200 AND MEET THE REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D-2241. 11. ALL WATER MAINS, SANITARY SEWER MAINS AND RECLAIMED WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, EXCEPT AS NOTED. 12. PRIOR TO COMMENCING NEW WORK WHICH REQUIRES CONNECTING TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY AND SHALL VERIFY THE LOCATION AND ELEVATION OF THE EXISTING CONNECTION POINT AND NOTIFY THE DEVELOPER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. 13. CONNECTIONS INTO EXISTING COUNTY-OWNED SYSTEMS SHALL BE VIA WET TAP. WET TAPS SHALL BE PERFORMED BY HILLSBOROUGH COUNTY AT THE OWNER'S EXPENSE. MATERIALS FOR WET TAPS LARGER THAN 2" SHALL BE PROVIDED AND INSTALLED BY THE PROJECT CONTRACTOR. EXCAVATION, BACKFILL, AND SURFACE RESTORATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. 14. LOCATION OF THE SANITARY SEWER SERVICE LATERALS, IF INDICATED ON THE PLANS ARE A DISTANCE FROM THE DOWNSTREAM MANHOLE. 15. LOCATION OF THE WATER SERVICE SLEEVE, IF INDICATED ON THE PLANS, ARE PER THE CENTERLINE ROAD STATIONING. 16. CONFLICTS BETWEEN REUSE WATER AND STORM, SANITARY SEWER OR WATER MAIN TO BE RESOLVED BY ADJUSTING THE REUSE WATER LINES AS NECESSARY. 17. JOINT RESTRAINTS SHALL BE PROVIDED AT ALL FITTINGS, JOINTS AND BENDS AS SHOWN ON DETAILS. 18. ALL PIPE AND FITTINGS SHALL BE CLEARLY MARKED WITH THE NAME OR TRADEMARK OF THE MANUFACTURER, THE BATCH NUMBER, THE LOCATION OF THE PLANT AND STRENGTH DESIGNATION, AS APPLICABLE. ALL PIPE SHALL BE LAID WITH A TWO INCH METALLIC TAPE APPROPRIATELY COLOR CODED AND IMPRINTED WITH THE TYPE OF SERVICE, 12 INCHES BELOW FINAL GRADE, DIRECTLY ABOVE THE UTILITY FOR IDENTIFICATION AND EASE OF LOCATION. THE APPROPRIATE TAPE COLOR CODES ARE AS FOLLOWS: GREEN SANITARY FORCE MAIN BLUE POTABLE WATER PURPLE TREATED EFFLUENT FOR REUSE 19. THE CONTRACTOR SHALL TEST ALL GRAVITY SEWERS IN ACCORDANCE WITH HILLSBOROUGH COUNTY REGULATIONS. IF ACCEPTABLE, SAID TESTS WILL BE CERTIFIED BY THE ENGINEER OF RECORD AS REQUIRED. 20. PIPE DEFLECTION SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-600, LATEST EDITION. 21. THRUST BLOCKS ARE NOT ALLOWED! RESTRAINED JOINTS SHALL BE USED ON ALL PRESSURIZED PIPING. 22. FIRE HYDRANTS WILL REQUIRE FLOW TESTING AND COLOR-CODING BASED ON TEST RESULTS.	PAVING AND GRADING 1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. 3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT. 4. PROPOSED SPOT ELEVATIONS REPRESENT TOP OF FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS. 5. CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT. 6. CONCRETE CURBING WILL BE PLACED AS SHOWN ON THE PLANS. 7. THE CONTRACTOR WILL STABILIZE BY SOD OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. 8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT TO HILLSBOROUGH COUNTY. UPON COMPLETION OF PROPOSED CONSTRUCTION, SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET. 9. ALL UNDERGROUND UTILITIES, INCLUDING UTILITY SLEEVES, AND CONDUITS SHALL BE INSTALLED PRIOR TO BASE & PAVEMENT CONSTRUCTION.	Call 48 hours before you dig!  IT'S THE LAW! 1-800-432-4770	Datum: NAVD 1988 C-01				



PROJECT SPECIFIC DEMOLITION NOTES

OPERATION & MAINTENANCE NOTE:

DEWATERING NOTE:

SILT FENCE NOTES:

1. AFTER STAKING OF SILT FENCE AND 'ESC' (EROSION, SEDIMENTATION CONTROL) MEASURES, ERS STAFF MUST BE CONTACTED TO INSPECT THE STAKED LOCATIONS.

2. SILT FENCE LOCATIONS SHOWN ON THIS PLAN ARE SHOWN SCHEMATICALLY AT PROPERTY BOUNDARIES AND APPROXIMATE LIMITS OF CONSTRUCTION. CONTRACTOR TO FIELD ADJUST AS NECESSARY PER SITE CONDITIONS.

FORTUITOUS FINDS REQUIREMENTS:

- (1) IF EVIDENCE OF THE EXISTENCE OF HISTORIC RESOURCES IS DISCOVERED OR OBSERVED AT DEVELOPMENT SITES OR DURING DEVELOPMENT ACTIVITIES AFTER FINAL APPROVAL, ALL WORK SHALL CEASE IN THE AREA OF EFFECT AS DETERMINED BY THE DIRECTOR. THE DEVELOPER, OWNER, CONTRACTOR, OR AGENT THEREOF SHALL NOTIFY THE DIRECTOR WITHIN TWO WORKING DAYS. EXAMPLES OF SUCH EVIDENCE INCLUDE WHOLE OR FRAGMENTARY STONE TOOLS, SHELL TOOLS, ABORIGINAL OR HISTORIC POTTERY, HISTORIC GLASS, HISTORIC BOTTLES, BONE TOOLS, HISTORIC BUILDING FOUNDATIONS, SHELL MOUNDS, SHELL MIDDENS, OR SAND MOUNDS. THE DIRECTOR SHALL ASSESS THE SIGNIFICANCE OF THE FINDS WITHIN FIVE WORKING DAYS OF NOTIFICATION SO AS TO MINIMIZE DELAYS DEVELOPMENT ACTIVITIES.
- (2) IF ANY HUMAN SKELETAL REMAINS OR ASSOCIATED BURIAL ARTIFACTS ARE DISCOVERED AT DEVELOPMENT SITES OR DURING DEVELOPMENT ACTIVITY, ALL WORK IN THE AREA MUST CEASE, AND THE PERMITTEE MUST IMMEDIATELY NOTIFY THE NEAREST LAW ENFORCEMENT OFFICE, THE COUNTY CORONER AND THE MANAGER OF HISTORICAL RESOURCES WITHIN TWO WORKING DAYS.

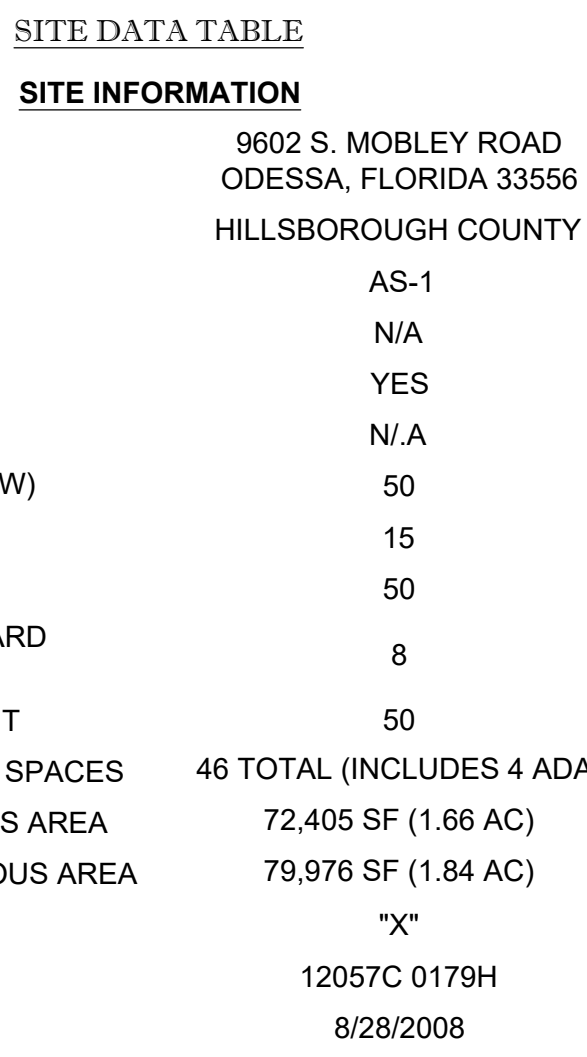
REV I S I O N S



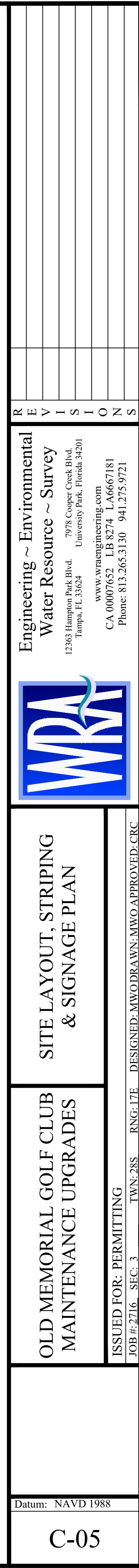
OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES

Datum: NAVD 1988

C-02



R1-1
30"X30"
36" X36"

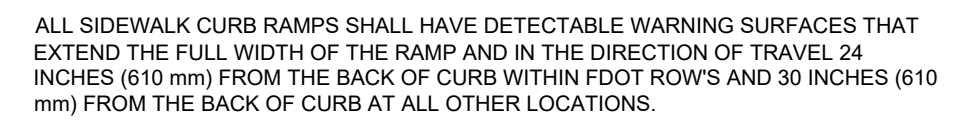




*6" SIDEWALK SHALL BE INSTALLED ON ENLARGED WALKWAYS SUBJECT TO VEHICLE TRAFFIC.

INTEGRAL CURB DETAIL

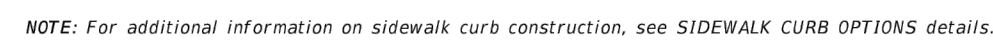
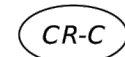
NOT TO SCALE



CURB RAMP DETECTABLE WARNING DETAIL

NOT TO SCALE
(PER FDOT INDEX #304)

(PER FDOT INDEX #304)



=SIDEWALK CURB OPTIONS:

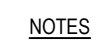
SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB



NOT TO SCALE
(PER FDOT INDEX #300)



NOT TO SCALE



1. HANDICAPPED SIGN WILL BE OF A D.O.T. (BLUE) COLOR PAVEMENT BORDER LINES (ONE ON EACH SIDE) OF THE HANDICAPPED SPACE WILL BE OF A BLUE COLOR OF A QUALITY EQUIVALENT TO SUPER STRIPE TRAFFIC PAINT SOLD BY FOX VALLEY SYSTEMS INC. OF CARY ILLINOIS. PHONE 1-800-323-4770 SHALL BE STRIPED ON THE WEARING SURFACE OF EACH SPACE DESIGNED FOR THE HANDICAPPED SPACE.

ACCESSIBLE PARKING SIGN DETAIL

NOT TO SCALE

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SITE DETAILS

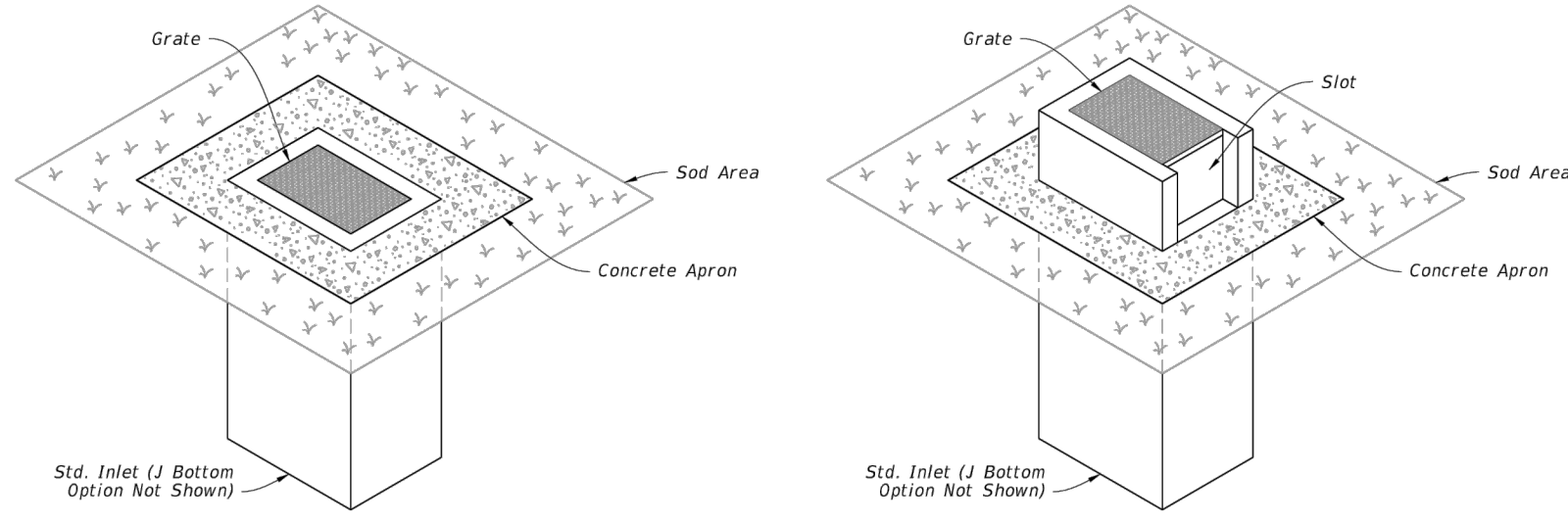
OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES

JOB #: 2716 SEC: 3 TWO

Datum: NAVD 1988

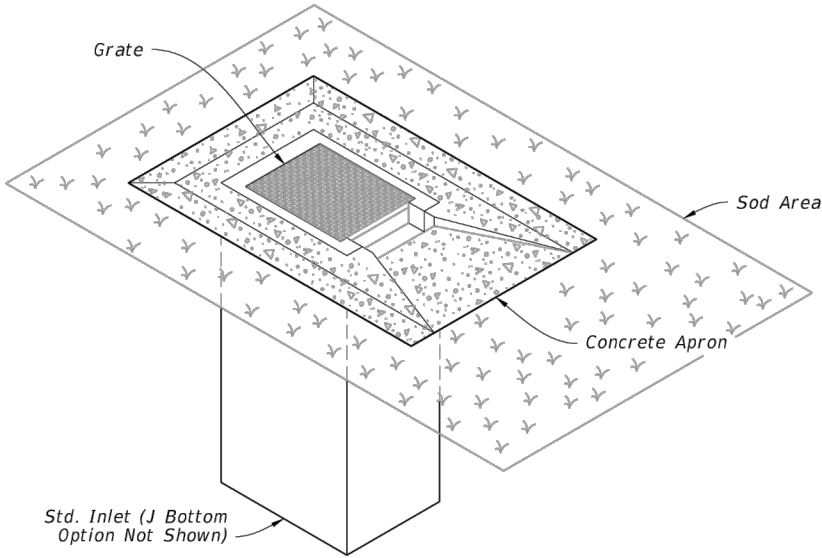
GENERAL NOTES:

1. Work this Index with Index 425-001 and Index 425-010.
2. Chamfer all exposed edges and corners $\frac{3}{8}$ " chamfer or tooled to $\frac{1}{8}$ " radius.
3. All reinforcing is Grade 60 bars with 2" minimum cover unless otherwise noted. Cut or bend bars for 1 $\frac{1}{2}$ " clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.
4. Use Concrete Apron on inlets without slots and inlets with non-traversable slots only when called for in the Plans.
5. Quantities are for informational and estimating purposes only.
6. Slots are not permitted on sides with grate seats.



DITCH BOTTOM INLET TYPE C
TRAVERSABLE
(Without Slot - Type D, E, and H Similar, Pipe Connection Not Shown)

DITCH BOTTOM INLET TYPE C
NON-TRAVERSABLE
(Slot > 7" Shown - Type D, E, and H Similar, Pipe Connection Not Shown)



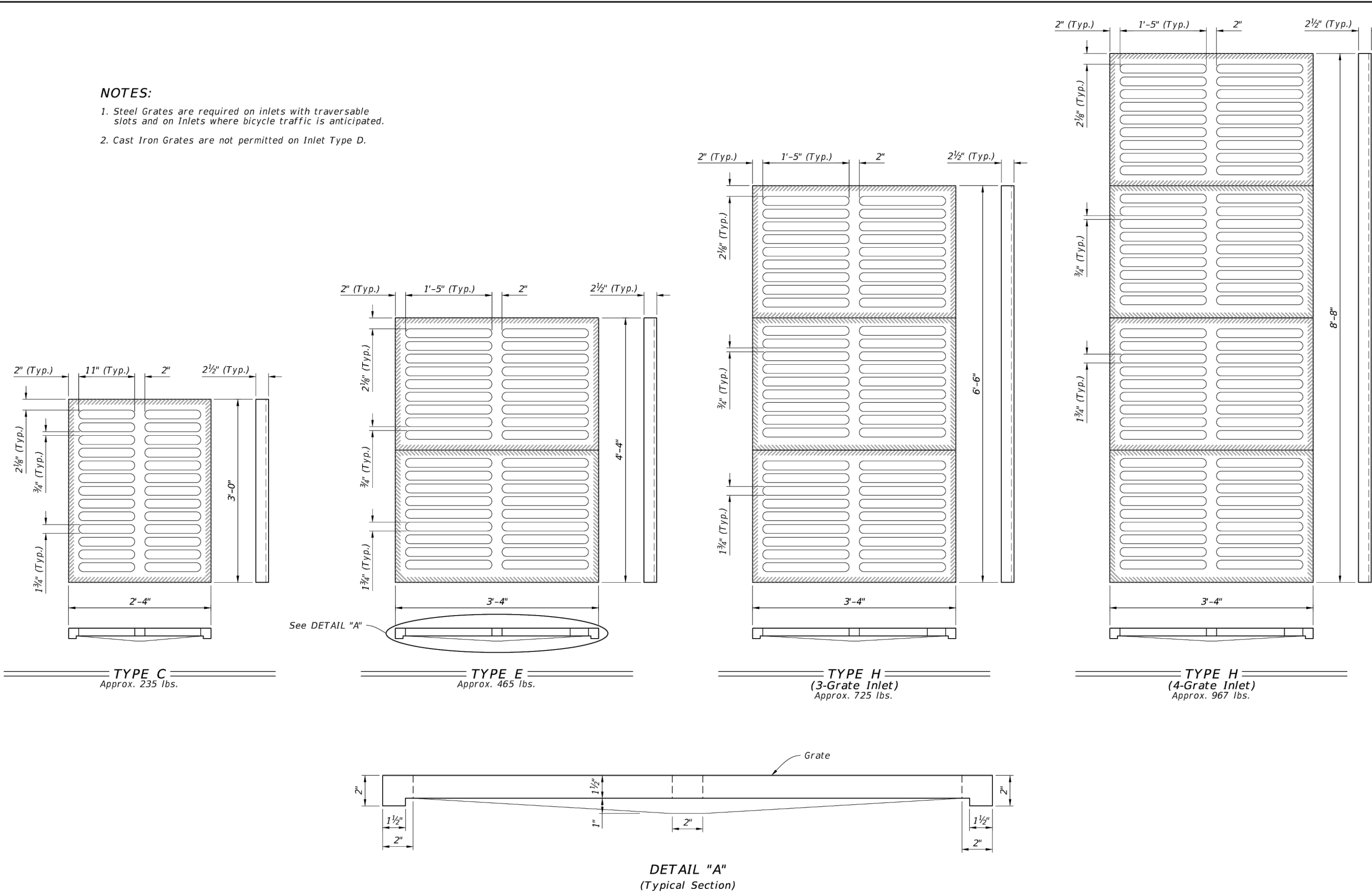
DITCH BOTTOM INLET TYPE C
TRAVERSABLE
(Single Slot < 7" Shown, Double Slot, Type D, and E Similar, Pipe Connection Not Shown)

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Type C - Dimensional, Reinforcing, and Grate Details
3	Type D - Dimensional, Reinforcing, and Grate Details
4	Type E - Dimensional, Reinforcing, and Grate Details
5	Type H (2 & 3 Grate) - Dimensional, Reinforcing, and Steel Grate Details
6	Type H (4 Grate) - Dimensional, Reinforcing, and Steel Grate Details
7	Cast Iron Grate Details
8	Non-Traversable Inlet Details
9	Traversable Inlet Without Slot Details
10	Traversable Inlet With Slot Details
11	Case 1 - Add Traversable Slots to Existing Inlets
12	Case 2 - Add Traversable Slots (Partial) to Existing Inlets
13	Case 3 - Add Traversable Slots (Partial) to Existing Inlets and Ditch Block
14	Alternate A Structure Bottom - Top Slab Details

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/23			FY 2026-27 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	425-052 1 of 14

NOTES:

1. Steel Grates are required on inlets with traversable slots and on inlets where bicycle traffic is anticipated.
2. Cast Iron Grates are not permitted on Inlet Type D.



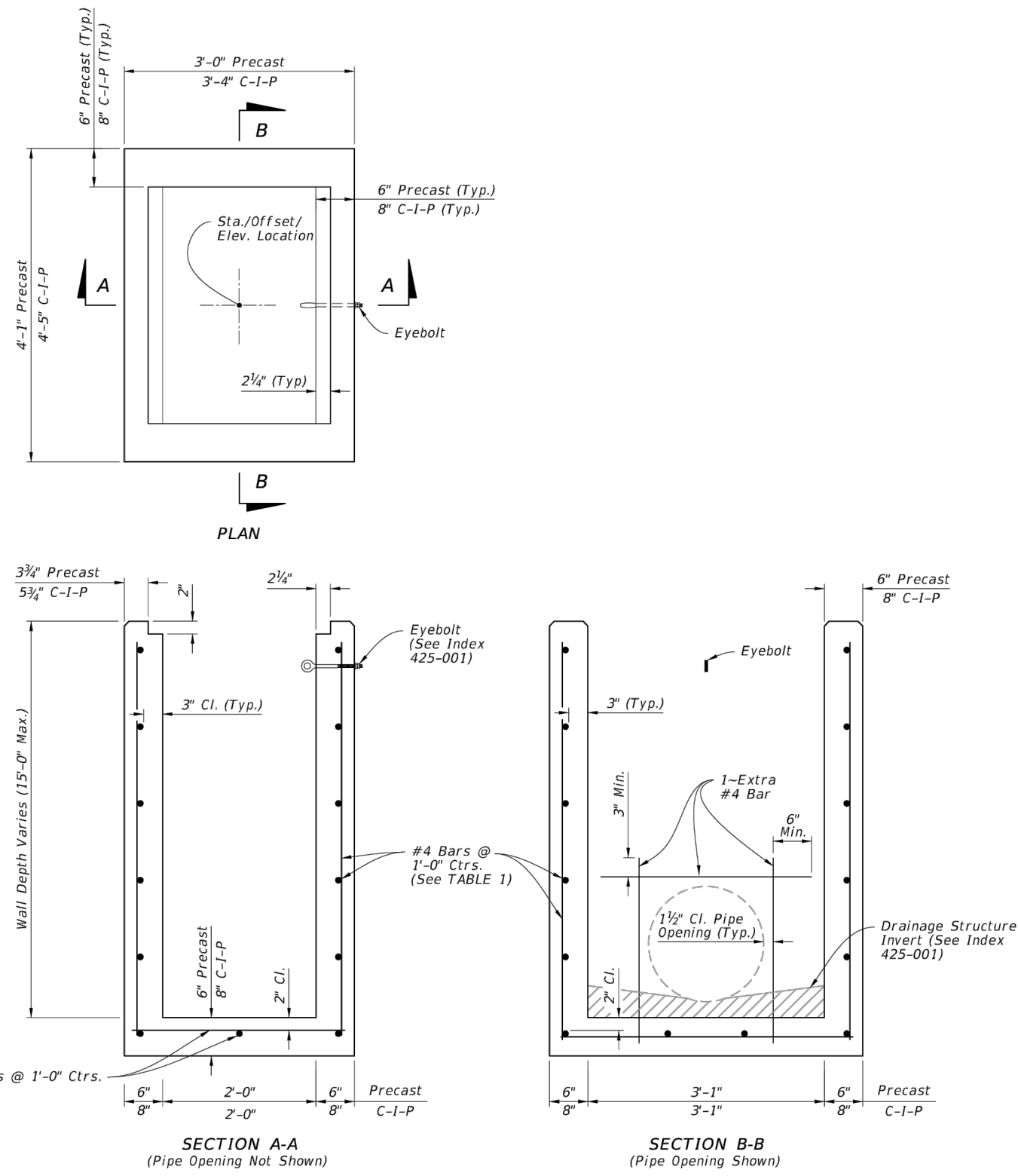
LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FY 2026-27 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	425-052 7 of 14

GENERAL NOTES:

1. Unless otherwise designated in the plans, concrete pipe mitered end sections may be used with any type of cross drain pipe; corrugated steel pipe mitered end sections may be used with any type of cross drain pipe except aluminum pipe; and, corrugated aluminum mitered end sections may be used with any type of cross drain pipe except steel pipe. When bituminous coated metal pipe is specified for cross drain pipe, construct the mitered end sections with like pipe or concrete pipe. When the mitered end section pipe is dissimilar to the cross drain pipe, construct a concrete jacket in accordance with Index 430-001.
2. Use either corrugated metal or concrete mitered end sections for corrugated polyethylene pipe (HDPE), polyvinyl-chloride pipe (PVC), steel reinforced polyethylene pipe (SRPE), and polypropylene pipe (PP). When used in conjunction with corrugated mitered end sections, make connection using either a formed metal band specifically designed to join HDPE, PVC, SRPE, or PP pipe, with metal pipe. When used in conjunction with a concrete mitered end sections, construct concrete jacket in accordance with Index 430-001.
3. Class NS concrete cast-in-place reinforced slabs are required for all sizes of cross drain pipes. Construct slabs at 5 $\frac{1}{2}$ " thick, unless 3" thickness is called for in the Plans.
4. Select lengths of concrete pipe that avoid excessive connections in the assembly of the mitered end section.
5. Repair corrugated metal pipe galvanizing that is damaged during beveling and perforating.
6. When existing multiple cross drain pipes are spaced other than the dimensions shown in this Index, have nonparallel axes, or non-uniform sections, either construct the mitered end sections separately as single pipe or collectively as multiple pipe end sections as directed by the Engineer.
7. Saddle Slope:
1:4 Miter - Slope to $\frac{1}{4}$ " of pipe for round pipes less than or equal to 18" diameter and 1:1 for round pipes greater than or equal to 24" diameter.
Slope to the major axis for elliptical pipes 24"x38" or smaller and 1:2 for pipes 29"x45" or larger.
Slope to the span line for pipe arch 28"x20" or smaller and 1:2 for pipe arch 35"x24" or larger.
- 1:2 Miter - Slope to $\frac{1}{2}$ " of pipe for round pipes less than or equal to 18" diameter and 1:2 for round pipes greater than or equal to 24" diameter.
Slope to the major axis for elliptical pipes 29"x45" or smaller and 1:1 for pipes 34"x53" or larger.
Slope 1:1 for all pipe arch sizes.
8. Quantities shown are for estimating purposes only.

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Single and Multiple Concrete Pipe
3	Concrete Pipe Dimensions and Quantities
4	Single and Multiple Corrugated Metal Pipe
5	Corrugated Metal Pipe Dimensions and Quantities
6	Concrete Pipe Connections and Corrugated Metal Pipe (CMP) Anchor Detail

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/19			FY 2026-27 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	430-021 1 of 6



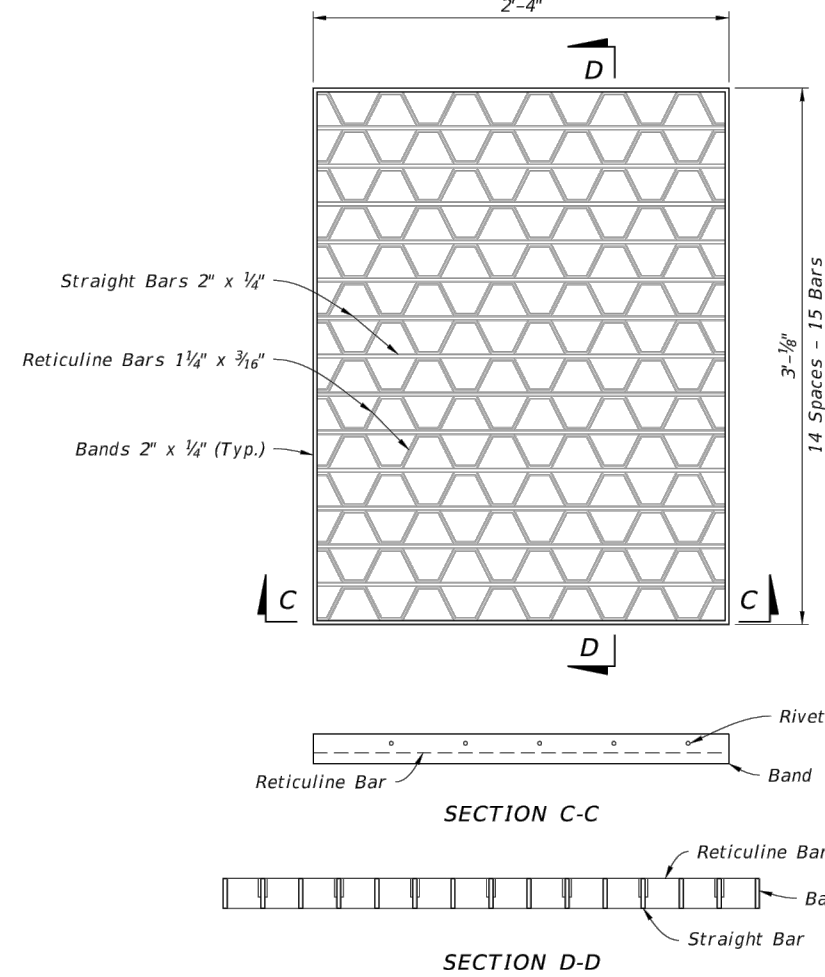
DIMENSIONAL AND REINFORCING DETAILS

TABLE 1 HORIZONTAL WALL REINFORCING SCHEDULE			
WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING
0' - 15'	A12	0.20	12" WWF

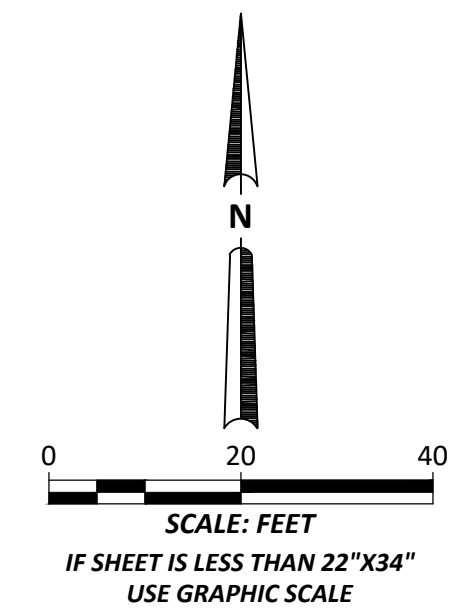
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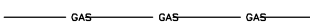
1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

STEEL GRATE DETAIL
(Approx. 104 Lbs. - See Sheet 7 For Cast Iron Grates)



9/26/2025 11:27:59 AM



LEGEND	
	PROPOSED STORM SEWER
	PROPOSED ELECTRIC LINE
	PROPOSED GAS LINE
	PROPOSED WATER MAIN (DOMESTIC)
	PROPOSED WATER LINE (FIRE)
	PROPOSED DDCVA
	PROPOSED WATER METER
	PROPOSED BACKFLOW PREVENTION DEVICE
	PROPOSED WATER FITTINGS
	PROPOSED REDUCER
	PROPOSED SANITARY MANHOLE
	PROPOSED PROPOSED VALVE
	PROPOSED FDC
	PROPOSED CLEANOUT
	PROPOSED OIL/WATER SEPARATOR

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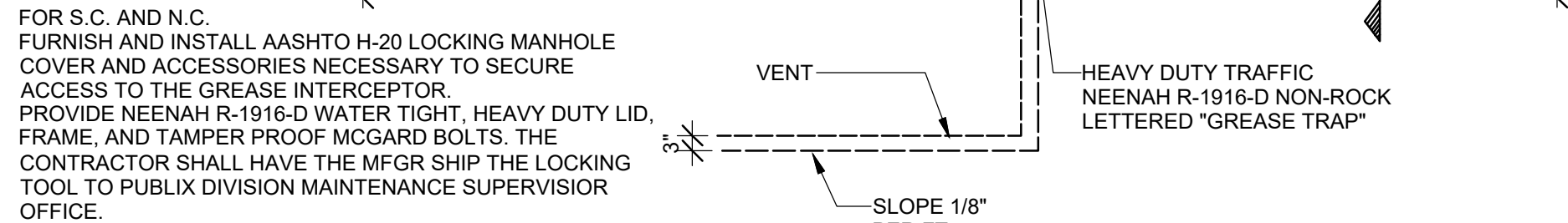
UTILITY PLAN

OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES

ISSUED FOR: PERMITTING

JOB #: 2716 SEC: 3 TWN: 28S RNG: 17E DESIGNED: MWO DRAWN: MWO APPROVED: CRC

Datum: NAVD 1988



NOTES:

BAFFLE SHALL COMPLY WITH AHJ REQUIREMENTS.

SYSTEM REQUIREMENTS - 3000 GAL.

TYPICAL SINGLE INTERCEPTOR CAPACITY 1500 GALLONS

VERIFY GREASE TRAP REQUIREMENTS WITH LOCAL CODES

PROVIDE HS-20 TRAFFIC RATED

SAMPLING PORT SHALL HAVE A MINIMUM 6 FT HORIZONTAL AND 4 FT VERTICAL CLEARANCE IN ALL DIRECTIONS

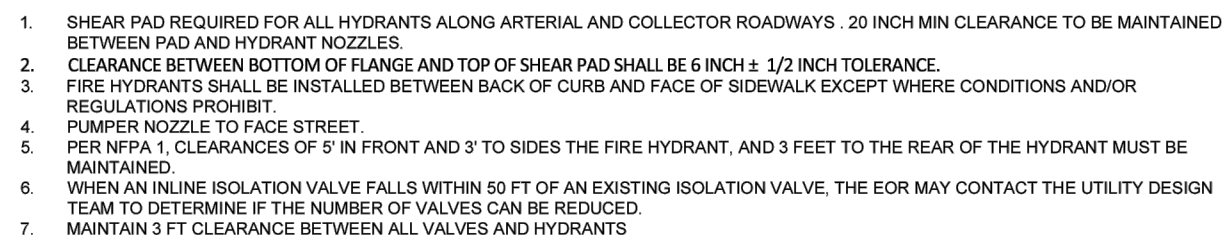
GREASE INTERCEPTOR SHALL BE ACCESSABLE AT ALL TIMES SO AS TO ALLOW FOR MAINTENANCE AND CLEANING WITHOUT IMPEDIMENTS.

FURNISHED WITH EITHER ADDITIVES OR COATINGS TO PROTECT TANK'S INTERIOR TO MINIMUM PH OF 3

1 GREASE INTERCEPTOR -1500 GAL
P5.3 NTS



NOTE:
GREASE INTERCEPTORS
ARE FURNISHED AND INSTALLED
BY THE LANDLORD



SPECIFICATION 331002

Exhibit No. W-7A

NOTES:

1. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE (THIS PAGE).
2. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE PUD DEPARTMENT
3. ALL INTERNALLY RESTRAINED JOINTS SHALL BE MARKED RED.

DESIGN ENGINEER SHALL CALCULATE PROPER VALUES AND FILL IN TABLE PRIOR TO SUBMITTAL.

MINIMUM FOOTAGE OF PIPE RESTRAINT	PIPE SIZE (INCHES)		
11-14"	H-B		
	VU-B		
	VD-B		
22-1/2"	H-B		
	VU-B		
	VD-B		
45"	H-B		
	VU-B		
	VD-B		
90"	H-B		
	VU-B		
	VD-B		
TEE			
*DEAD END PLUG REDUCER			

MINIMUM DESIGN CRITERIA BEDDING

TYPE: 3
 DESIGN PRESSURE: 150 PSI.
 SAFETY FACTOR: 1.5
 DEPTH OF COVER: 3.0 FT.

H-B: HORIZONTAL BEND
 VU-B: VERTICAL-UP BEND
 VD-B: VERTICAL-DOWN BEND
 *CONSIDER VALVES AS A DEAD END PLUG

NOTES:

1. ALL BRASS PIPE AND FITTINGS SHALL BE THREADED SCH. 40.
2. CAM-LOCK MALE ADAPTER & DUST CAP SHALL BE STAINLESS STEEL/THREADED.
3. ACTUAL LENGTH OF THE BLOWOFF PIPING TO BE DETERMINED IN THE FIELD.
4. DEFLECT OR INSTALL FITTINGS AS REQUIRED TO MAINTAIN COVER AND TO SET BLOW-OFF ASSEMBLY PLUMB.
5. EXTENSION OF VALVE BOX SHALL BE SET SO AS TO RESERVE 1/2 OF THE ADJUSTMENT LENGTH FOR FUTURE USE.
6. A FULL SIZE IN-LINE VALVE MAY BE USED AT PROJECT PHASE LINES. THE VALVE MAY REQUIRE RELOCATION, IF THE VALVE FALLS WITHIN CONCRETE IN THE NEXT PHASE.

SPECIFICATION 331002

Exhibit No. W-7E

RESTRAINER

D.I.P.

PVC

PVC

RESTRAINER

METHOD OF RESTRAINING PUSH-ON JOINT PIPE

RESTRAINING ROD

PVC

PVC

RESTRAINER - SEE APP. B

DETAIL PUSH-ON JOINT

RESTRAINING ROD

D.I.P.

PVC

RESTRAINER - SEE APP. B

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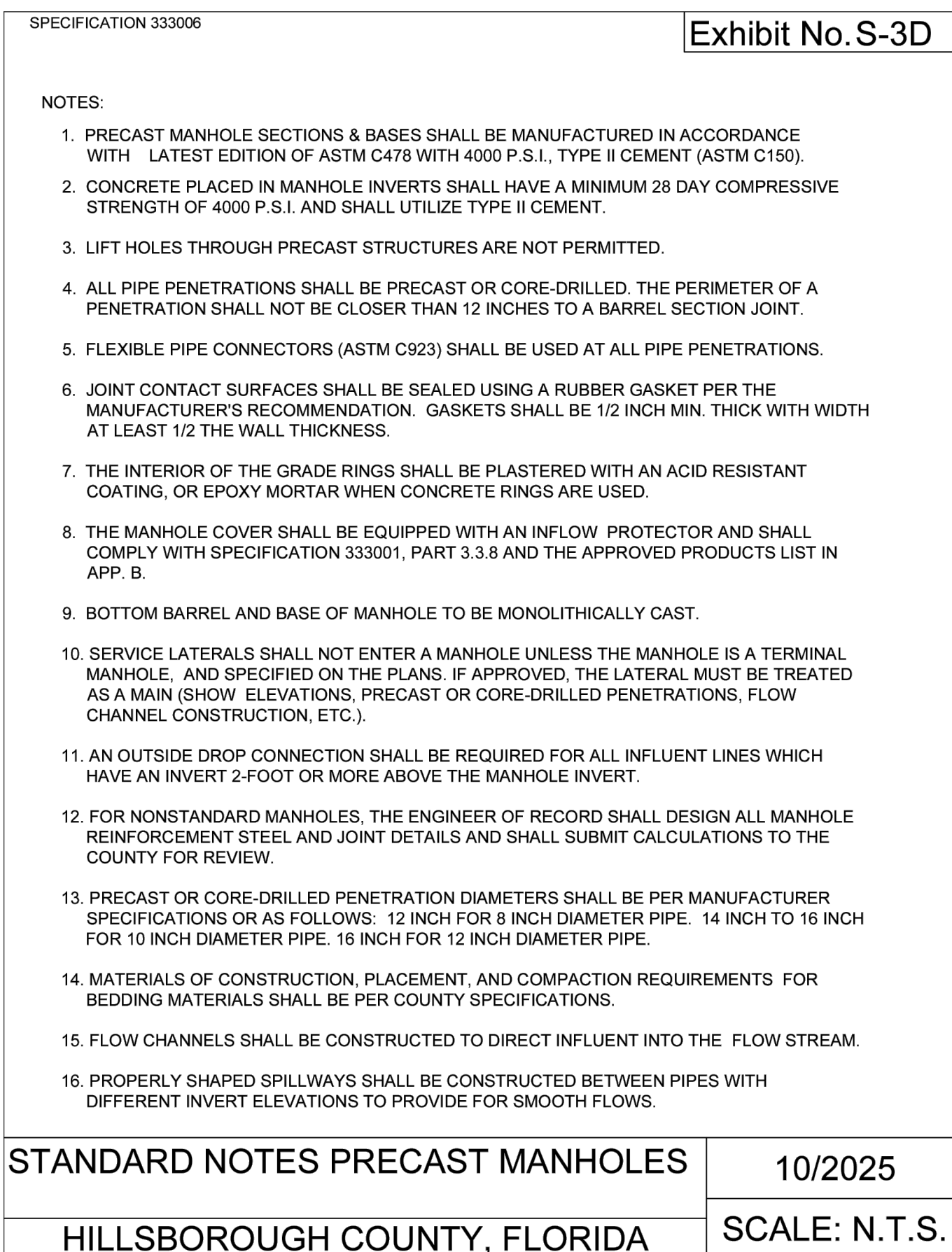
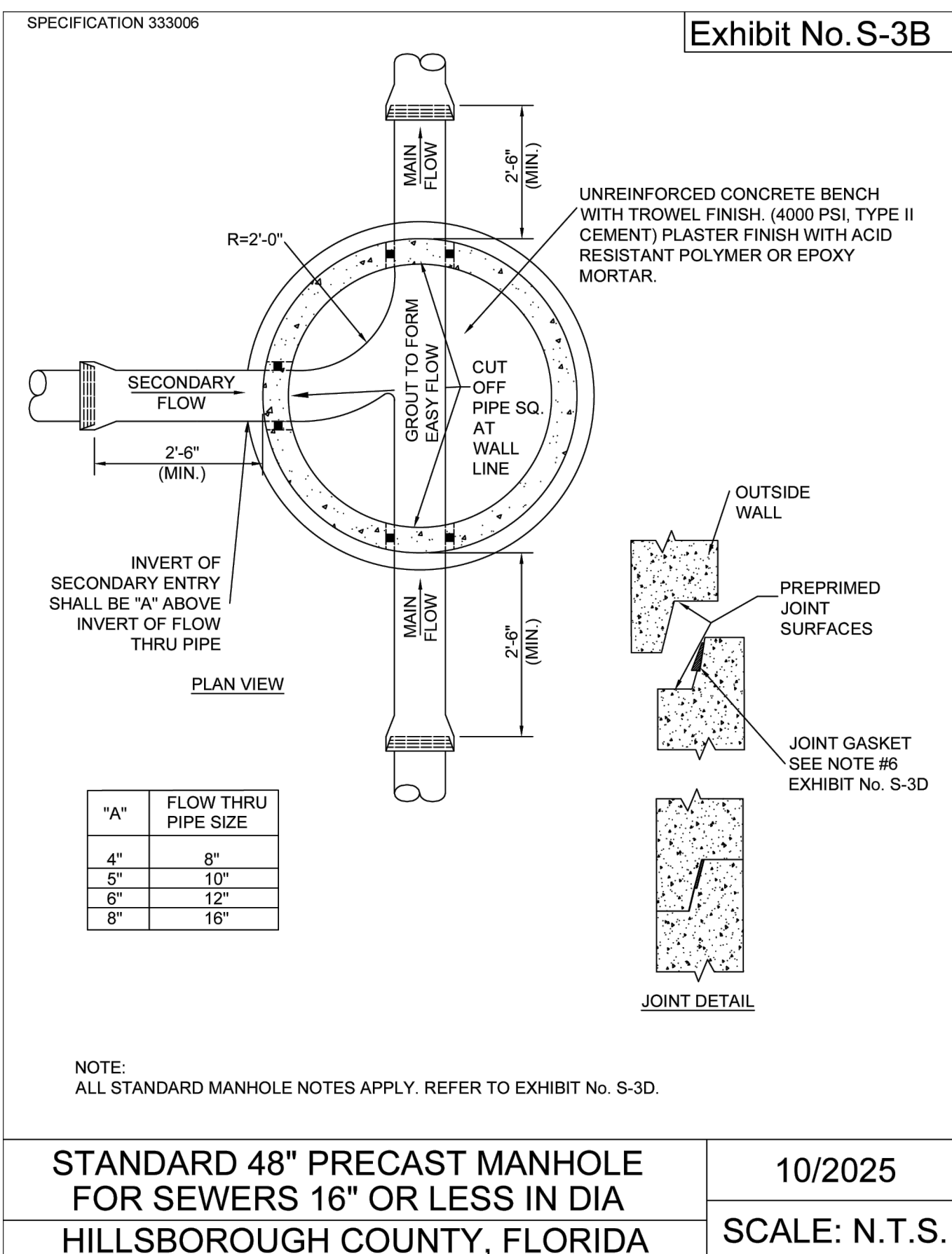
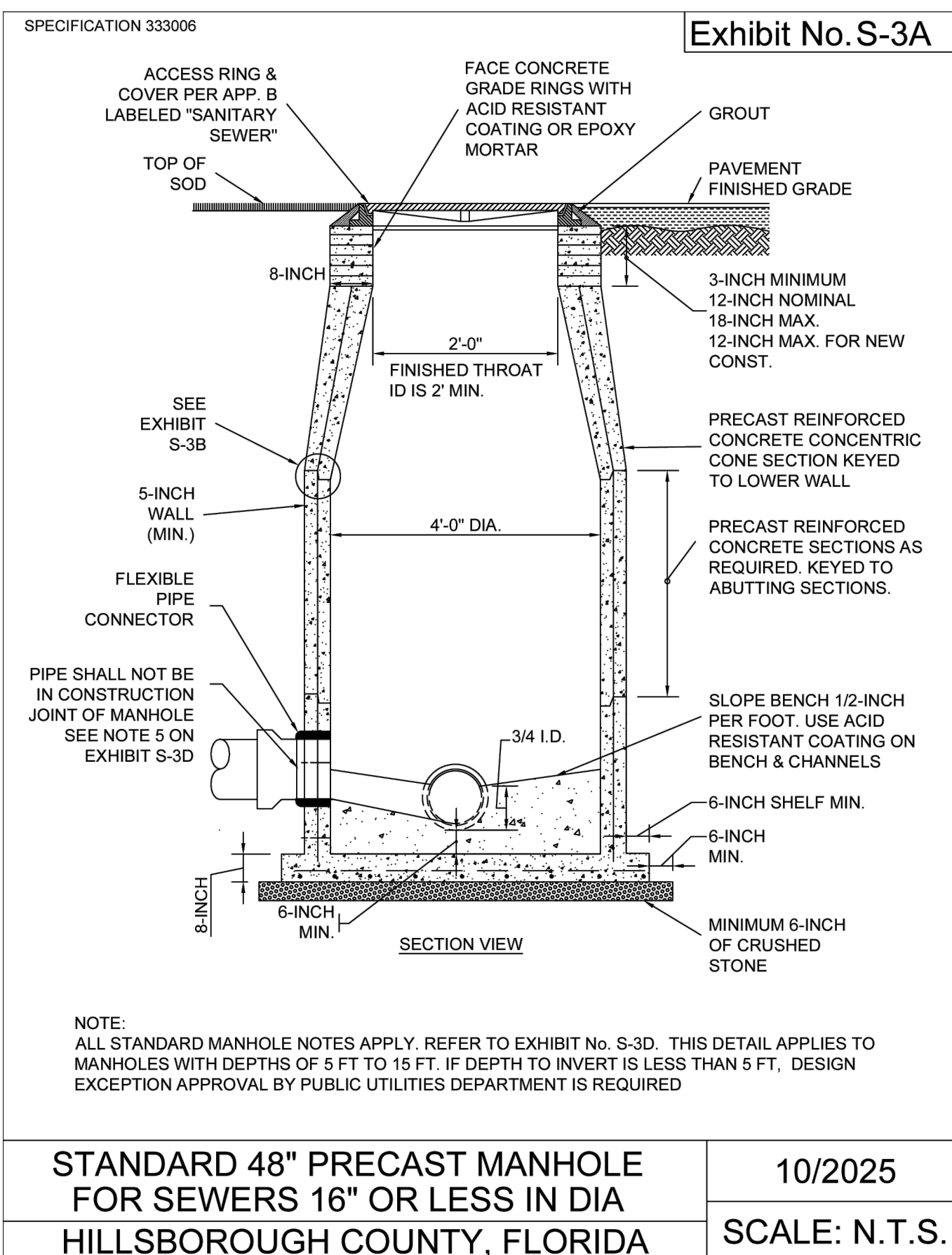
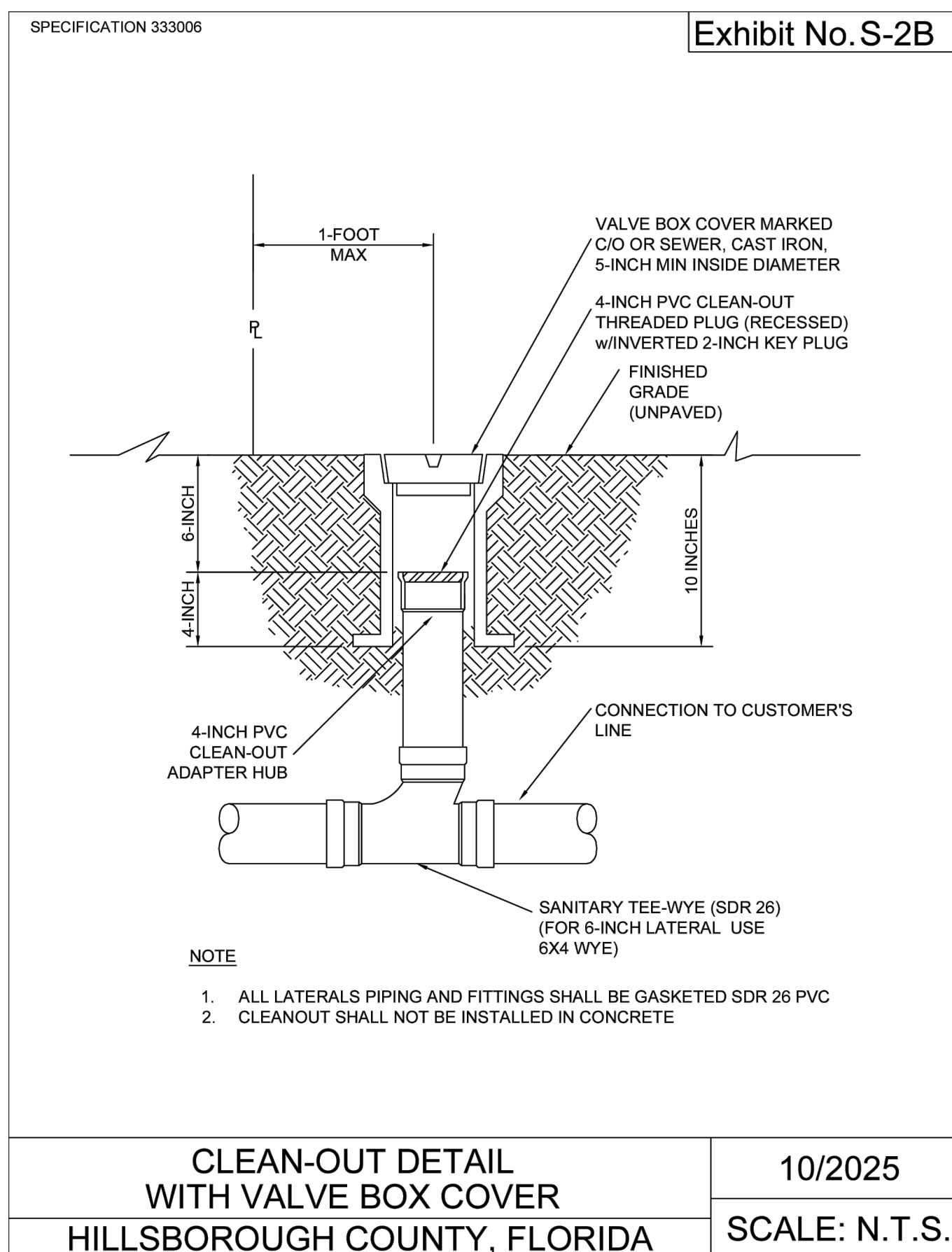
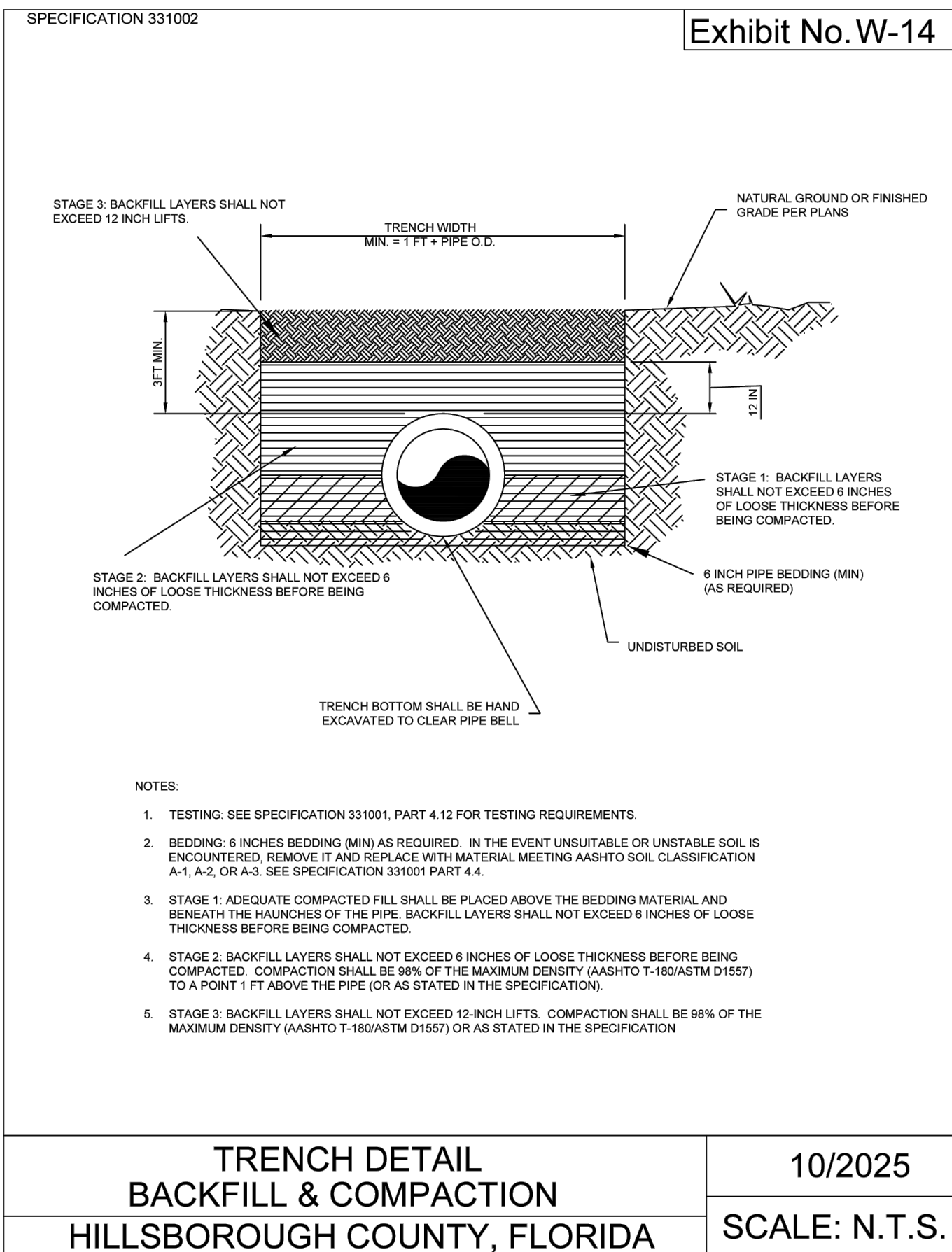
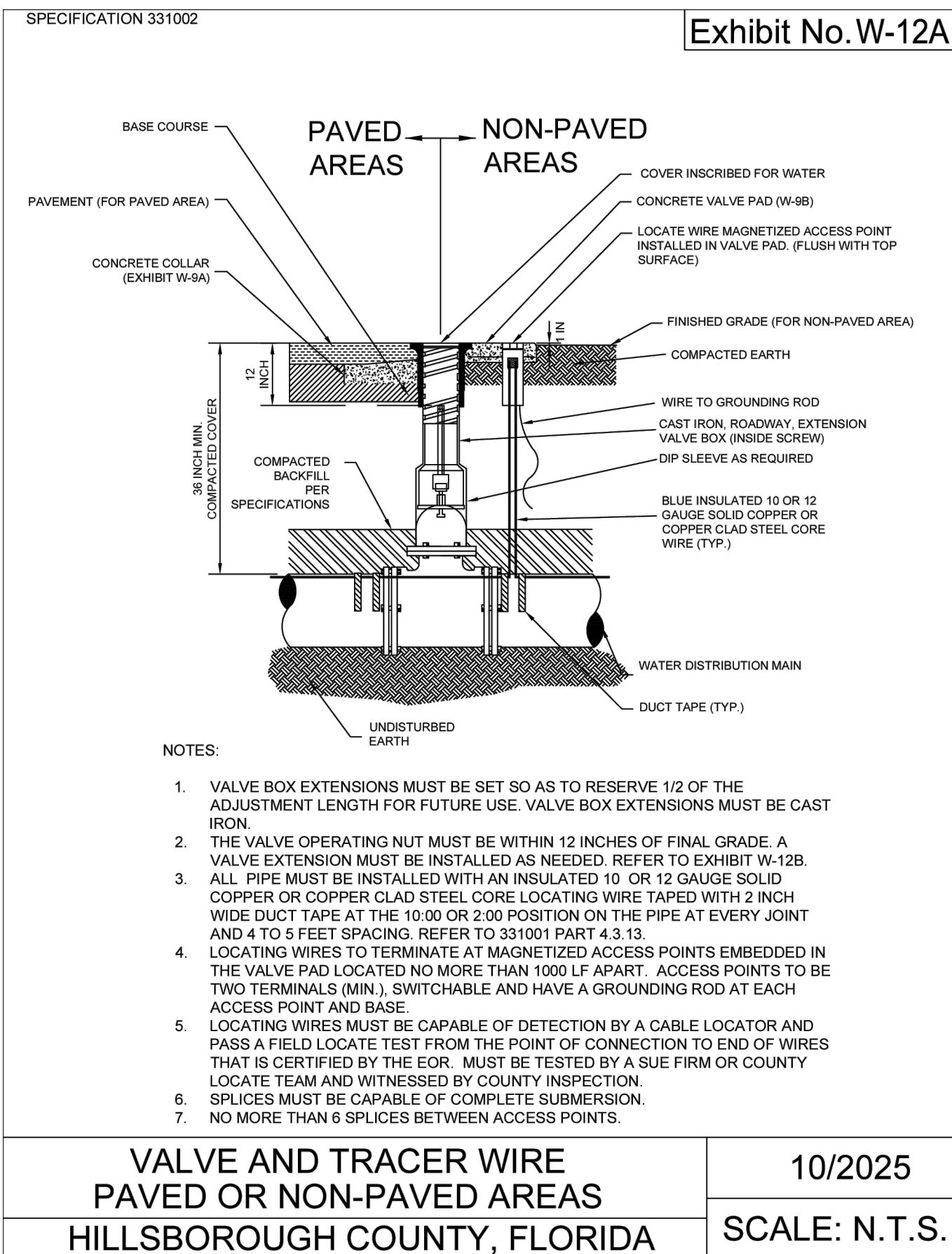
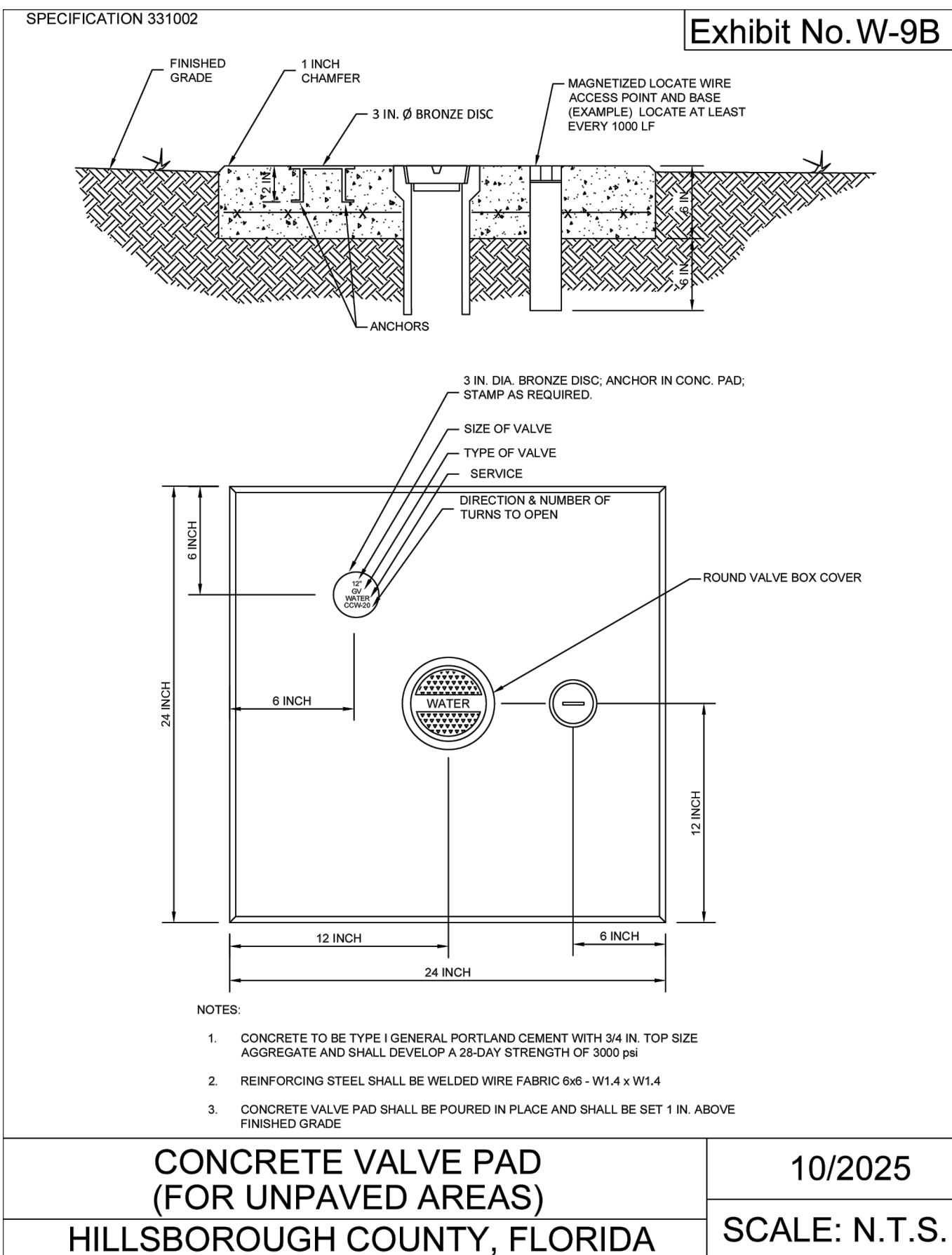
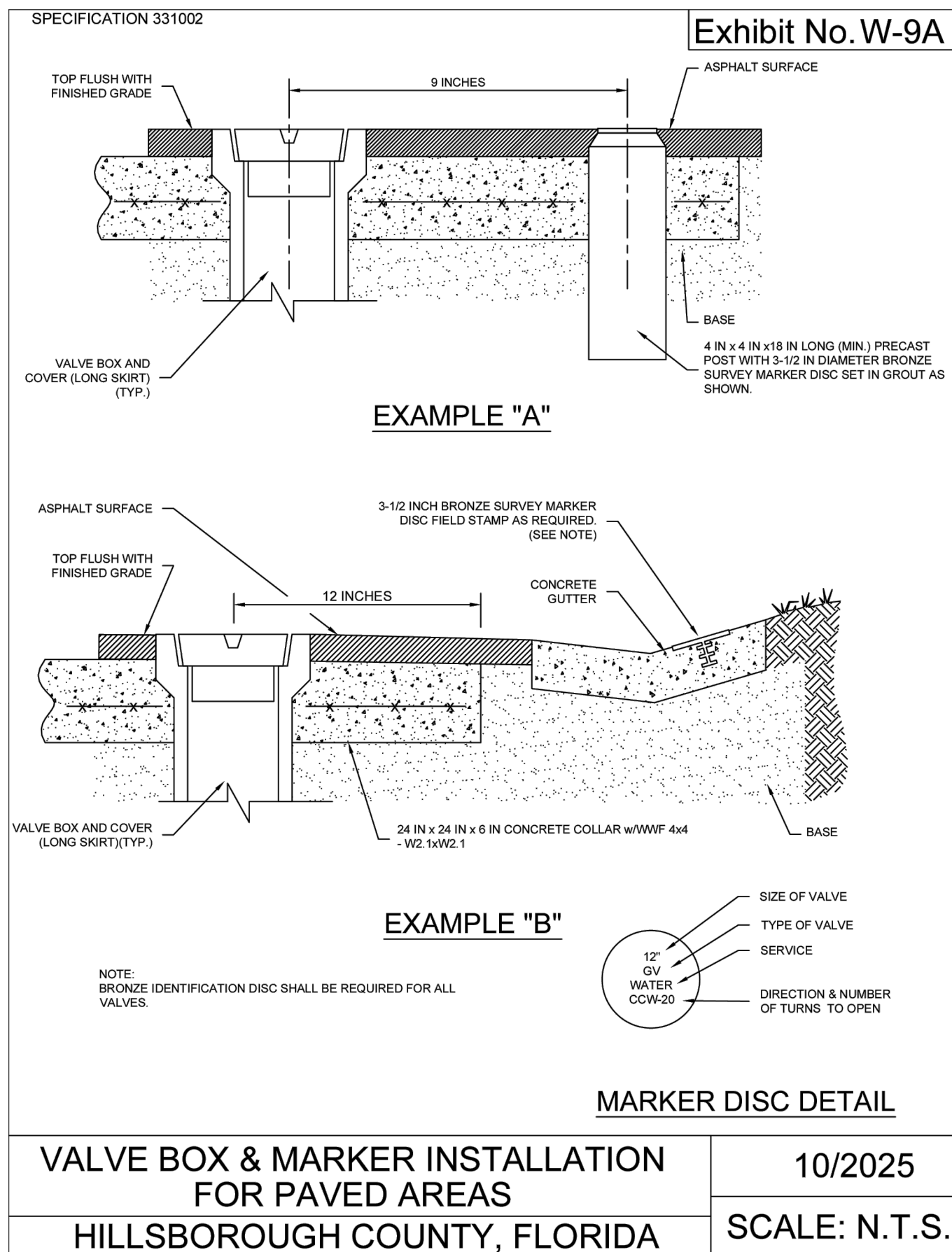


UTILITY DETAILS

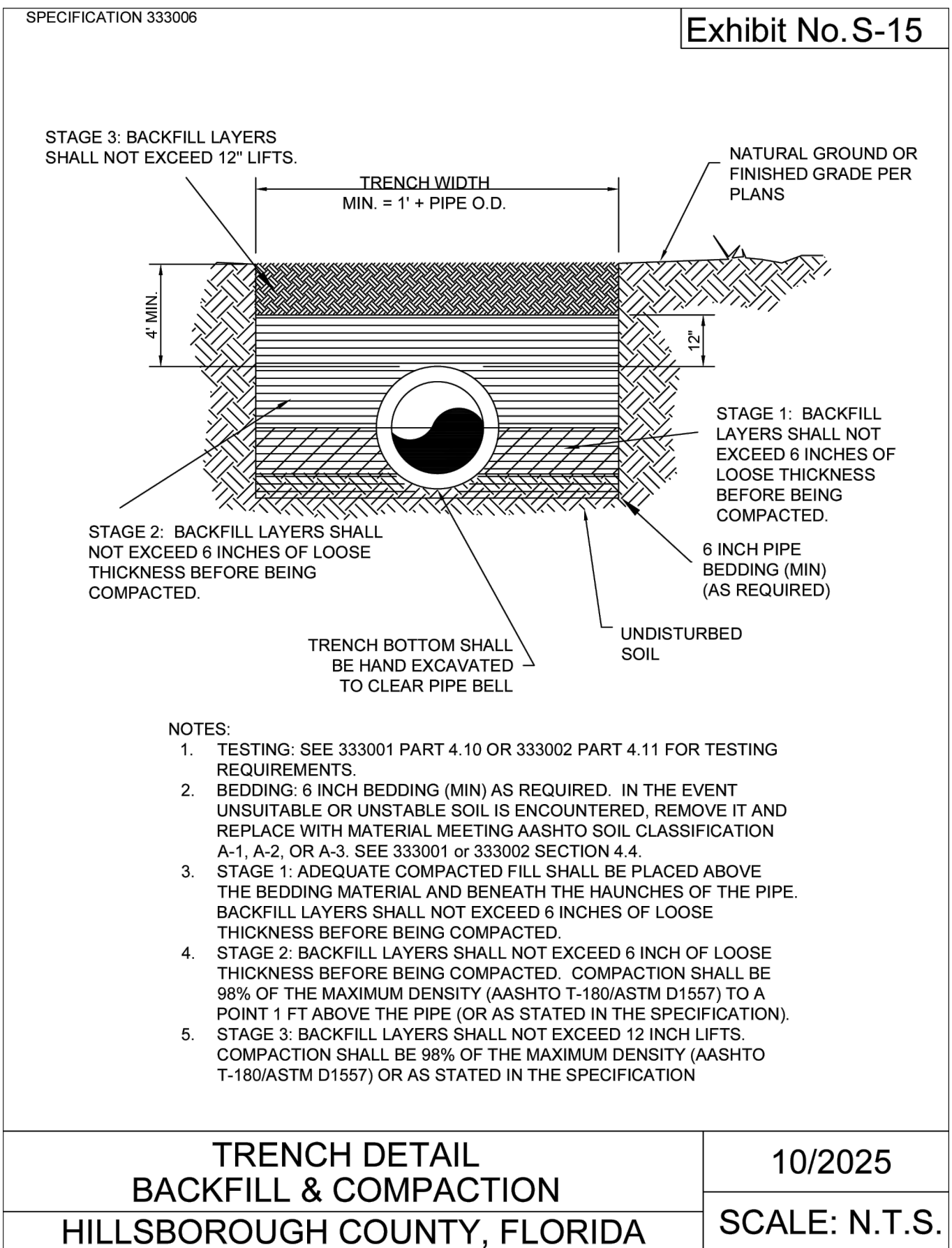
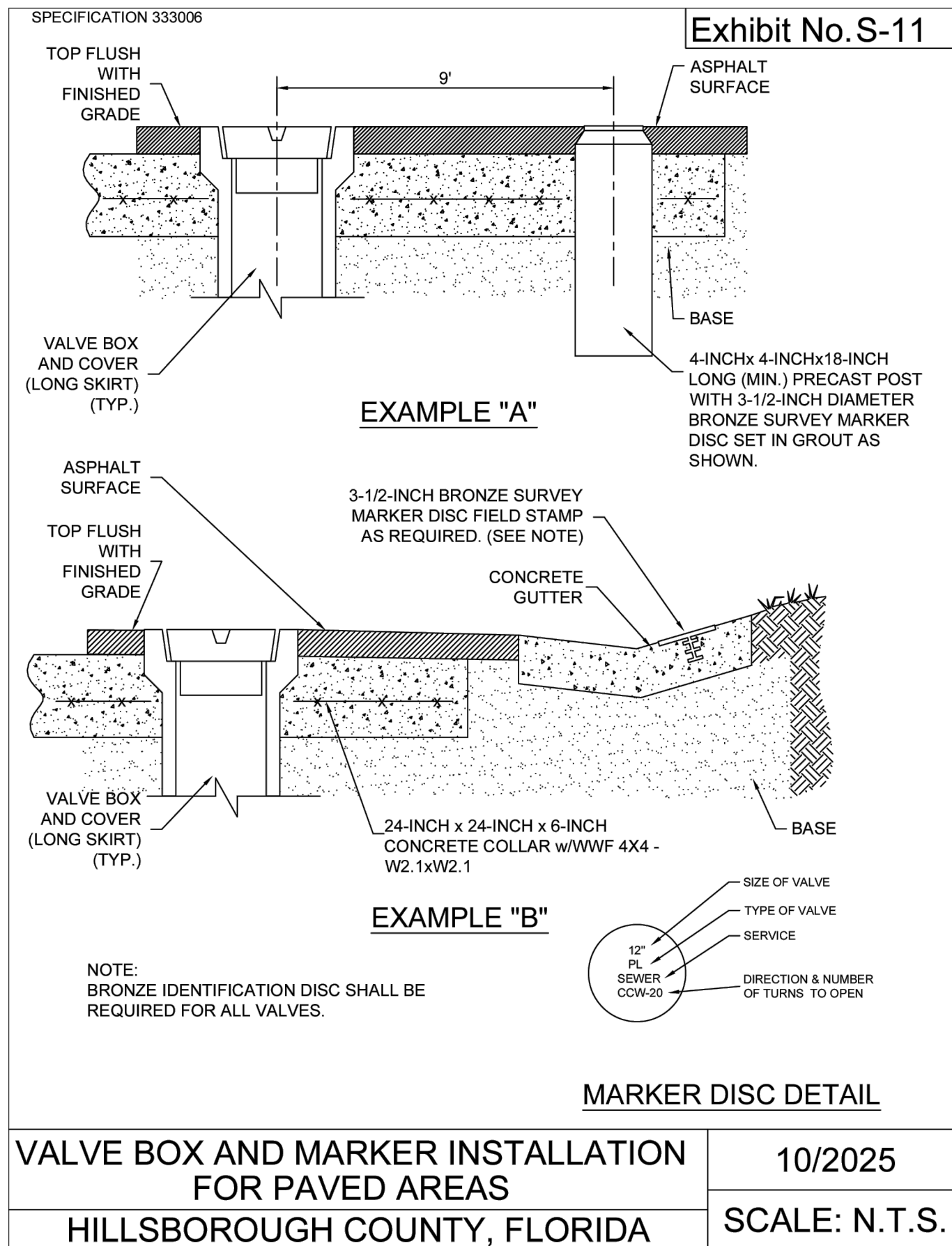
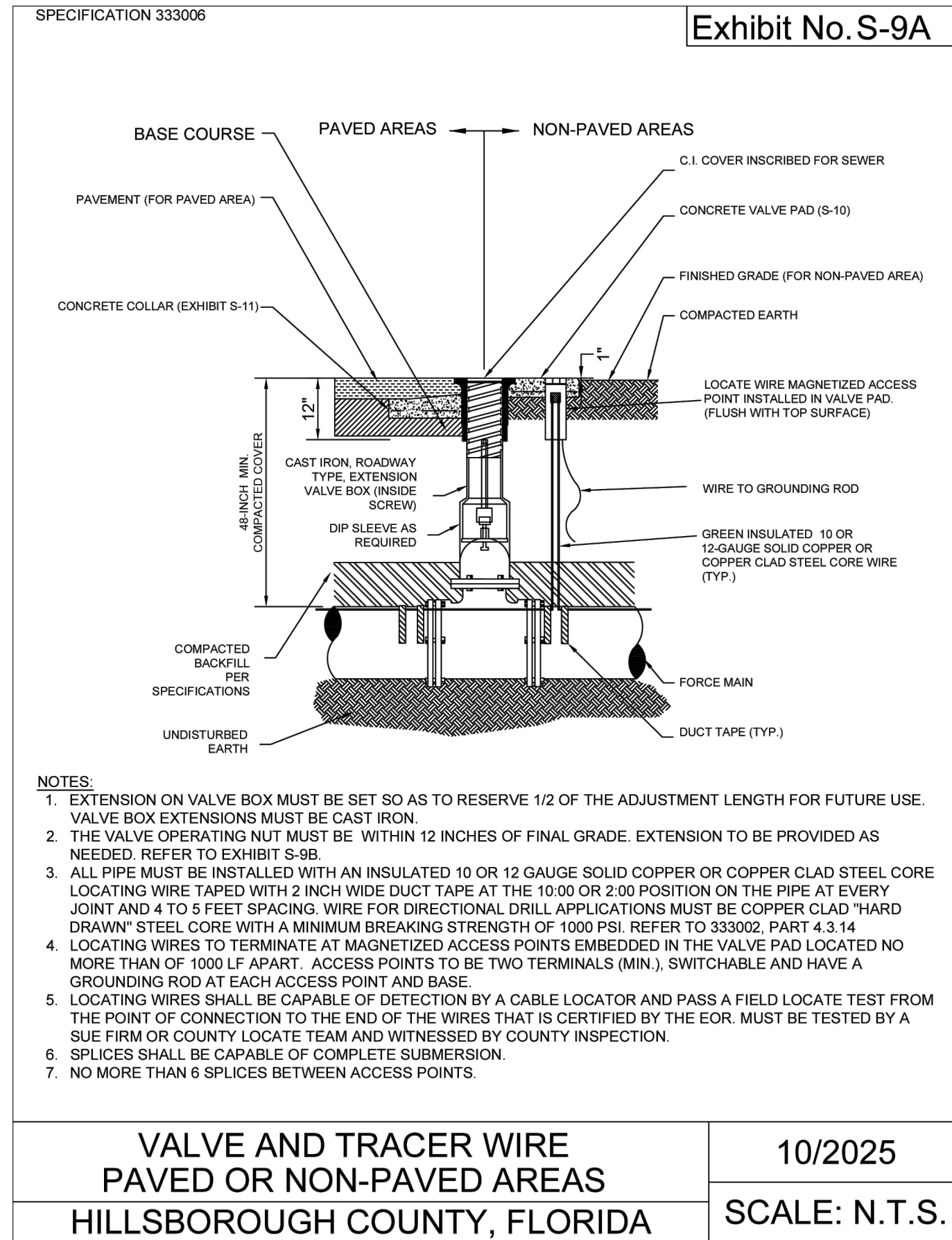
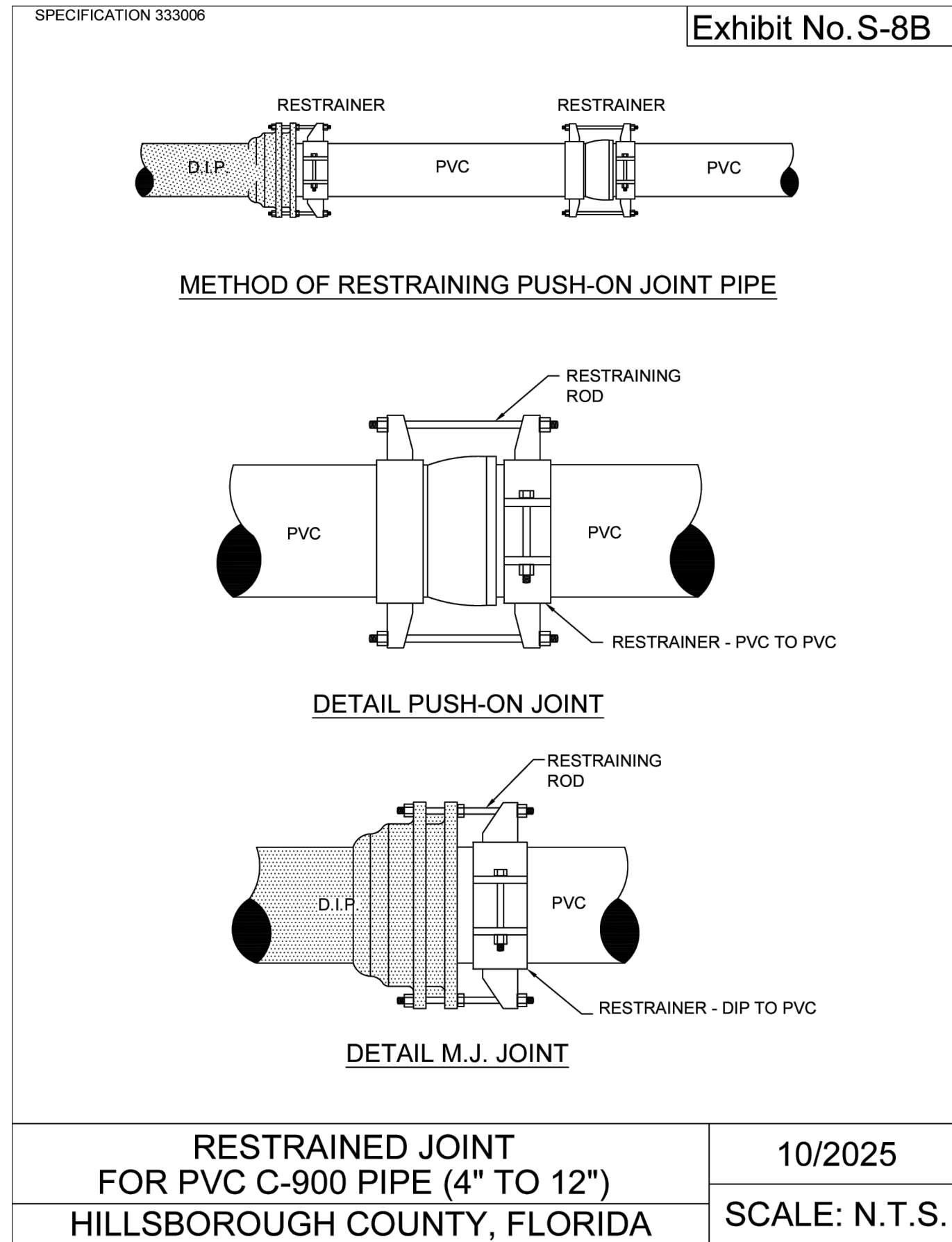
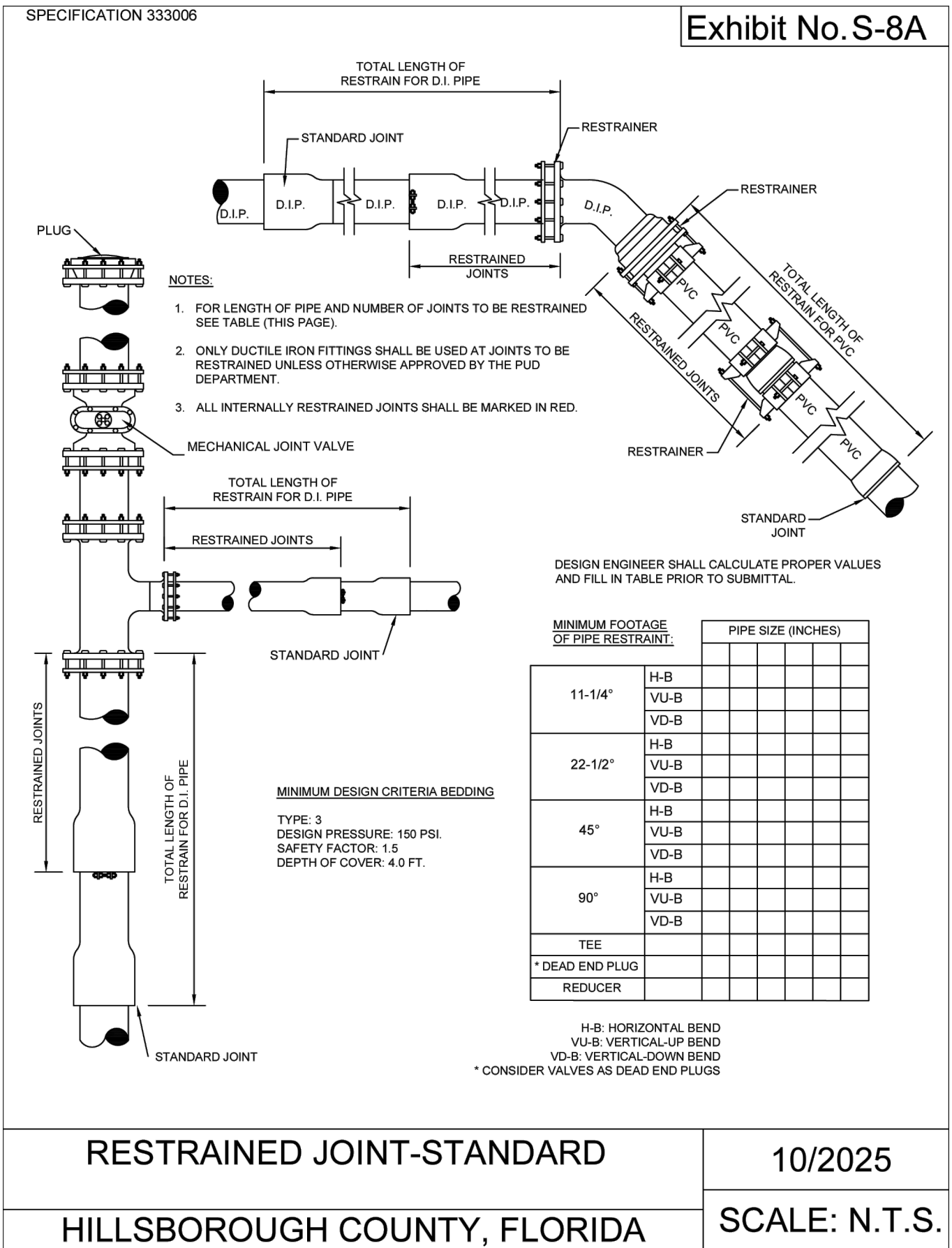
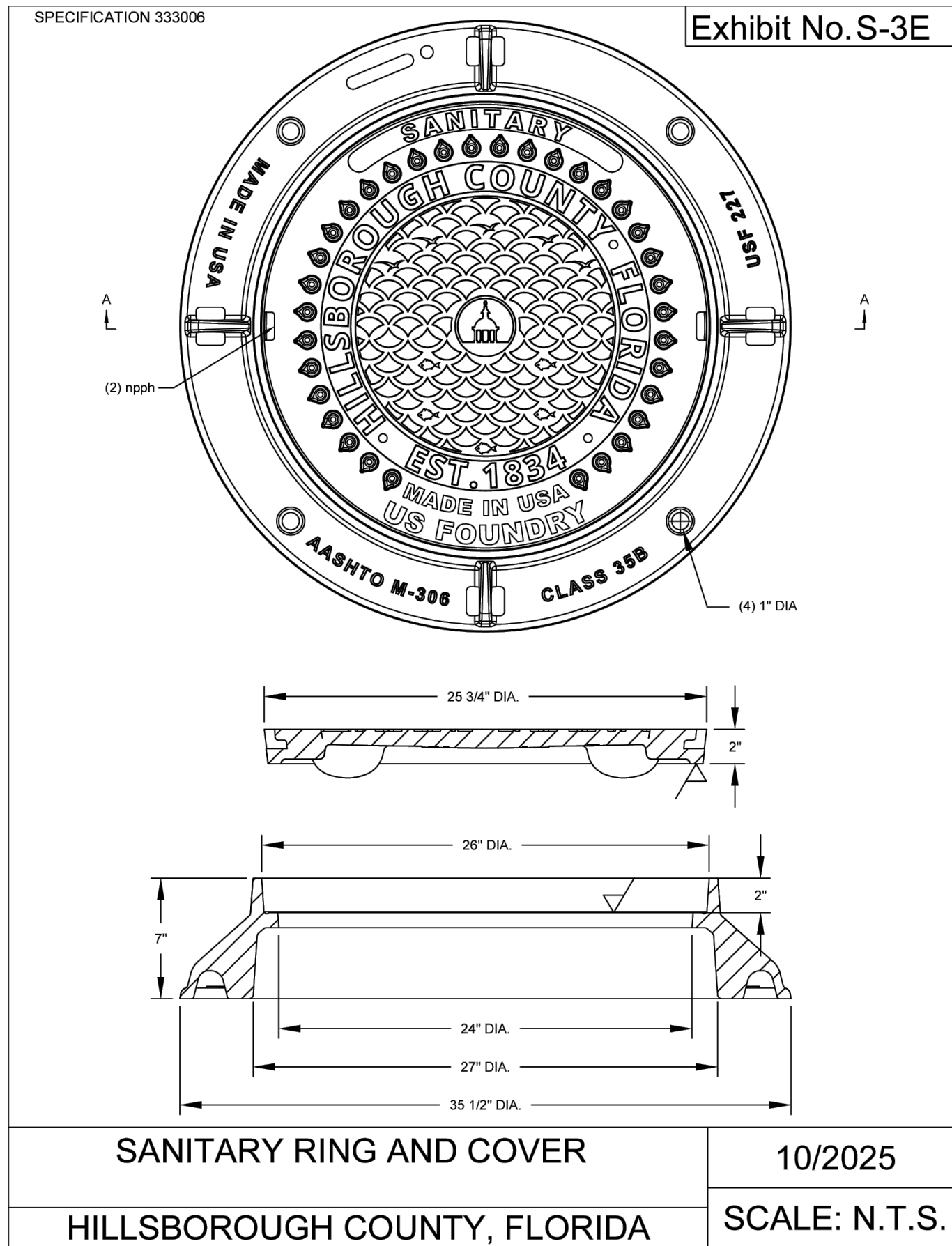
OLD MEMORIAL GOLF CLUB MAINTENANCE UPGRADES

ISSUED FOR: PERMITTING

Datum: NAVD 1988



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2026 WRA



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