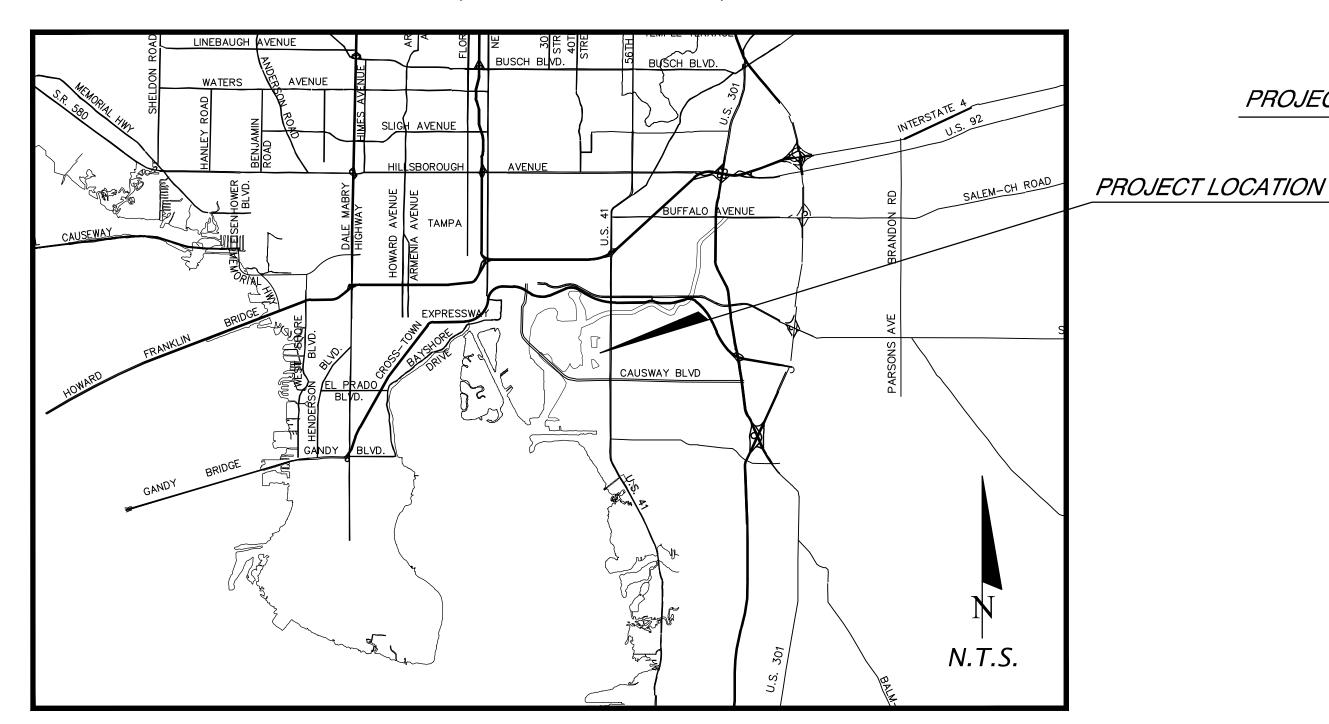
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PALM RIVER RESTORATION (W367) EAST McKAYBAYSTORMWATER AND HABITAT RESTORATION SITES

HILLSBOROUGH COUNTY, FLORIDA SECTIONS 21 & 28, TOWNSHIP 29S, RANGE 19E



PREPARED FOR:



TRANSPORTATION - DIST. 7 11201 N. McKINLEY DRIVE TAMPA, FLORIDA 33612 PHONE: (813) 975-6000

DRAINAGE PLANS ENGINEER OF RECORD:

PROJECT VICINITY

MICHAEL C. PECK, P.E. #73103

License #2610

为 FT LAUDERDALE

REVISIONS DATE DESCRIPTION

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

PLANS PREPARED BY:

ARDURRA

100% PLANS MAY 28, 2015

LIMITED UPDATE JULY 22, 2020

COMPONENTS OF CONTRACT PLANS SET

N/A

- COVER SHEET
- CONSTRUCTION POLLUTION PREVENTION SHEET
- KEY SHEET
- EXISTING DRAINAGE BASIN MAP

- PAVING, GRADING AND DRAINAGE PLAN

- PLANTING PLAN DETAILS
- TYPICAL SECTIONS

- GRADING CROSS SECTIONS

- 34-34.1 DRAINAGE STRUCTURE S200 STRUCTURAL DETAILS
- SPOIL MATERIAL HAUL ROUTE PLAN

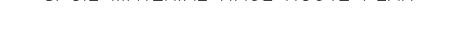
INDEX OF CONSTRUCTION PLANS

SHEET NO. SHEET DESCRIPTION

- NOTES AND LEGEND

- PROPOSED DRAINAGE BASIN MAP
- LIMITS OF CLEARING
- PLANTING PLAN
- CONTROL NETWORK

- UTILITY RELOCATION DETAILS
- POND CROSS SECTIONS
- DRAINAGE STRUCTURE CROSS SECTIONS
- DRAINAGE STRUCTURE PLAN VIEW DETAIL SHEETS
- DRAINAGE STRUCTURE S101 DETAIL SHEET



SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWIM) 7601 U.S. HIGHWAY 301 NORTH TAMPA, FLORIDA 33637 PHONE: (813) 985-7481

FLORIDA DEPARTMENT OF

ALL ELEVATIONS SHOWN ARE BASED ON THE NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SHEET NO.

PROJECT MANAGER: JANIE HAGBERG

- 2. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT EXISTING TREES IDENTIFIED TO BE SAVED REMAIN UNDAMAGED DURING CONSTRUCTION.
- 3. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS PROVIDED BY ENGINEER.
- 4. THE CONTRACTOR SHALL NOT ENTER UPON OR IN ANY WAY ALTER ANY WETLAND AREAS, EXCEPT AS AUTHORIZED BY THE ENVIRONMENTAL PERMITS. ALL WORK IN THE VICINITY OF OPEN WATER OR WETLANDS SHALL BE PERFORMED IN COMPLIANCE WITH ALL PERMITS. ANY FINES OR OTHER COSTS RESULTING FROM THE CONTRACTOR'S VIOLATION OF PERMIT CONDITIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- PIPE MEASUREMENTS ARE TO CENTER OF STRUCTURES FOR INLETS AND MANHOLES AND TO THE DOWNSTREAM END OF MITERED END SECTIONS.
- ANY U.S.C. & G.S. MONUMENT WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, PROJECT ENGINEER SHOULD NOTIFY;

DIRECTOR, NATIONAL GEODETIC SURVEY 1315 EAST-WEST HIGHWAY SILVER SPRING, MARYLAND 20910-3282 PHONE: (301) 713-3242

- 7. A PORTION OF THE SITE LIES WITHIN FLOOD ZONE "AE" WITH A BASE FLOOD ELEVATION OF 10.0' NAVD AS INDICATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 12057C0214H DATED AUGUST 28, 2008.
- 8. THE MEAN HIGH WATER LEVEL OF McKAY BAY IN THE VICINITY OF THE PROJECT IS APPROXIMATELY 0.70' NAVD, THE MEAN LOW WATER LEVEL OF McKAY BAY IN THE VICINITY OF THE PROJECT IS APPROXIMATELY -1.31' NAVD BOTH BASED ON TIDE STATION NUMBER 872-6711 FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) LAND BOUNDARY INFORMATION SYSTEM (LABINS).
- RELOCATION AND/OR REPLACEMENT OF EXISTING UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION THAT ARE NOT SHOWN ON THE CONSTRUCTION PLANS ARE TO BE COORDINATED BY SITE CONTRACTOR. ALL EXISTING WATER AND SANITARY SEWER LINES ARE ASSUMED TO HAVE BEEN PREVIOUSLY CONSTRUCTED USING REQUIRED RESTRAINTS.
- 10. ALL RELOCATED UTILITIES SHALL PROVIDE RESTRAINED JOINTS.

-PAVING. GRADING & DRAINAGE NOTES -

- ALL UNDERGROUND UTILITIES MUST BE INSTALLED BEFORE SUB-BASE. BASE AND SURFACE ARE CONSTRUCTED.
- SIDEWALKS REMOVED FROM CONSTRUCTION ACTIVITIES TO BE REPLACED BY THE CONTRACTOR AS PART OF CONSTRUCTION ACTIVITIES AND SHALL INCLUDE CURB RAMPS AT CROSSWALKS IN ACCORDANCE WITH FDOT INDEX 522-002.
- STORM SEWER PIPE LINES SHALL NOT BE INSTALLED PRIOR TO PLACEMENT AND ALIGNMENT OF INLET STRUCTURES.
- THE DRAINAGE SYSTEM SHALL BE CONTINUOUSLY MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION
- WHERE VEGETATION, DEBRIS OR SEDIMENT HAS ACCUMULATED IN SUCH A MANNER AS TO INTERFERE WITH THE FREE FLOW OF WATER OR ADEQUATE FUNCTIONING OF DRAINAGE FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL CLEAR AND REMOVE THE DEBRIS OR OBSTRUCTION.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH UTILITY COMPANIES TO PROVIDE EXISTING UTILITY LOCATES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXCESS MATERIAL FROM EXCAVATIONS SHALL BE HAULED AND PLACED INTO THE NORTHEAST DREDGE DISPOSAL AREA AS DEPICTED ON THE HAUL ROUTE PLAN (SHEET 36). ALL MATERIAL PLACED IN THE DREDGE DISPOSAL AREA SHALL BE STABILIZED BY HYDROSEEDING.
- ALL ABOVE NOTES APPLY TO ALL PAVING, GRADING AND DRAINAGE PLAN SHEETS.

DEWATERING NOTES -

- DEWATERING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH CITY OF TAMPA, SWFWMD, AND STATE OF FLORIDA MINIMUM STANDARDS AND BEST MANAGEMENT PRACTICES.
- 2. THE CONTRACTOR RETAINS ALL RESPONSIBILITY AND OBLIGATION FOR SITE AND OPERATIONAL SAFETY. THE CONTRACTOR SHALL ADJUST THE MEANS AND METHODS OF THIS PLAN AS APPROPRIATE FOR MAINTAINING SITE AND OPERATIONAL SAFETY.
- 3. THE CONTRACTOR SHALL PROVIDE PUMPING EQUIPMENT AND DEVICES TO PROPERLY REMOVE AND DISPOSE OF WATER DURING CONSTRUCTION.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING AND OBTAINING ANY AND ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY DEWATERING OPERATIONS.

EROSION AND SEDIMENT CONTROL —

- THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
- 2. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR SYNTHETIC BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHOULD BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT. EROSION AND SEDIMENT CONTROLS SHALL COMPLY WITH "STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL", DATED JUNE 2007, UPDATED JULY 2013.
- WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATERS FROM THE CONSTRUCTION AREA. THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENT BASINS, OR CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.
- THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. 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.
- WATER REMAINING IN THE EXCAVATIONS AFTER CONSTRUCTION MUST BE KEPT CONFINED WITHIN THE EXCAVATIONS PRIOR TO DISCHARGE (IF APPLICABLE). UNTIL THE TURBIDITY LEVEL OF THE POND WATER MEETS STATE WATER QUALITY STANDARDS.
- 6. NO CLAY MATERIAL SHALL BE LEFT EXPOSED IN THE EXCAVATIONS. IF CLAY OR SANDY CLAYS ARE LEFT EXPOSED AT THE PERMITTED DEPTH. THE CONTRACTOR SHALL OVER EXCAVATE THE POND'S BOTTOM AND SIDE SLOPES BY A MINIMUM OF 12 INCHES AND BACKFILL WITH CLEAN SANDS.
- PROVIDE ALL DISTURBED AREAS WITHIN THE LIMITS OF THE WORK WITH TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL, UTILIZING EARTH DAMS & PONDS, GRADE TO DRAIN SWALES, SETTLING BASINS, SILT FENCES, STONE FILTERS, SYNTHETIC BALE FILTERS, ETC., TREATING ALL SOIL SURFACES WITH SEEDED TOPSOIL AND / OR MULCH AFTER GRADING.
- 8. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE. AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED. STATE AND LOCAL LAWS SHALL BE COMPLIED WITH AT ALL TIMES.
- 10. TO MINIMIZE SOIL EROSION, PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES (I.E. SYNTHETIC BALES, BAFFLES, SODDING AND SANDBAGGING) SHALL BE PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUN-OFF ON EXPOSED LAND SURFACES.
- 11. PERMANENT VEGETATION SHALL BE BY SEEDING OR SODDING ALL EXPOSED AREAS WITHIN THREE DAYS AFTER FINAL GRADING. MULCH SHALL BE USED AS NECESSARY FOR PROTECTION UNTIL 75% GROWTH IS ESTABLISHED. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL WHICH WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY AS TO PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
- 12. ALL NEW EROSION AND SILT CONTROL METHODS AND LOCATIONS INDICATED ON THIS DRAWING ARE FOR START-UP AND GENERAL REFERENCE ONLY AND SHALL BE ADJUSTED, AS REQUIRED, TO SUIT THE PROCESS OF THE CONSTRUCTION.
- 13. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME FRAME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING. OR SEEDING IS ACCEPTABLE FOR STABILIZATION: HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED.
- 14. SEE PGD PLANS FOR ADDITIONAL EROSION CONTROL LOCATION INFORMATION AND DETAILS.
- 15. CONTRACTOR TO COMPLY WITH ALL REGULATIONS AS SET FORTH BY THE FDEP NPDES STORMWATER REGULATORY PROGRAM.
- 16. CONTRACTOR TO CONSTRUCT PROPOSED STORMWATER PONDS IN EITHER CELLS OR SEQUENCED SO THAT THE FIRST PONDS FUNCTION AS SEDIMENT BASINS TO SEPARATE SUSPENDED SOLIDS FROM PRODUCED GROUNDWATER. ALL PRODUCED GROUNDWATER MUST MEET CRITERIA OF "STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY" EFFECTIVE DATE FEBRUARY 14. 2000: DOCUMENT NUMBER 62-621.300(2).
- 17. 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 DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.

·PERFORMANCE TURF NOTES ·

- 2. ALL SOD SHALL BE PASPALUM UNLESS OTHERWISE DIRECTED BY DISTRICT REPRESENTATIVE.
- HYDROSEEDING MIX FOR AREAS TO BE STABILIZED BY HYDROSEEDING SHALL BE BASED ON SEASONAL CONDITIONS. THE FOLLOWING SEED MIXES SHALL BE USED:

SPRING - SUMMER (MARCH - OCTOBER) 33% PENSACOLA BAHIAGRASS 33% UN-HULLED COMMON BERMUDAGRASS 34% BROWN-TOP MILLET

FALL - WINTER (NOVEMBER - FEBRUARY) 33% PENSACOLA BAHIAGRASS 34% GULF ANNUAL RYEGRASS

- EXISTING LEGEND -

× 3.5 SPOT ELEVATIONS: SWALE..... DIRECTION OF FLOW JURISDICTIONAL LINE . SANITARY SEWER AND MANHOLE STORM SEWER LINE SIZE & MAT. STORM INLETS WATER MAIN BURIED ELECTRIC & RISER OVERHEAD ELECTRIC. BURIED FIBER OPTIC GAS LINE · PHONE LINE · PROPERTY LINE CONTOUR LINE AND LABEL · CENTERLINE RIGHT OF WAY LINE FEMA FLOOD ZONE LINE . FENCE LINE · AB-11BORING ID & LOCATION: BENCHMARK LOCATION TEMPORARY BENCHMARK LIGHT POLE UTILITY POLE ... HATCH DESCRIPTION CONCRETE LIMITS TREE DESCRIPTION 28 OAK TREE AND SIZE

SURVEY INFORMATION NOTES —

1. LAST DATE OF FIELD SURVEY: SEPTEMBER 10, 2010

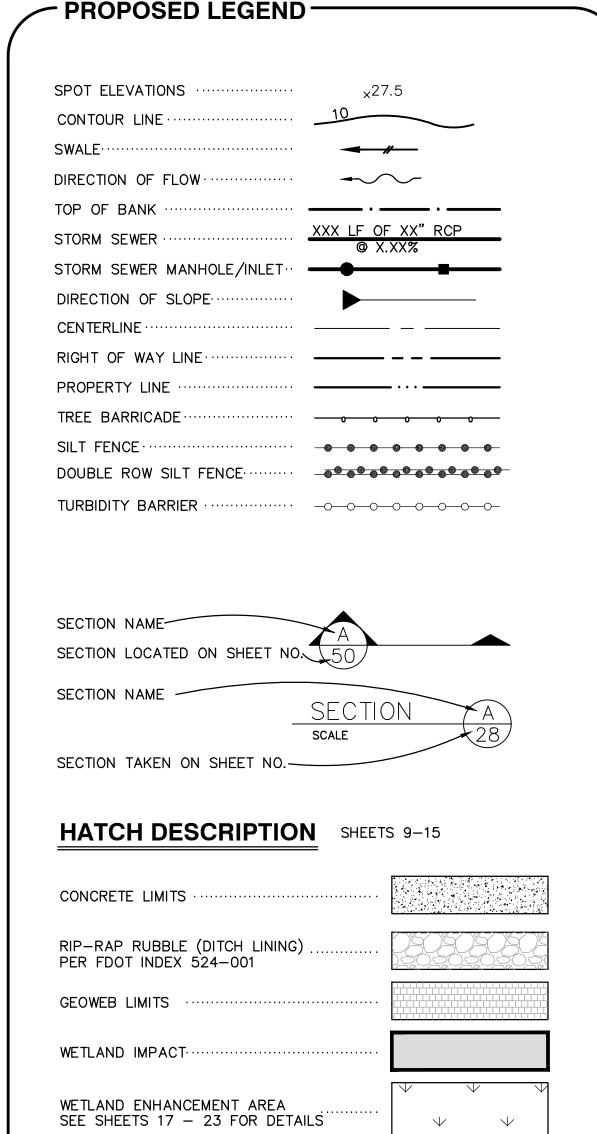
(SPECIES OAK UNLESS OTHERWISE NOTED)

NOTE: TREES GPS LOCATED

- 2. VERTICAL ELEVATIONS ARE IN FEET AND ARE REFERENCED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988. ORIGINATING BENCHMARKS ARE NATIONAL GEODETIC SURVEY MONUMENT "W 256" HAVING AN ELEVATION OF 8.41' AND HILLSBOROUGH COUNTY MONUMENT "HV-02 0329" HAVING AN ELEVATION OF 3.86'.
- HORIZONTAL COORDINATE LOCATIONS SHOWN ON THE MAP OF SURVEY ARE STATE PLANE COORDINATES, FLORIDA WEST ZONE, NORTH AMERICAN DATUM 1983. 1990 ADJUSTMENT BASED ON NATIONAL GEODETIC SURVEY MONUMENTS "THOMPSON 2" AND "PALM".
- 4. USE OF ANY SURVEY FILES FOR PURPOSES OTHER THAN WHICH IT WAS INTENDED, WITHOUT WRITTEN VERIFICATION, WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO THE UNDERSIGNED. NOTHING HEREIN SHALL BE CONSTRUED TO GIVE ANY RIGHTS OR BENEFITS TO ANYONE OTHER THAN THOSE CERTIFIED TO.
- 5. UNLESS IT BEARS THE SIGNATURE AND ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER INDICATED BELOW THIS REPORT IS NOT VALID.
- ADDITIONS OR DELETIONS TO SURVEY MAPS, REPORTS OR ELECTRONIC FILES BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- PROPERTY AND RIGHT OF WAY LINES AS BASED ON BOUNDARY SURVEY PROVIDED BY THE DISTRICT. NO BOUNDARY SURVEY WAS PERFORMED AS PART OF THIS PROJECT.
- 8. WETLAND LINES ARE BASED ON TOB LOCATIONS AND OR GIS DATA

NVGD 29 = 0, NAVD 88 = (-) 0.883

THIS PROJECT IS IN NAVD 88 DATUM



ALL DISTURBED AREAS SHALL BE SODDED, UNLESS OTHERWISE SHOWN ON THE PLANS.

33% UN-HULLED COMMON BERMUDAGRASS

COLLABORATE, INNOVATE, CREATE.

PALM RIVER RESTORATION (W367) EAST Mc KAY BAY STORMWATER AND HABITAT

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

RESTORATION SITES

NOTES AND LEGEND

5044-005-004 12/22/2010 LIMITED UPDATE AS SHOWN DESCRIPTION

100% PLANS

MAY 28, 2015

JULY 22, 2020

SPOIL REMOVAL AREAS AND/OR DITCH

BACKFILL (SEE SHEETS 9 - 16 AND

SHEET 29 FOR DETAILS

4921 Memorial Highway One Memorial Center, Suite 300 Tampa, Florida 33634 Phone: (813) 880-8881 www.Ardurra.com License #2610

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT OWNER'S NAME: OWNER'S ADDRESS: SURFACE WATER IMPROVEMENT & MANAGEMENT (SWIM) SECTION 7601 U.S. HIGHWAY 301 NORTH

TAMPA, FLORIDA 33617

SOUTH SITE LAT. = $27^{\circ} 55' 41" N$ LAT. = $27^{\circ} 56' 10'' N$ LONG. = 82° 24' 31" W LONG. = 82° 24' 31" W

DESCRIPTION OF NATURE OF CONSTRUCTION ACTIVITY WATER QUALITY AND HABITAT RESTORATION PROJECT

SOIL DISTURBING ACTIVITIES INCLUDE:

INSTALLING STABILIZED CONSTRUCTION ENTRANCES, CONSTRUCTION OF EROSION AND SEDIMENT CONTROLS, CLEARING AND GRUBBING, SITE GRADING, EXCAVATION OF STORMWATER QUALITY PONDS, CONSTRUCTION OF DITCH BLOCKS, EXOTIC PLANT REMOVAL, DITCH BACKFILL AND VEGETATIVE

SITE AREA: NORTH SITE: 27.5 ACRES +/-SOUTH SITE: 13.0 ACRES

PRIOR TO COMMENCEMENT OF ANY WORK WITHIN THE PROJECT SITES, THE CONTRACTOR SHALL INSTALL ALL EROSION PROTECTION DEVICES THAT ARE CALLED FOR ON THE PLANS.

- 2. AFTER INSTALLATION OF THE EROSION CONTROL DEVICES, THE SITE CONTRACTOR MAY BEGIN CLEARING OPERATIONS WITHIN THE FOOTPRINT OF THE PROPOSED WORK AREA. THE SITE CONTRACTOR SHALL COMPLETE THE POND BERMS, INCLUDING STABILIZATION,
- IMMEDIATELY FOLLOWING CLEARING ACTIVITIES. UPON COMPLETION OF THE POND BERMS, THE SITE CONTRACTOR SHALL INSTALL THE OUTFALL STRUCTURES, WITH TEMPORARY EROSION CONTROL DEVICES. THE SITE CONTRACTOR MAY ELECT TO INSTALL THE PERMANENT CONTROL STRUCTURE OR PROVIDE A TEMPORARY STRUCTURE DEPENDING ON THE BERM ELEVATION AND PERMANENT CONTROL STRUCTURE ELEVATION.
- 4. UPON COMPLETION OF THE POND OUTFALL, THE SITE CONTRACTION MAY BEGIN SITE CLEARING, EARTHWORK, DRAINAGE, AND MAINTENANCE ROADWAY CONSTRUCTION ACTIVITIES. THE SITE CONTRACTOR SHALL STABILIZE ALL AREAS DISTURBED WITHIN FIVE DAYS OF THE COMPLETION OF GRADING ACTIVITIES OF THE DISTURBED AREAS. 5. THE SITE CONTRACTOR SHALL REMOVE ALL EROSION PROTECTION DEVICES FOLLOWING PERMANENT STABILIZATION OF ALL DISTURBED

NAME OF RECEIVING WATERS: McKAY BAY

CONTROLS

EROSION AND SEDIMENT CONTROLS

STABILIZATION PRACTICES

WIND EROSION STABILIZATION: THE CONTRACTOR SHALL DENUDE ONLY AREAS WHERE IT IS EXPECTED TO BE GRADED OR ALTERED WITHIN A TWO (2) WEEK TIME-FRAME, FINAL GRADES SHALL BE PERFORMED AND TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE APPLIED. AREAS WHERE CONSTRUCTION OPERATIONS WILL BE CONTINUOUS, FUGITIVE DUST SHALL BE MANAGED BY APPLYING A WATER SPRAY TO SATURATE THE SURFACE SOILS ON A DAILY BASIS, OR AS NEEDED TO MAINTAIN MINIMAL DUST TRANSPORT. FUGITIVE DUST SHALL BE MONITORED CONTINUOUSLY AND ADDITIONAL MEASURES MAY NEED TO BE TAKEN TO CONTROL OFF-SITE TRANSPORT OF UNACCEPTABLE LEVELS OF DUST.

TEMPORARY STABILIZATION: TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH HYDROSEED NO LATER THAN 5 DAYS FROM THE LAST CONSTRUCTION ACTIVITY.

PERMANENT STABILIZATION: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD OR PLANT MATERIAL OUTLINED ON PLAN NO LATER THAN 5 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY

STRUCTURAL PRACTICES

STAKED SILT FENCES: THE STAKED SILT FENCES WILL BE CONSTRUCTED AS SHOWN ON THE PLANS. THESE DEVICES WILL STOP AND DIVERT RUNOFF TO THE SEDIMENT BASINS.

SEDIMENT BASINS: THE STORM WATER MANAGEMENT AREAS WILL ACT AS SEDIMENT BASINS DURING CONSTRUCTION. THE SEDIMENT BASINS WILL BE THE DESIGN CROSS—SECTION, OR A MINIMUM OF 2 BELOW EXISTING GROUND AT THE CONTRACTORS DISCRETION TO ALLOW SILTS TO BE COLLECTED AND REMOVED PRIOR TO COMPLETION OF THE GRADING.

STORM WATER MANAGEMENT

STORM WATER DRAINAGE WILL BE PROVIDED BY A CURB, SWALE, STORM SEWER, AND CATCH BASIN SYSTEM FOR THE DEVELOPED AREAS. SWALES TO BE SODDED AND INCLUDE CHECK DAMS AND RIPRAP TO CONTROL RUNOFF VELOCITY AND TRANSPORT OF SEDIMENT. WHEN CONSTRUCTION IS COMPLETE THE IMPROVED PORTION OF THE SITE WILL DRAIN TO STORM WATER PONDS. THE PONDS WILL BE IN THE LOCATION OF THE TEMPORARY SEDIMENT BASINS. WHEN UPSLOPE AREAS ARE STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASINS. THE PONDS HAVE BEEN DESIGNED BY A PROFESSIONAL ENGINEER TO LIMIT PEAK FLOW RATES FROM THE DESIGN STORM EVENT AT OR BELOW PRE-DEVELOPMENT RATES, AND CONSTRUCTION PER DETAILS SHOWN IN THE PLANS IS IMPERATIVE.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS: ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN DUMPSTERS PER HILLSBOROUGH COUNTY SOLID WASTE REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTERS. THE DUMPSTERS WILL BE EMPTIED A MINIMUM OF ONCE A WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO A REGISTERED LANDFILL FOR DISPOSAL. NO CONSTRUCTION MATERIALS WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE ON-SITE OFFICE TRAILER AND THE CONSTRUCTION MANGER RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE: ALL HAZARDOUS WASTE MATERIALS, IF ENCOUNTERED, WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, AS REQUIRED BY LOCAL REGULATION.

OFFSITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS NEEDED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM OR TO THE SITE WILL BE COVERED WITH A TARPAULIN AT ALL TIMES.

TIMING OF CONTROL MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, STAKED SILT BARRIERS, STABILIZED CONSTRUCTION ENTRANCES AND SEDIMENT BASINS WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A HYDROSEED WITHIN 5 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THAT AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE TRAPS AND THE STAKED SILT BARRIERS WILL BE REMOVED.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL, AS ESTABLISHED BY THE FLORIDA ADMINISTRATIVE CODE, CHAPTER 62-4. THIS PLAN REFLECTS THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

MAINTENANCE INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROL.

ALL CONTROL MEASURES IN DISTURBED AREAS WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS OF THE END OF ANY STORM EVENT OF 0.25 INCHES OR GREATER BY A CONTRACTORS REPRESENTATIVE. (WHERE SITES HAVE BEEN FINALLY STABILIZED SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.) ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. SILT FENCE WILL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. THE SEDIMENT BASINS WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB. TEMPORARY AND PERMANENT GRASSING, SODDING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH. A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND SHALL BE KEPT IN AN ACTIVE LOG READILY AVAILABLE AT THE JOB SITE CONSTRUCTION TRAILER. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES. FILLING OUT THE INSPECTION AND MAINTENANCE REPORT WILL BE BY THE CONTRACTOR. PERSONNEL SELECTED FOR MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

WATER FROM FIRE FIGHTING ACTIVITIES, FIRE HYDRANT FLUSHING, WATER LINE FLUSHING, WATER USED TO SPRAY OFF LOOSE SOILS FROM VEHICLES, DUST CONTROL, PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED). ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

GROUNDWATER DEWATERING ACTIVITIES ARE NOT COVERED BY THIS PERMIT. THE CONTRACTOR MUST APPLY FOR COVERAGE UNDER THE GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY PURSUANT TO 62-621.300 (2), F.A.C.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:

CONCRETE PETROLEUM BASED PRODUCTS AND FUELS PAINTS (ENAMEL AND LATEX) CLEANING SOLVENTS METAL STUDS STONE

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT.

AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CONTAINED ENCLOSURE. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS. RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE.

HAZARDOUS PRODUCTS:

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS OF PROPER DISPOSAL SHALL BE FOLLOWED.

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON-SITE:

ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:

CONTRACTOR SHALL DESIGNATE AN AREA FOR DISCHARGE OF SURPLUS CONCRETE OR DRUM WASH WATER AND SHALL INSTALL A CONTAINMENT BERM AROUND THIS AREA TO PREVENT RUNOFF TO THE REMAINDER OF THE SITE. HARD DEBRIS SHALL BE DISPOSED OF BY CONTRACTOR UPON COMPLETION OF THE PROJECT.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE. EQUIPMENT AND MATERIALS WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

THE SPILL AREAS WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY,

THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER

NOTICE OF TERMINATION

A NOTICE OF TERMINATION WILL BE SUBMITTED TO EPA AFTER THE CONSTRUCTION HAS BEEN COMPLETED AND THE SITE HAS UNDERGONE FINAL STABILIZATION.

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS HAVE BEEN READ BY ME OR MY DESIGNATED REPRESENTATIVE AND UNDERSTAND THAT THIS SYSTEM HAS BEEN PREPARED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF. TRUE. ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER:	
SIGNED:	
NAME AND TITLE:	
NAME AND HILL.	SOUTHWEST FLORIDA WATER
COMPANY:	MANAGEMENT DISTRICT - SWIM SECTION
ADDRESS:	7601 U.S. HIGHWAY 301 NORTH
	TAMPA, FLORIDA 33617
DATE:	

CONTRACTOR'S CERTIFICATION

CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERIC STORM WATER PERMIT ISSUED PURSUANT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE	FOR	RESPONSIBLE FOR
NAME: TITLE: DATE:	COMPANY: ADDRESS: PHONE:	GENERAL CONTRACTOR
NAME: TITLE: DATE:	COMPANY: ADDRESS: PHONE:	TEMPORARY AND PERMANENT STABILIZATION
NAME: TITLE: DATE:	COMPANY: ADDRESS: PHONE:	STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, SEDIMENT BASIN

PALM RIVER RESTORATION (W367) EAST Mc KAY BAY STORMWATER AND HABITAT

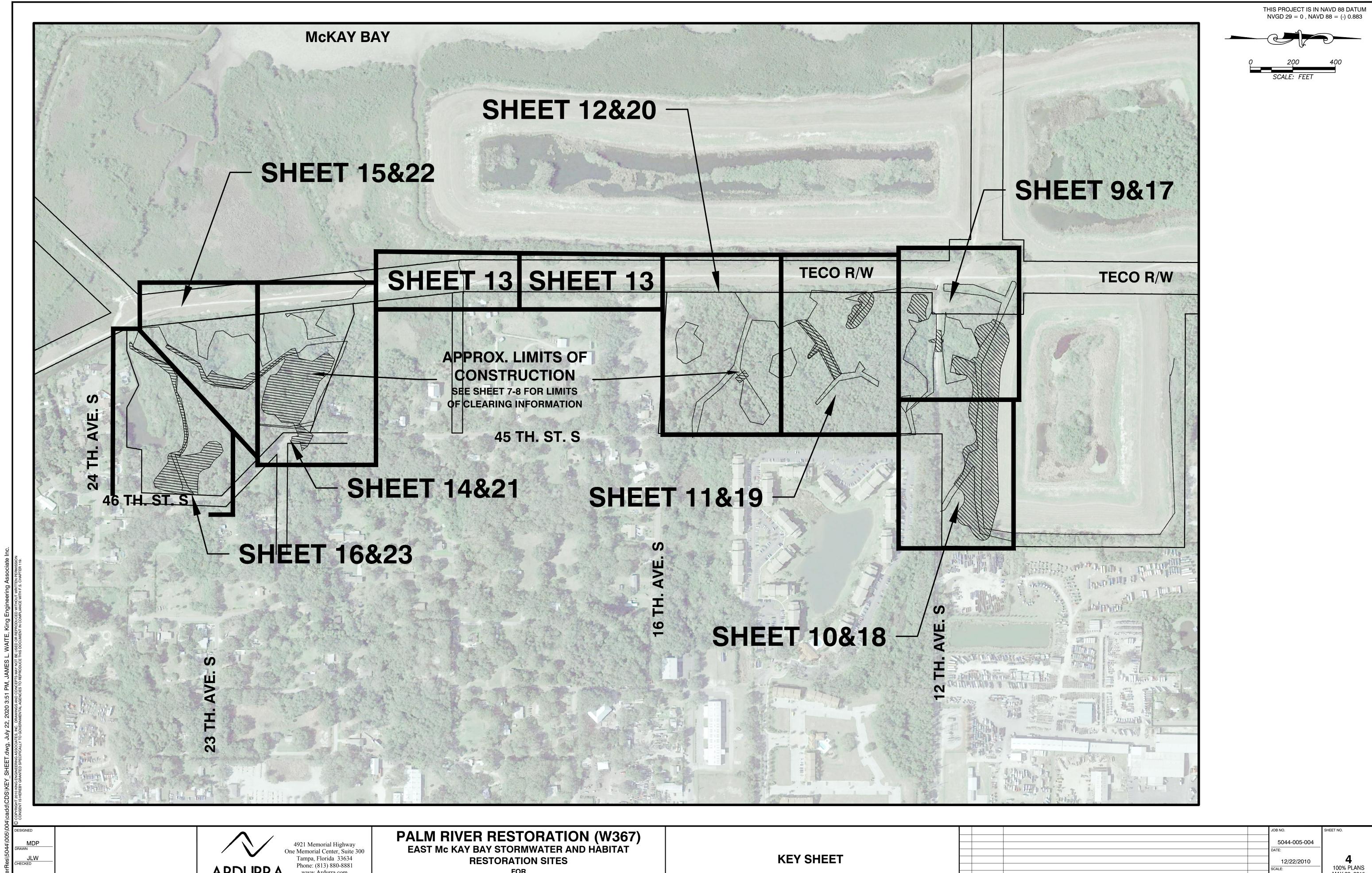
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

RESTORATION SITES

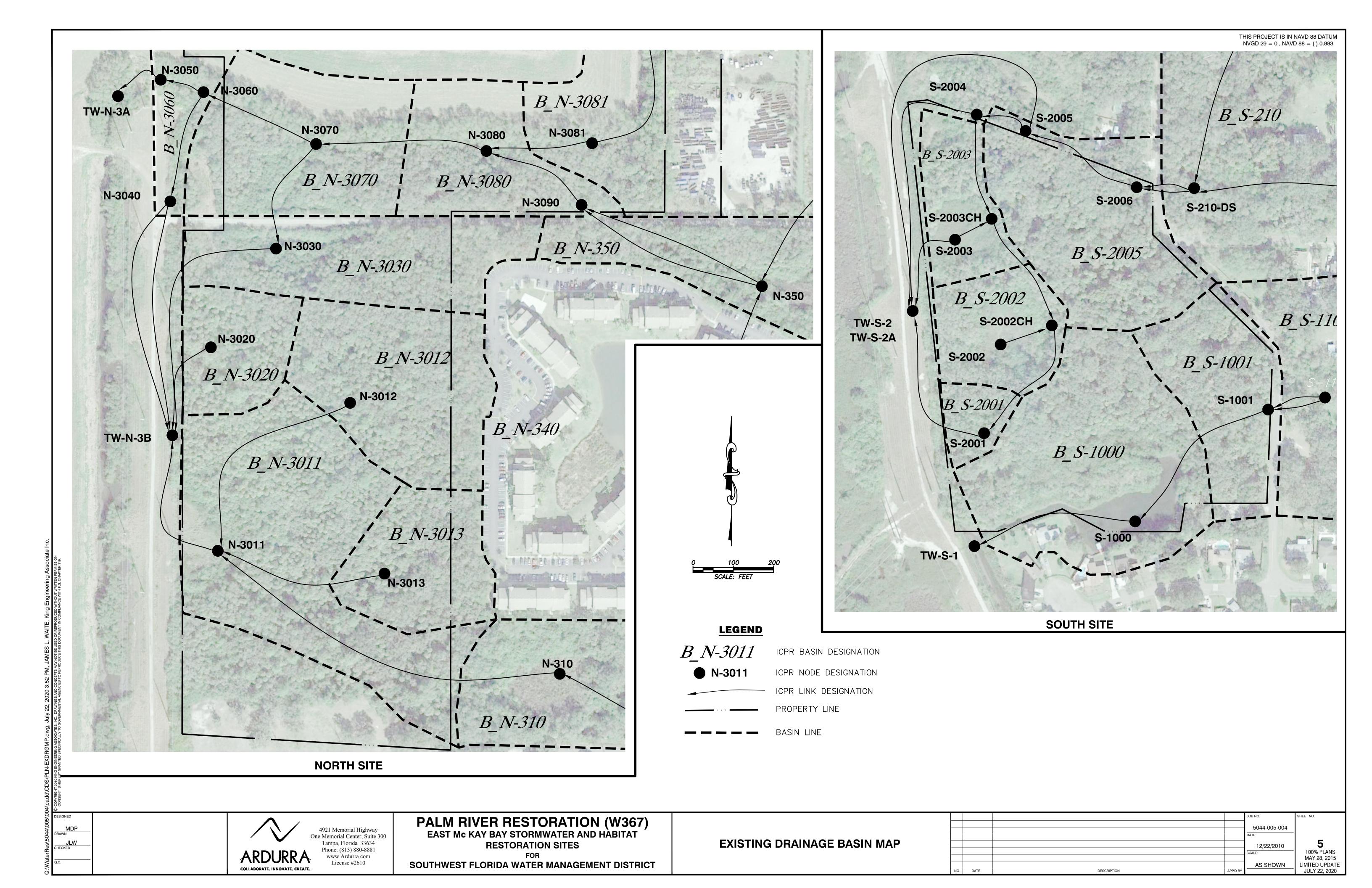
CONSTRUCTION POLLUTION PREVENTION PLAN

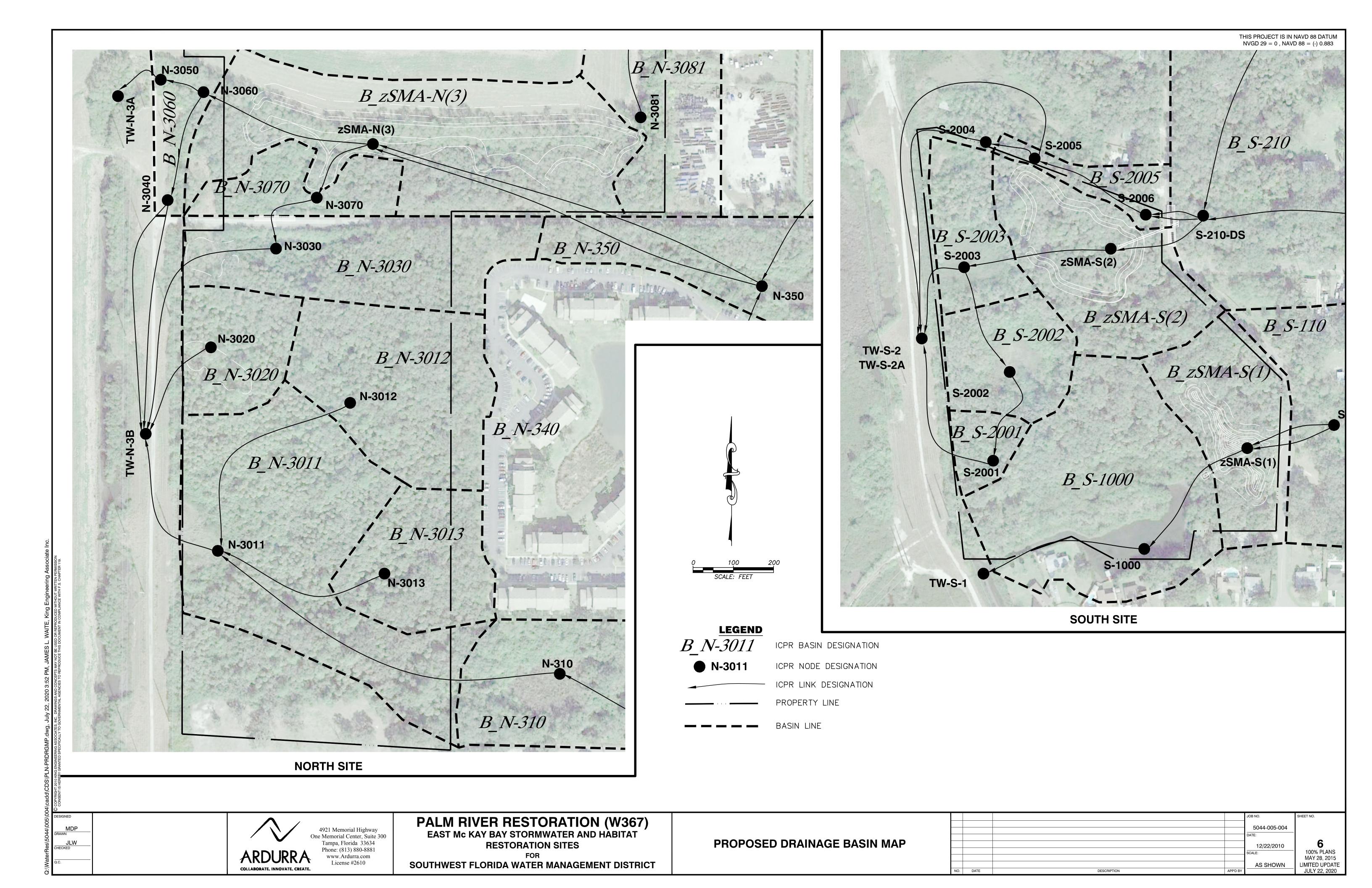
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				5044-005-004	
				DATE:	_
				12/22/2010	3
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					MAY 28, 2015
				AS SHOWN	LIMITED UPDATE
10.	DATE	DESCRIPTION	APP'D BY		JULY 22, 2020

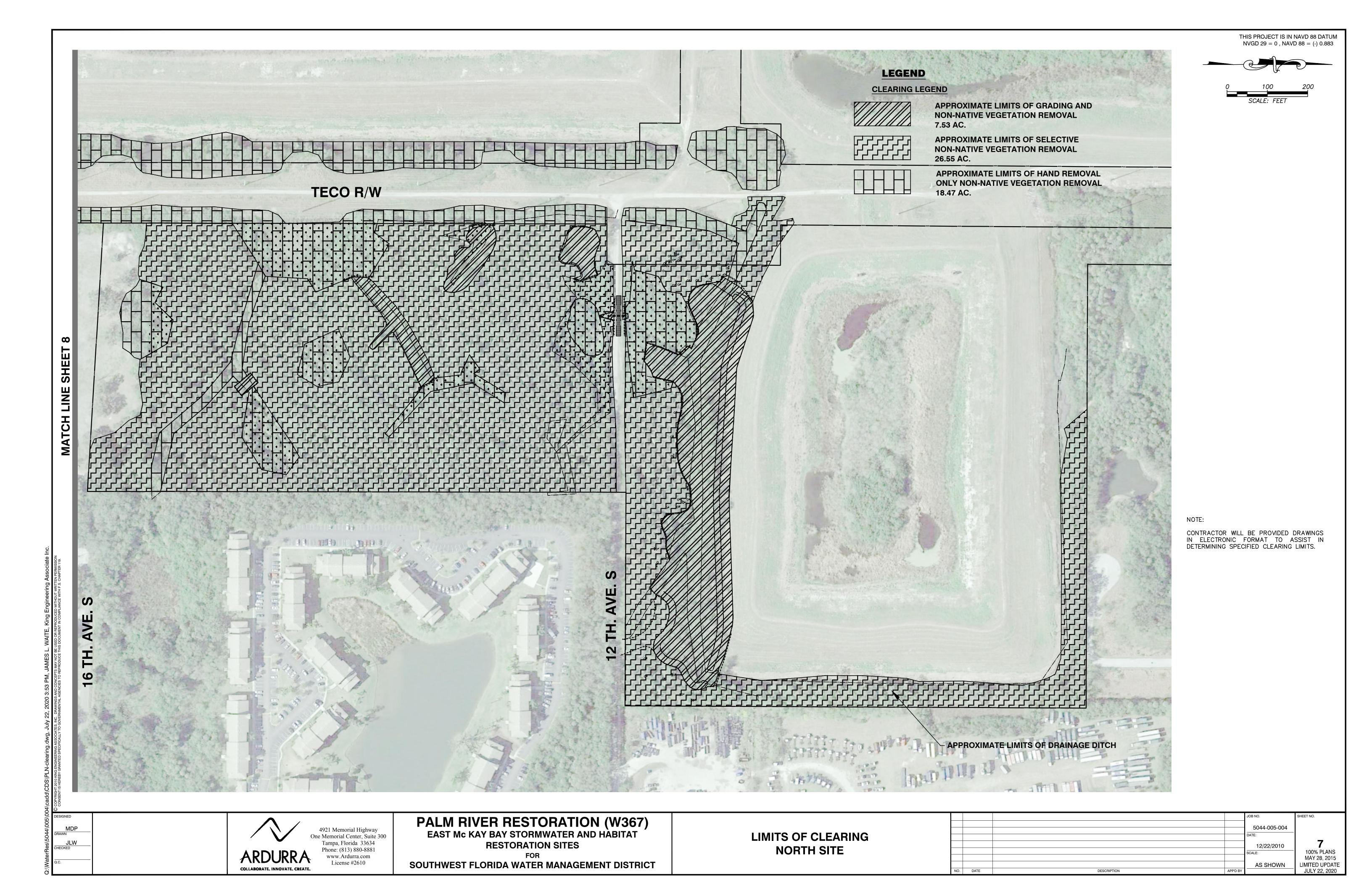
4921 Memorial Highway One Memorial Center, Suite 300 Tampa, Florida 33634 Phone: (813) 880-8881 www.Ardurra.com License #2610 COLLABORATE, INNOVATE, CREATE,

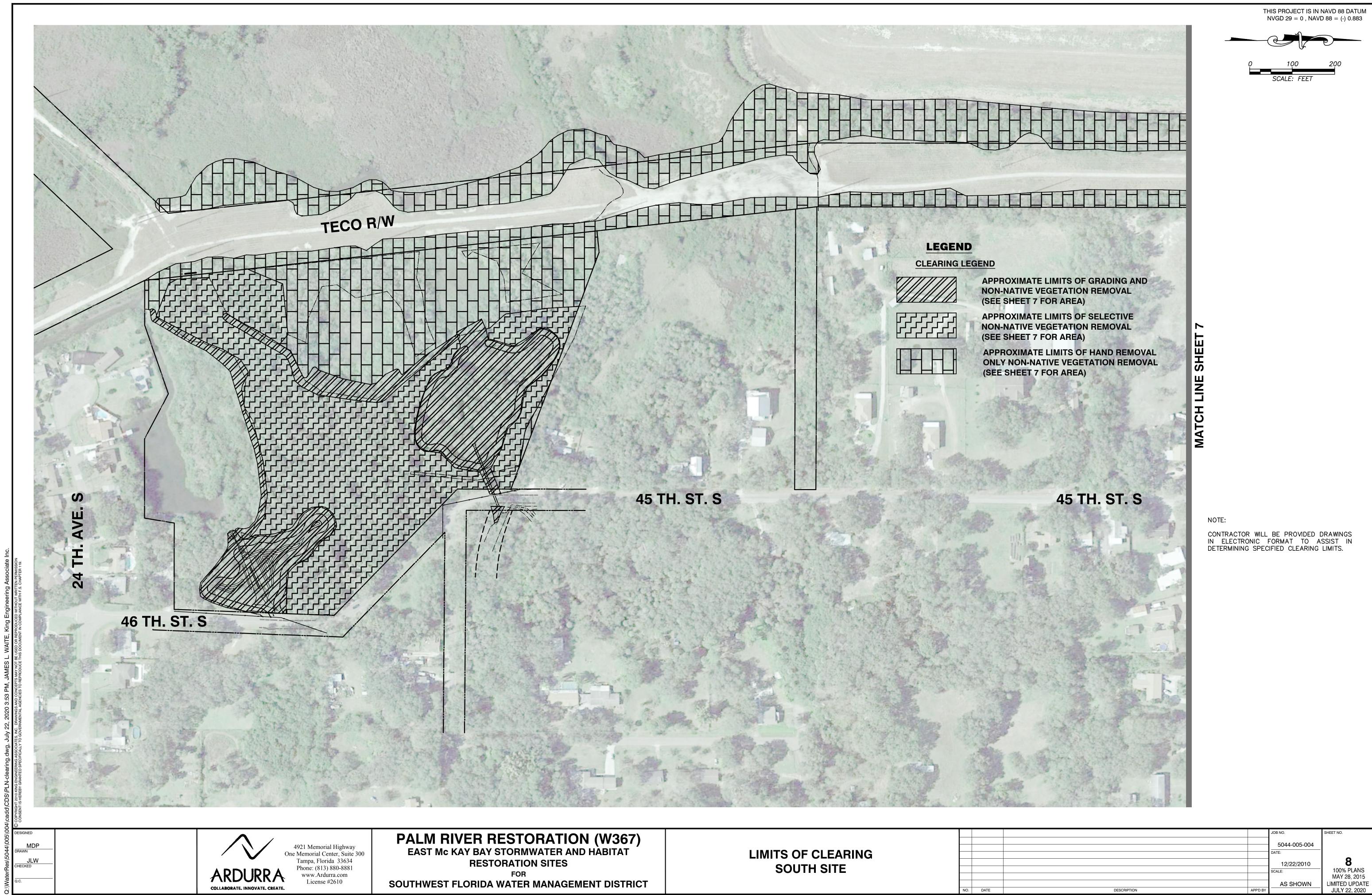


SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT



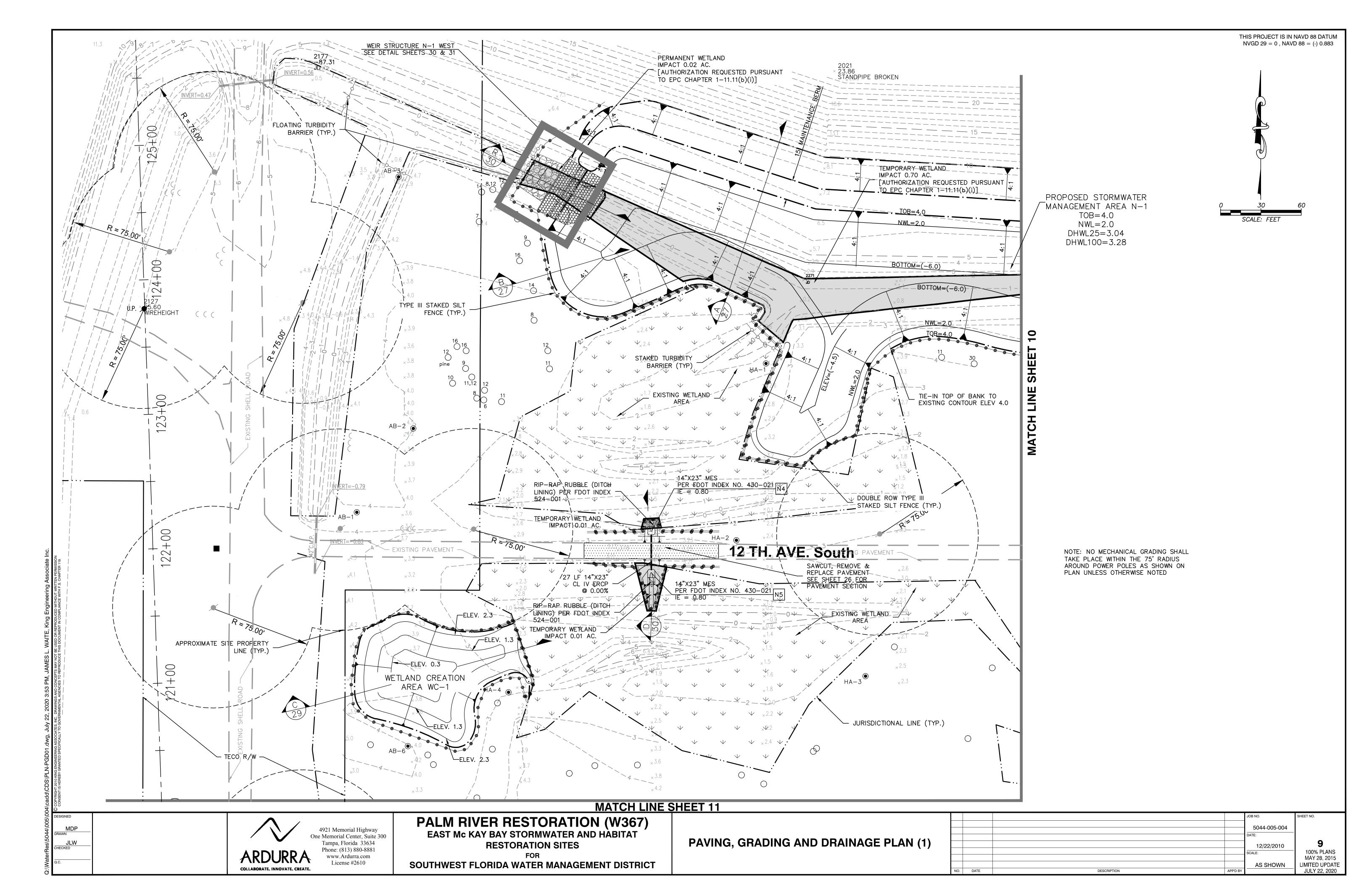


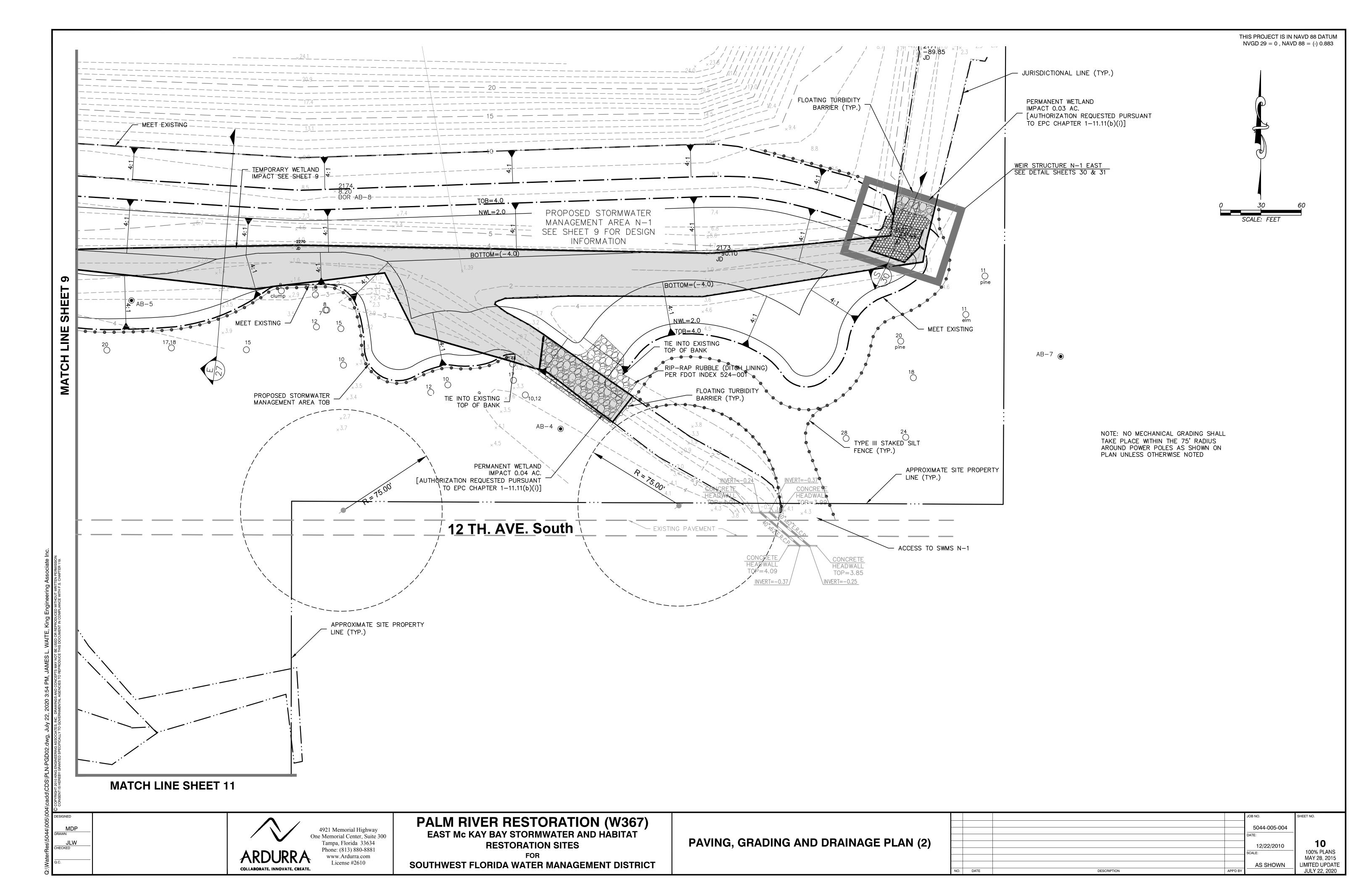


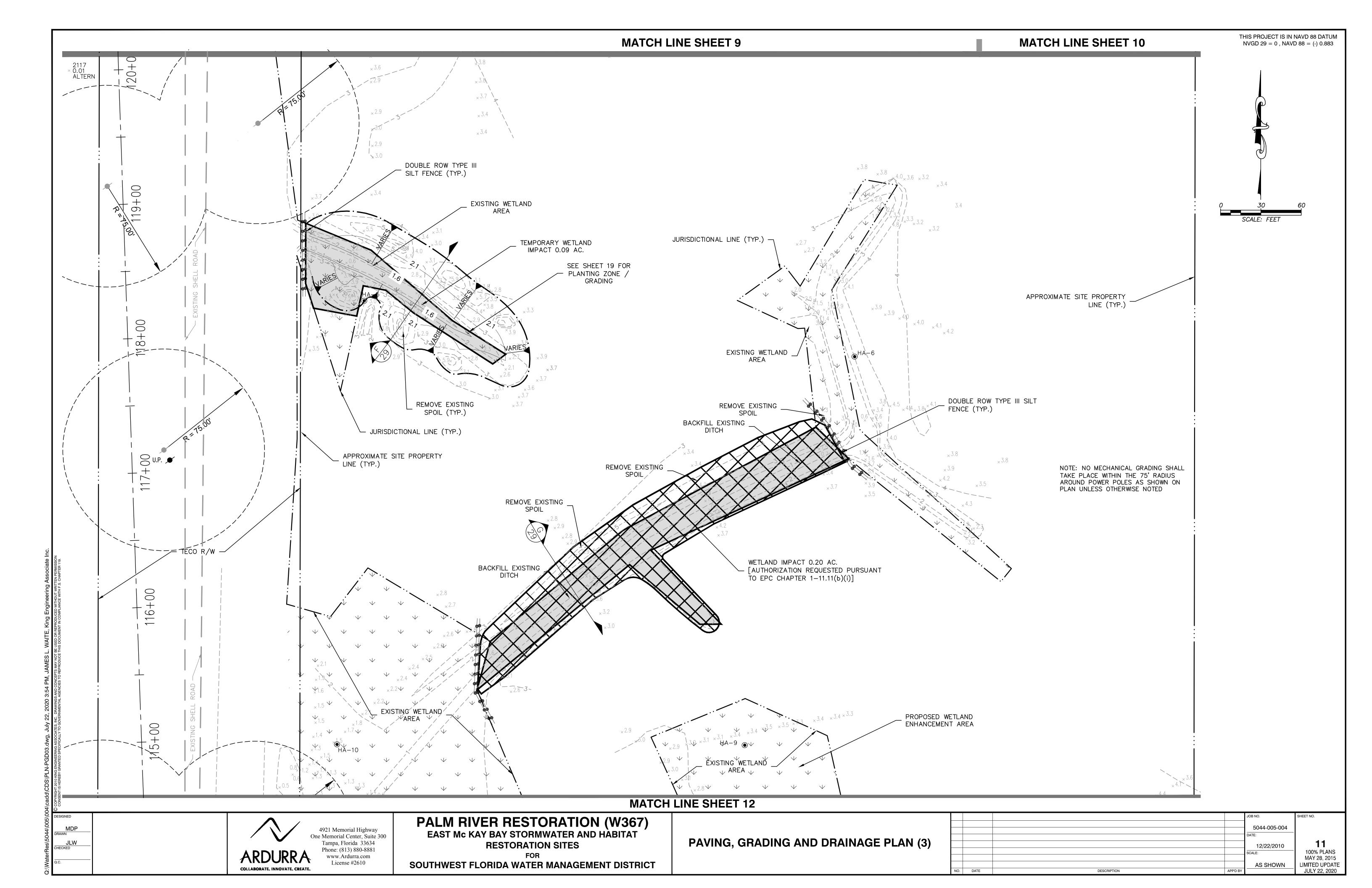


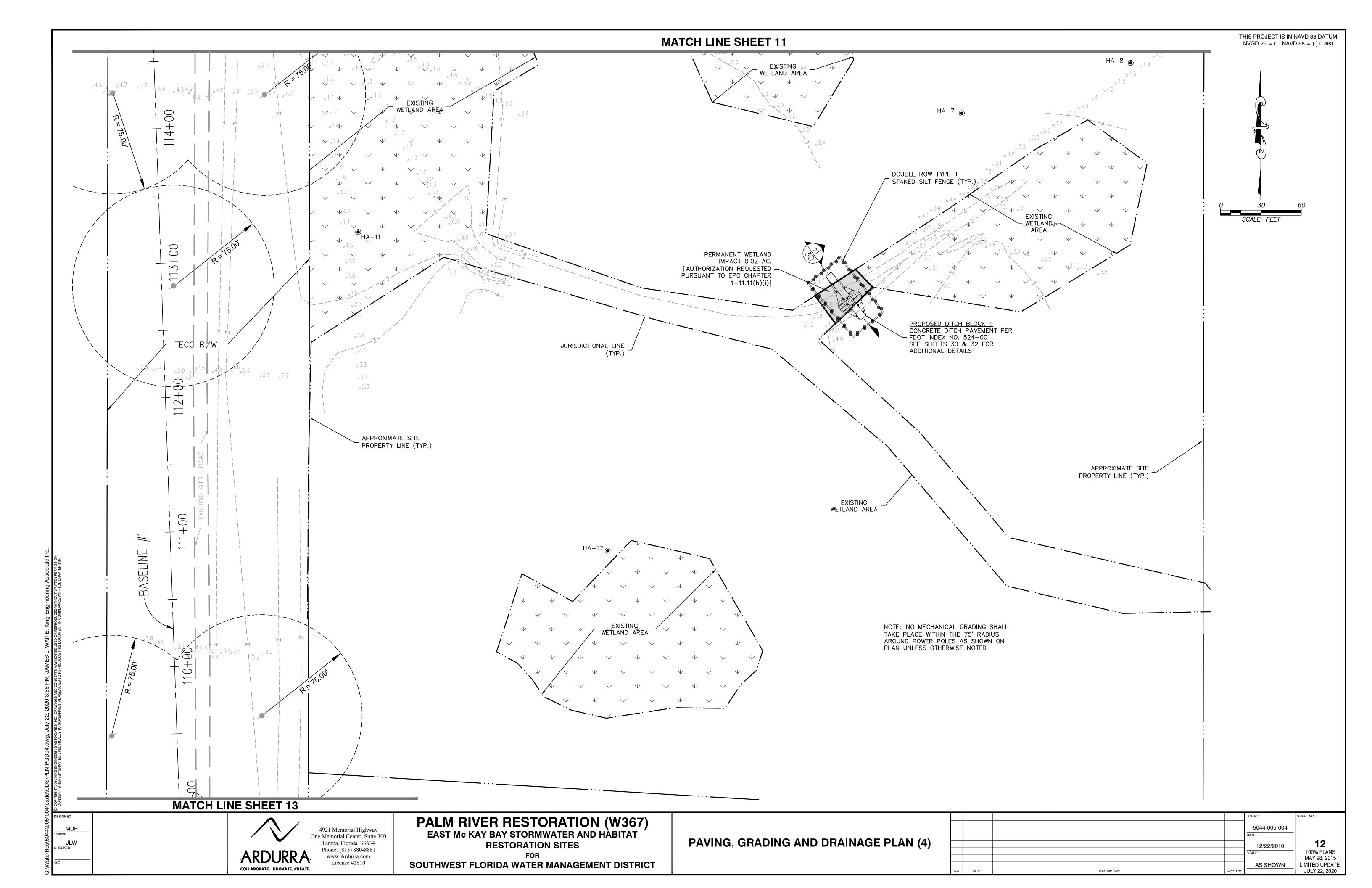
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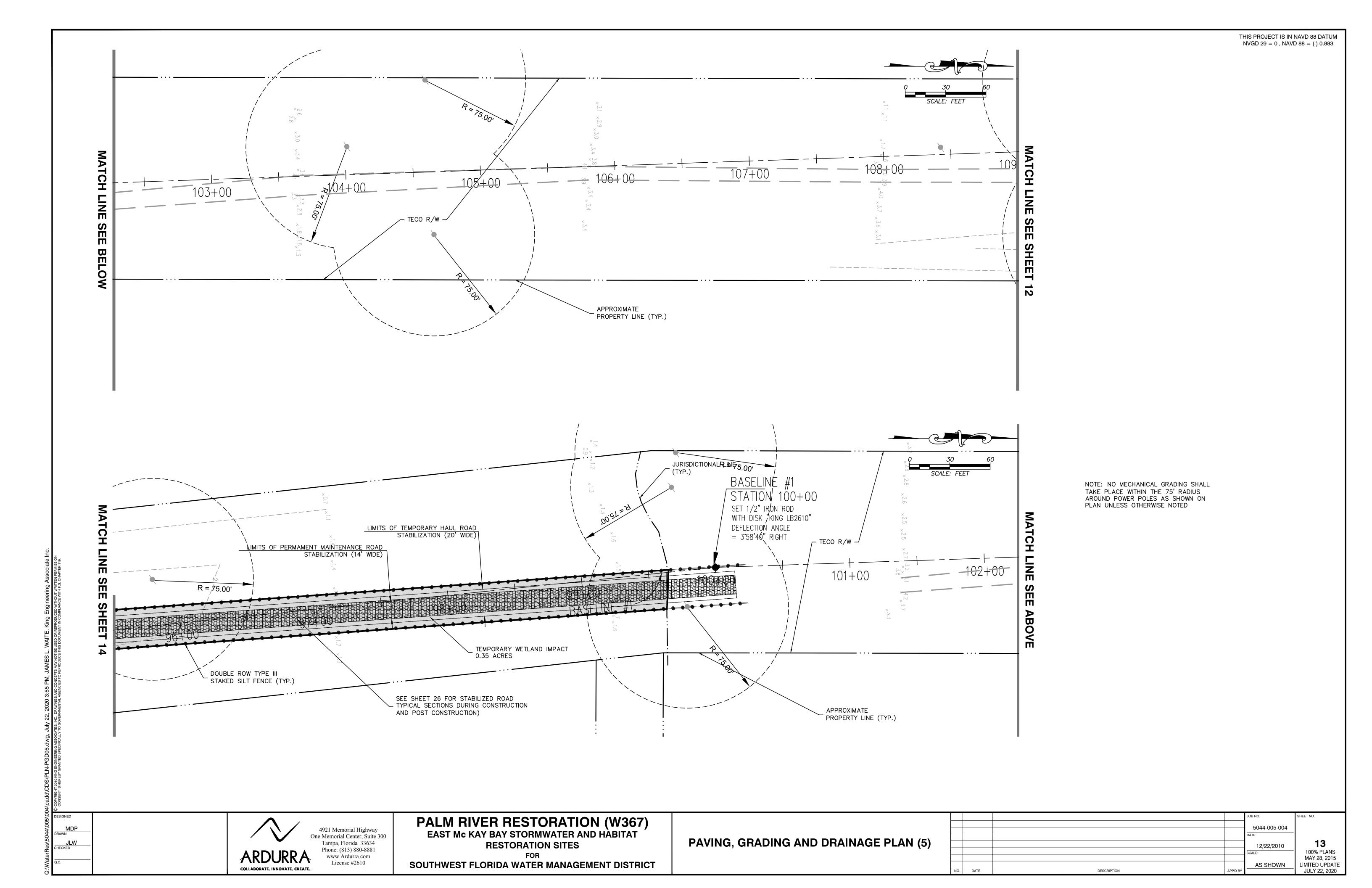
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

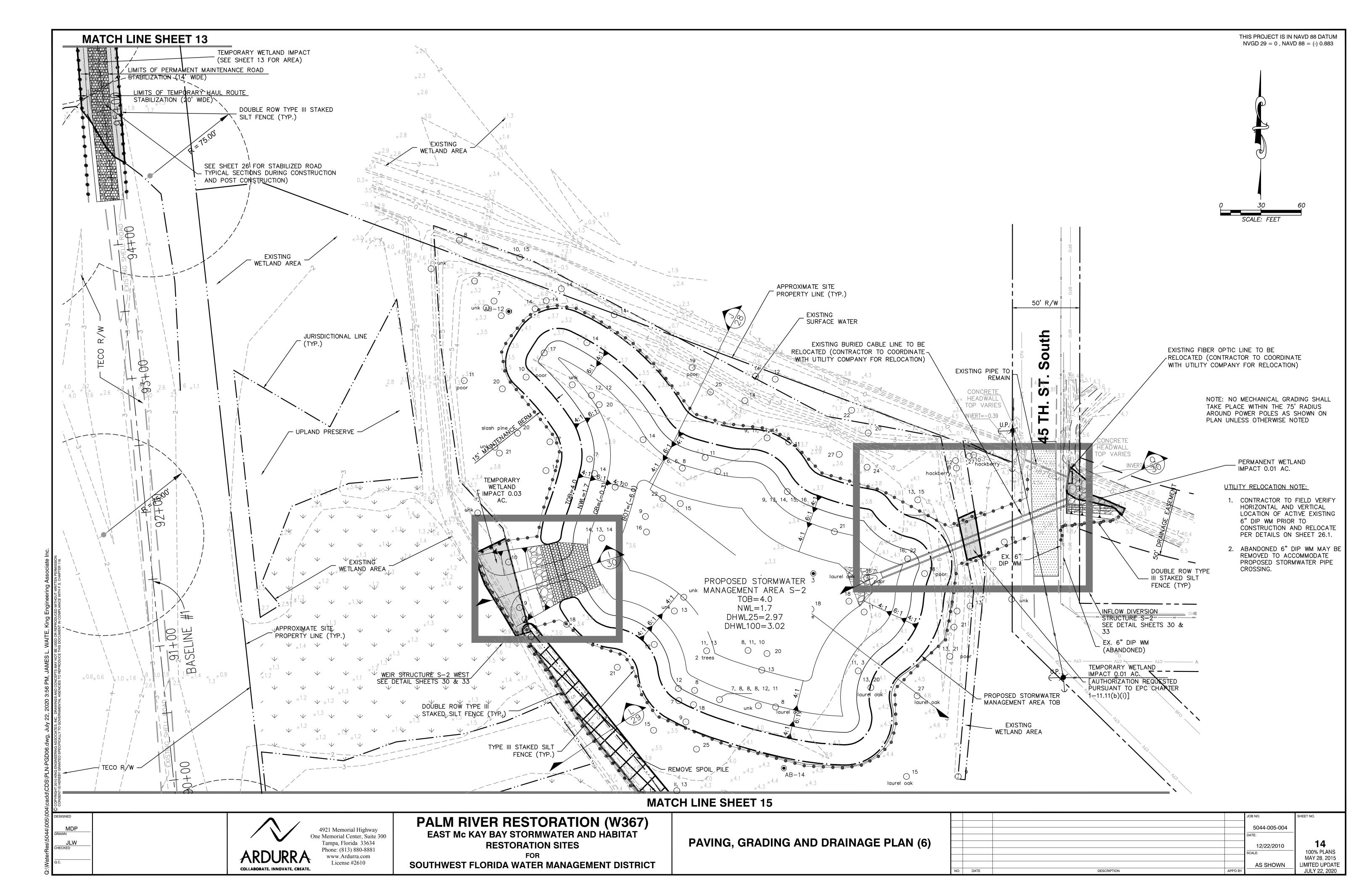


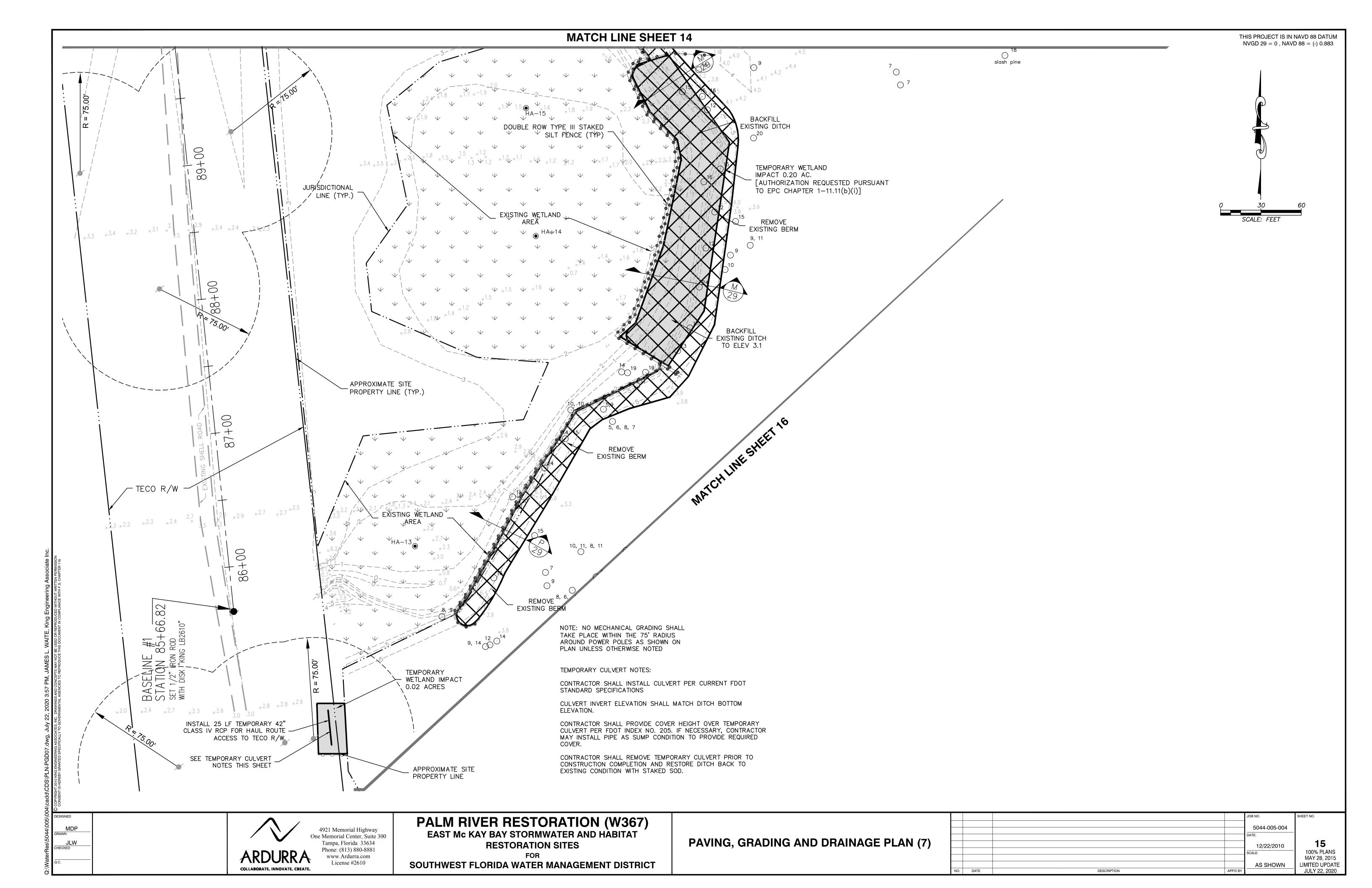


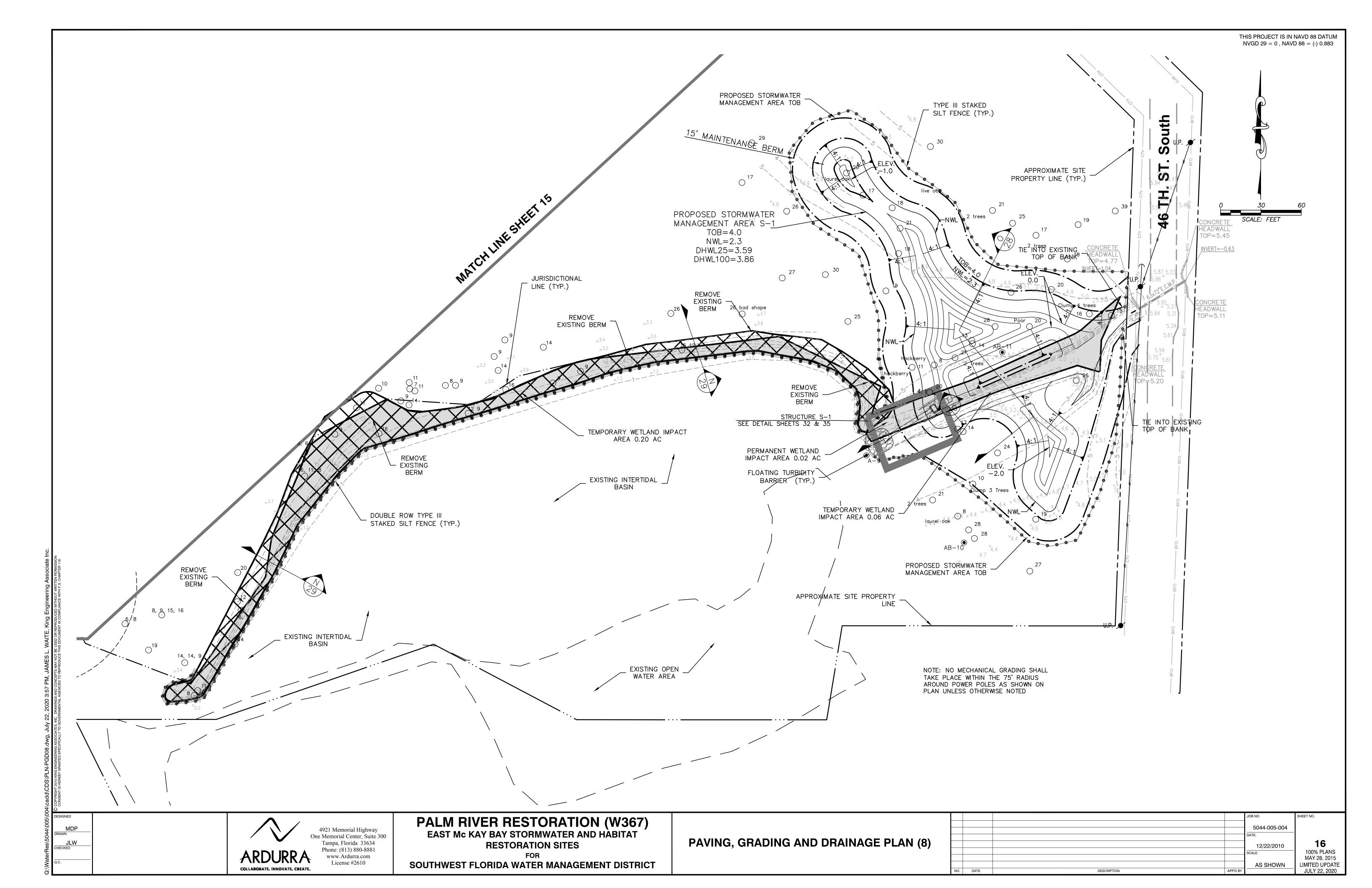


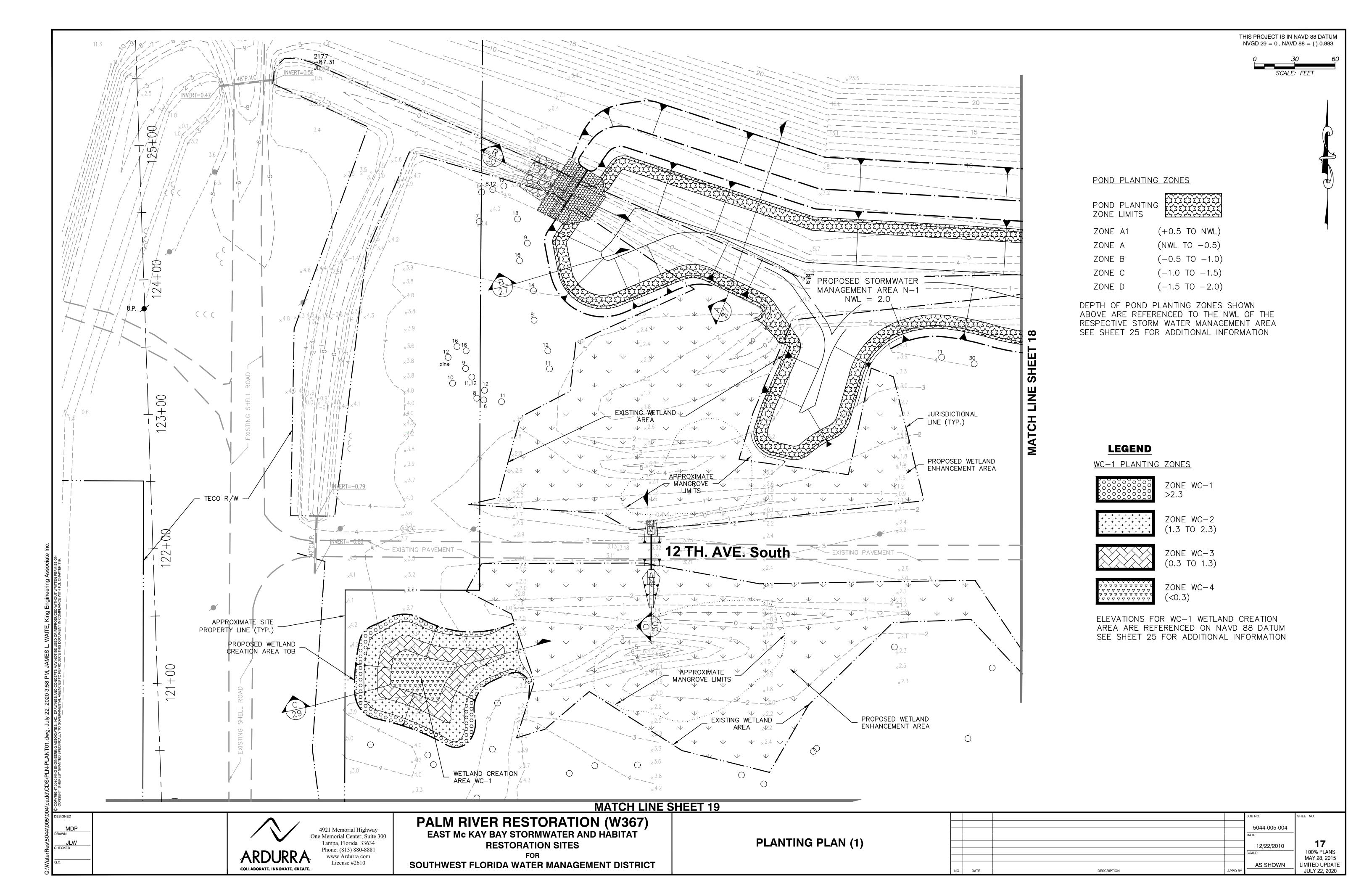


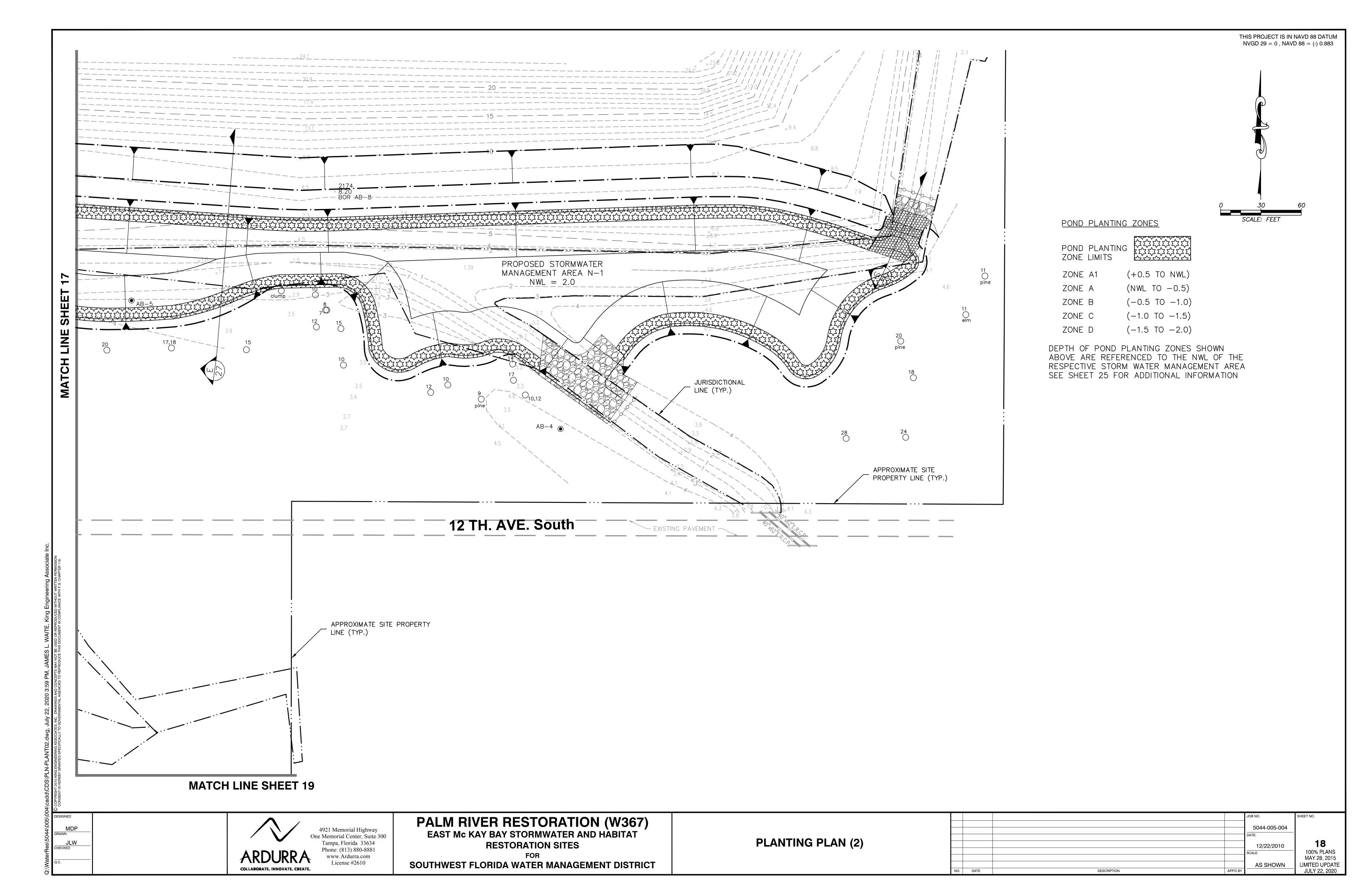


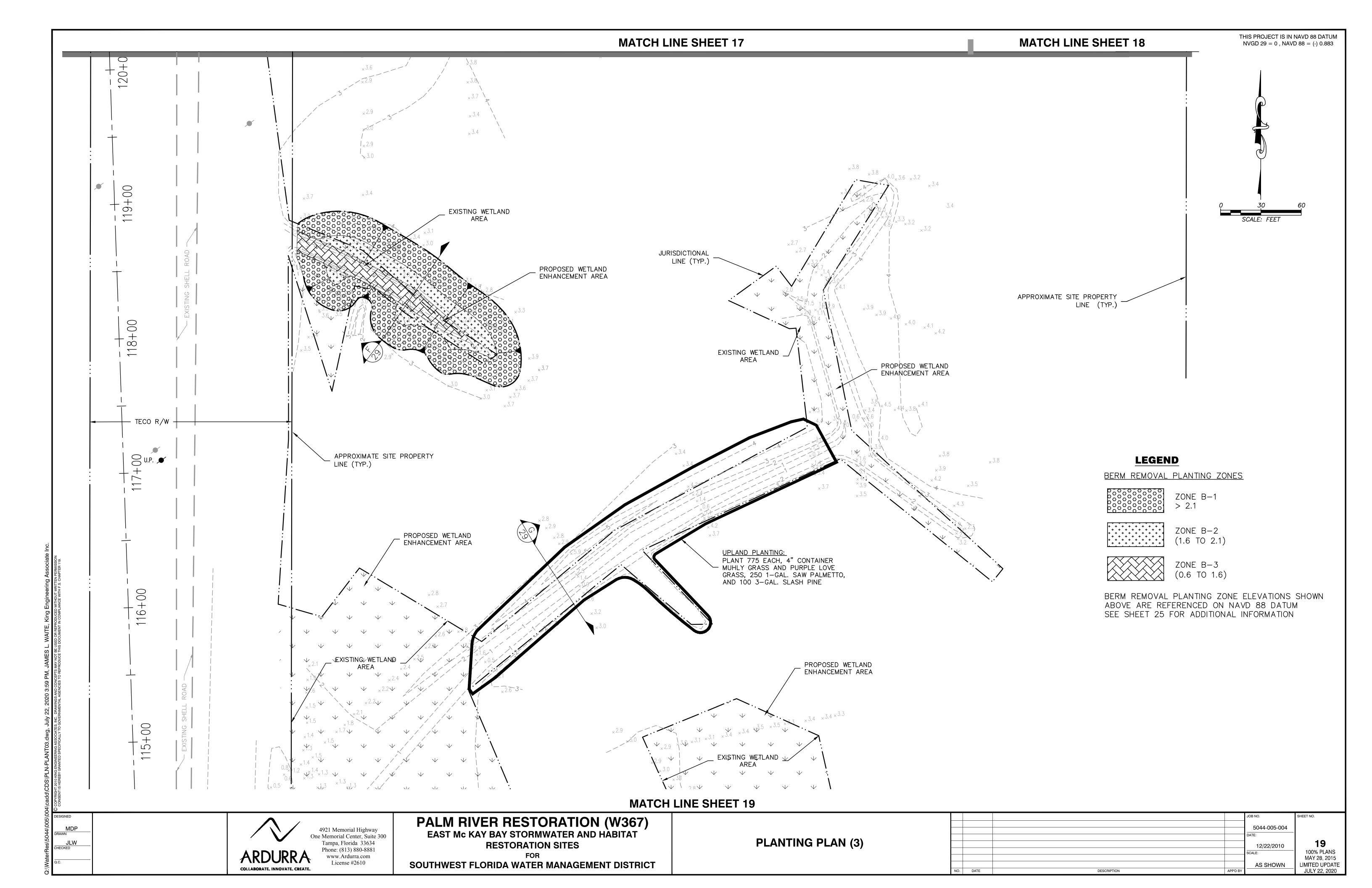


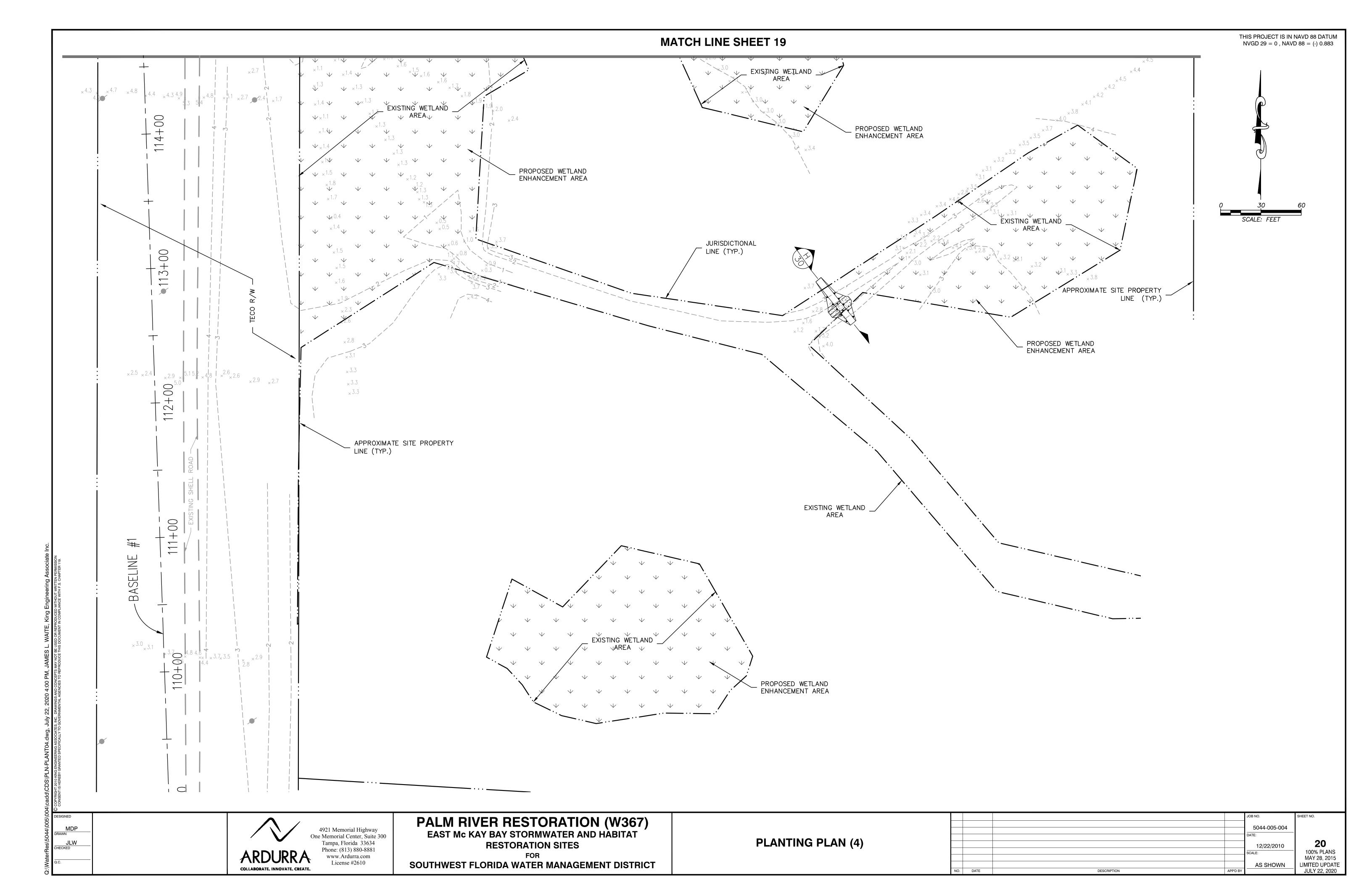


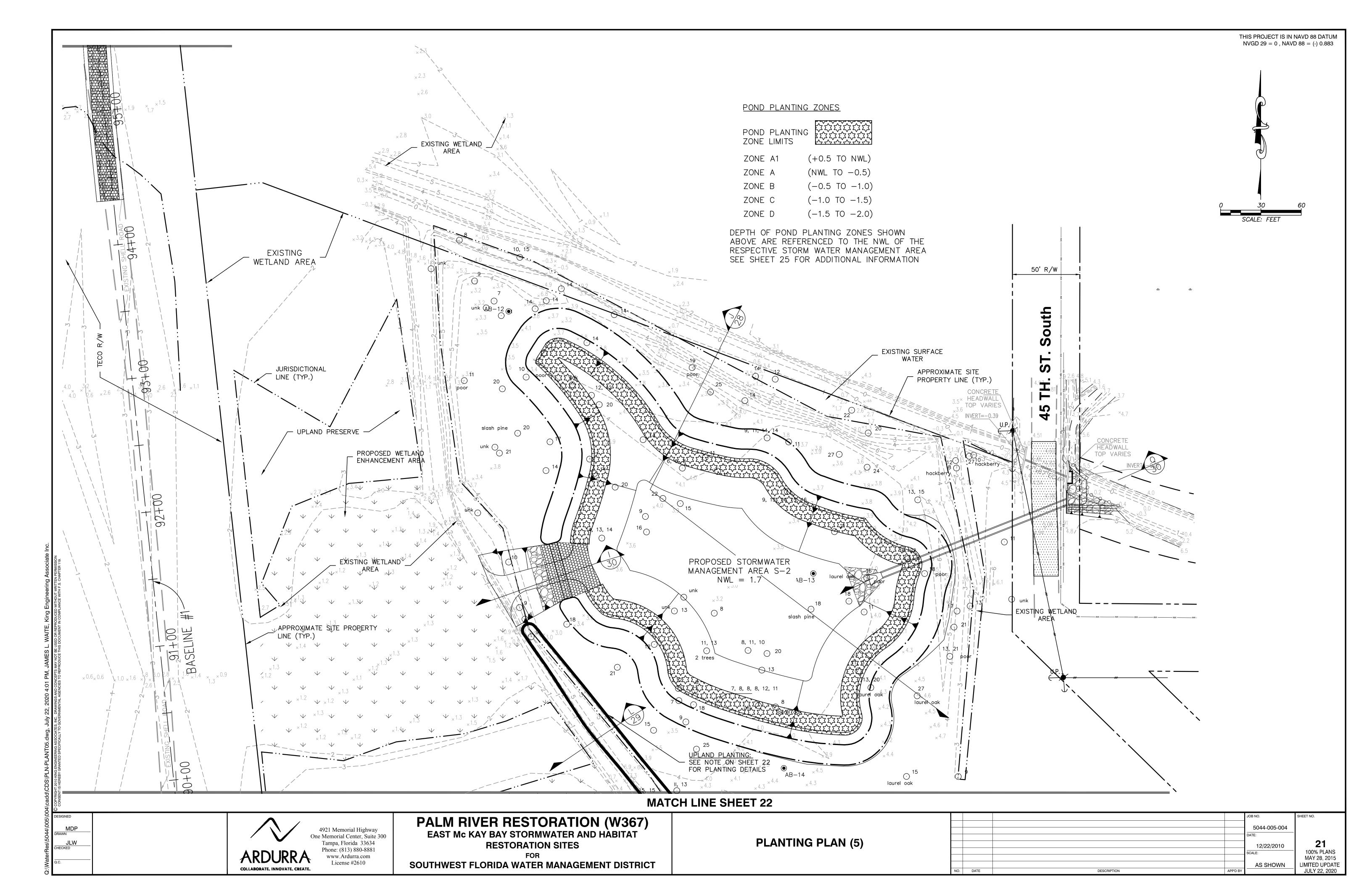


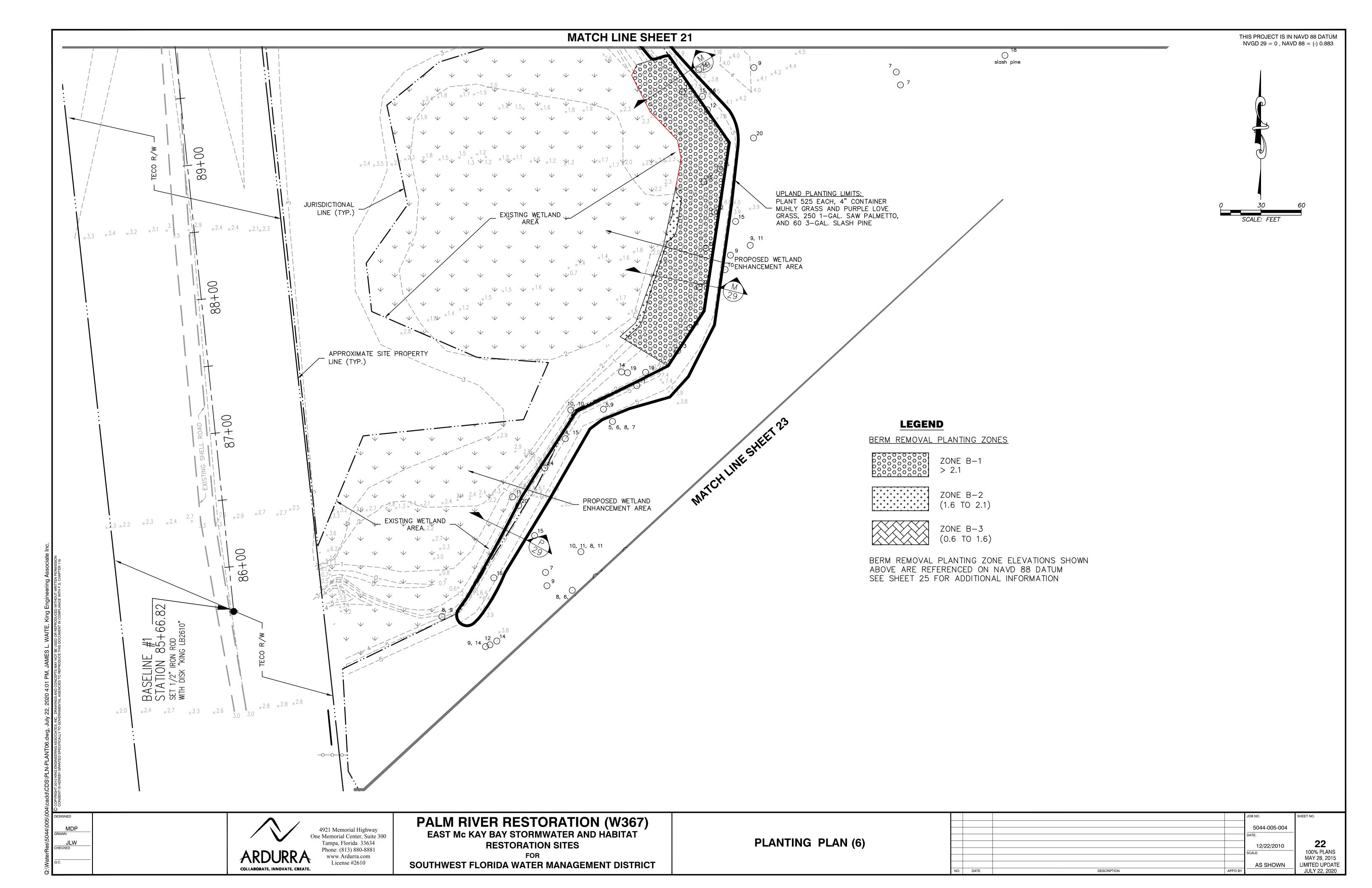


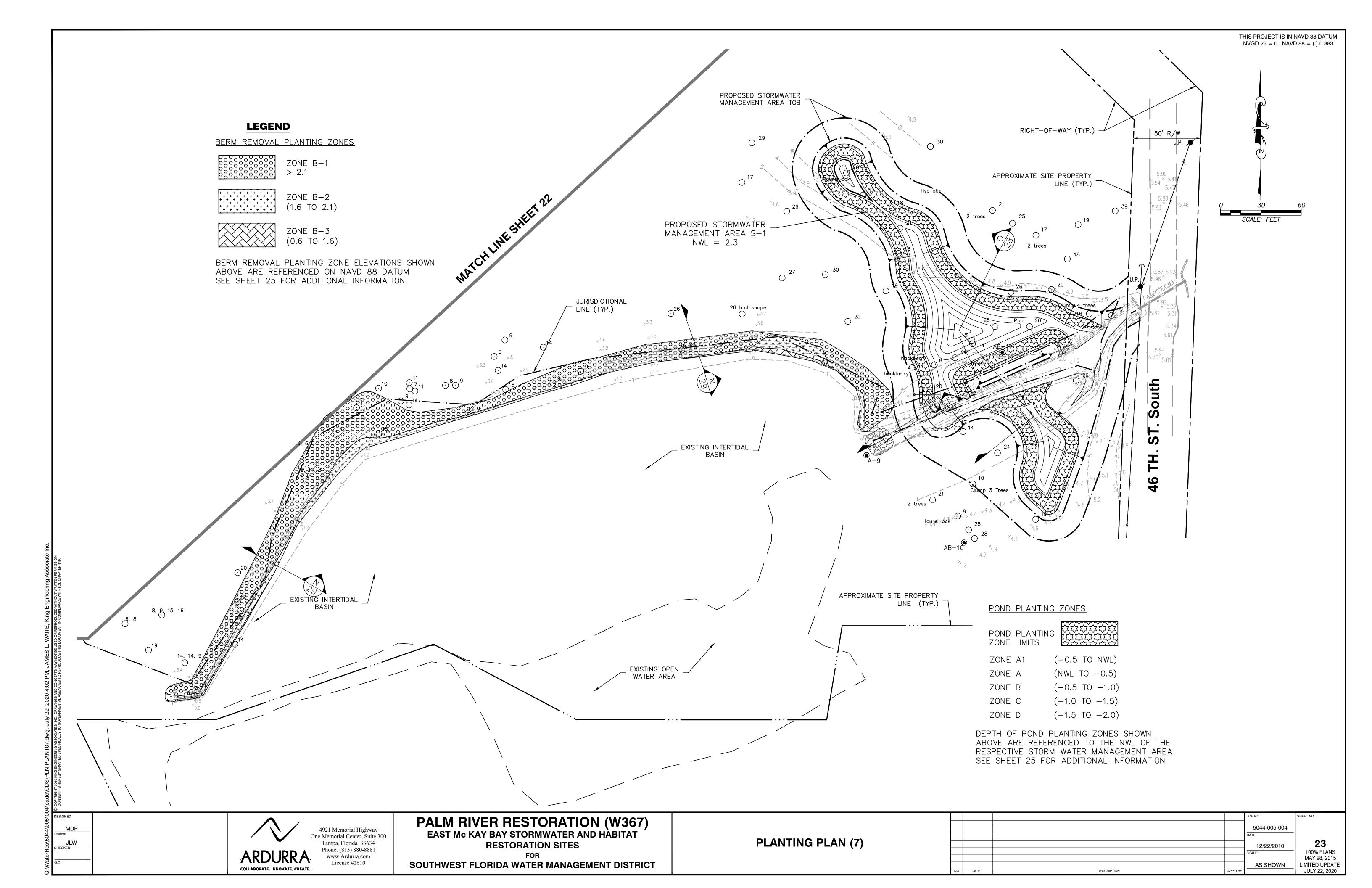


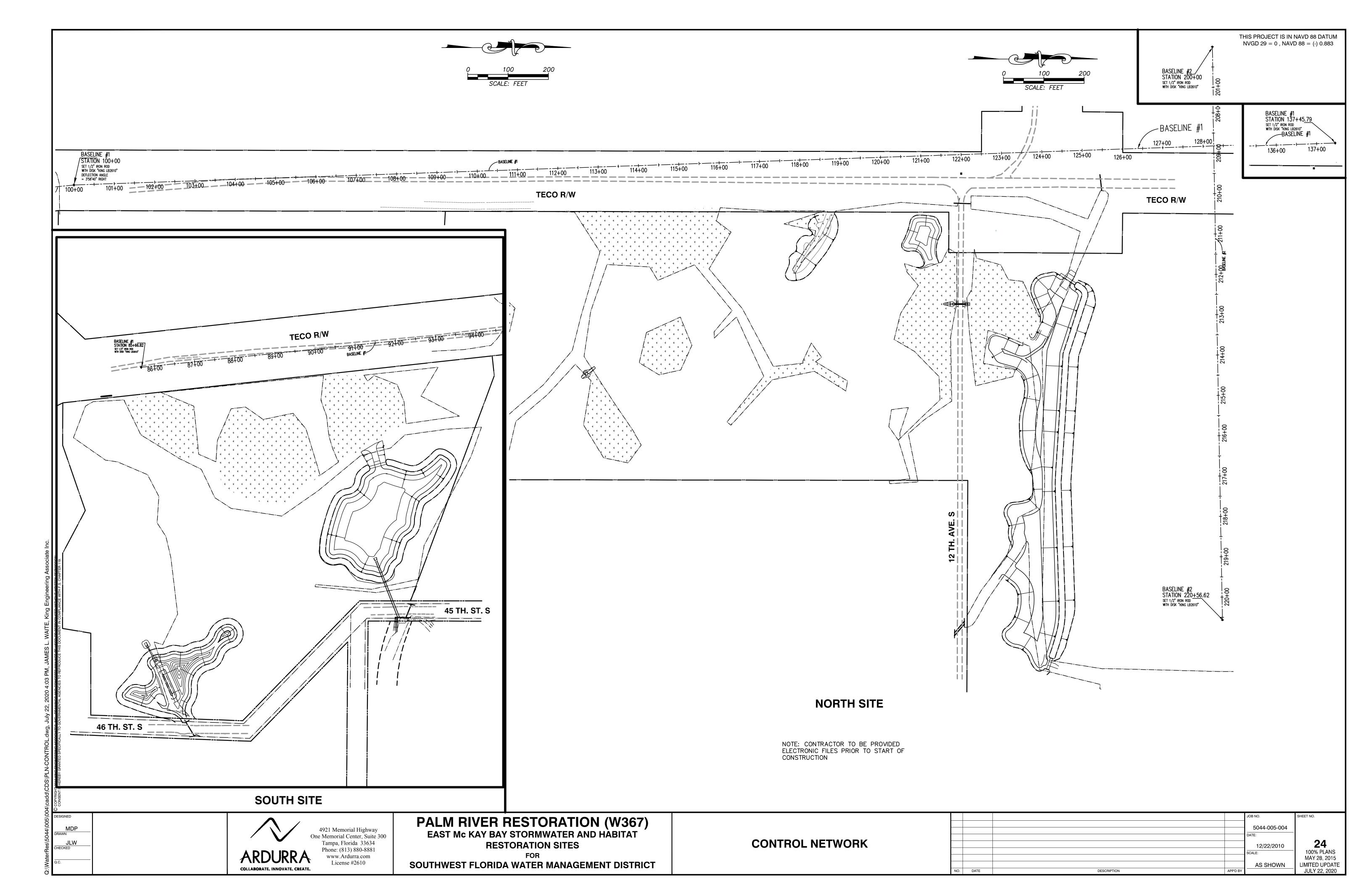






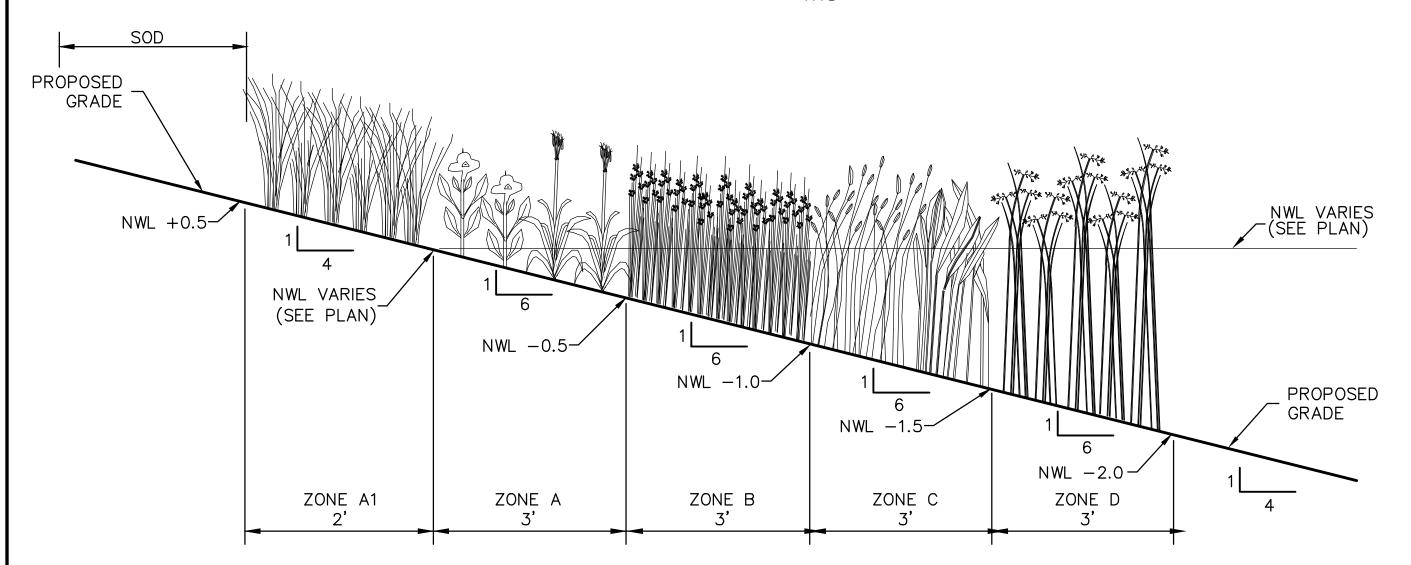




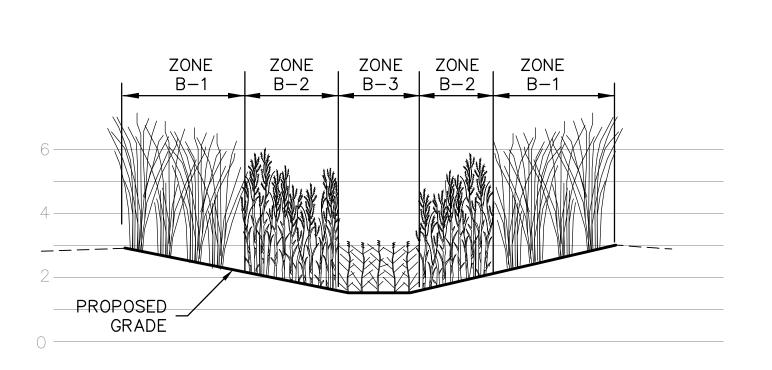


PROPOSED GRADE NWL VARIES (SEE PLAN) NWL VARIES (SEE PLAN) NWL - 0.5PROPOSED GRADE NWL -1.5 NWL - 2.0 -ZONE A1 ZONE A ZONE D ZONE B ZONE C

PONDS N-1 AND S-1 PLANTING TYPICAL SECTION NTS



POND S-2 PLANTING TYPICAL SECTION



BERM REMOVAL AND REGRADING PLANTING TYPICAL SECTION NTS

PONDS N-1, S-1 AND S-2 PLANTING SCHEDULE

ZONE	SPECIES	COMMON NAME	PLANTING DEPTH	SIZE	SPACING	N-1 # UNITS	S-1 # UNITS	S-2 # UNITS	STRATUM	% COVER
A1	SPARTINA BAKERI	SAND CORDGRASS	+0.50 TO NWL	4" POT	3' O.C.	483	188	198	G	80
A	CANNA FLACCIDA	GOLDEN CANNA	NWL TO -0.5	4" POT	3' O.C.	241	99	146	G	40
^	CRINUM AMERICANUM	STRING-LILY	NWL TO -0.5	4" POT	3' O.C.	241	99	146	G	40
В	JUNCUS ROEMERIANUS	BLACK NEEDLE RUSH	−0.5 TO −1.0	4" POT	3' O.C.	482	178	286	G	40
С	ELEOCHARIS CELLULOSA	COASTAL SPIKERUSH	−1.0 TO −1.5	4" POT	3' O.C.	241	86	140	G	40
	SAGITTARIA LANCIFOLIA	ARROWHEAD	−1.0 TO −1.5	4" POT	3' O.C.	241	86	140	G	40
D	SCIRPUS ROBUSTUS	BULRUSH	-1.5 TO -2.0	4" POT	3' O.C.	503	165	274	G	80

NOTE: DEPTH OF PLANTING ZONES IN SCHEDULE ARE IN REFERENCE TO NWL OF THE STORM WATER MANAGEMENT AREA

BERM REMOVAL AND REGRADING PLANTING SCHEDULE

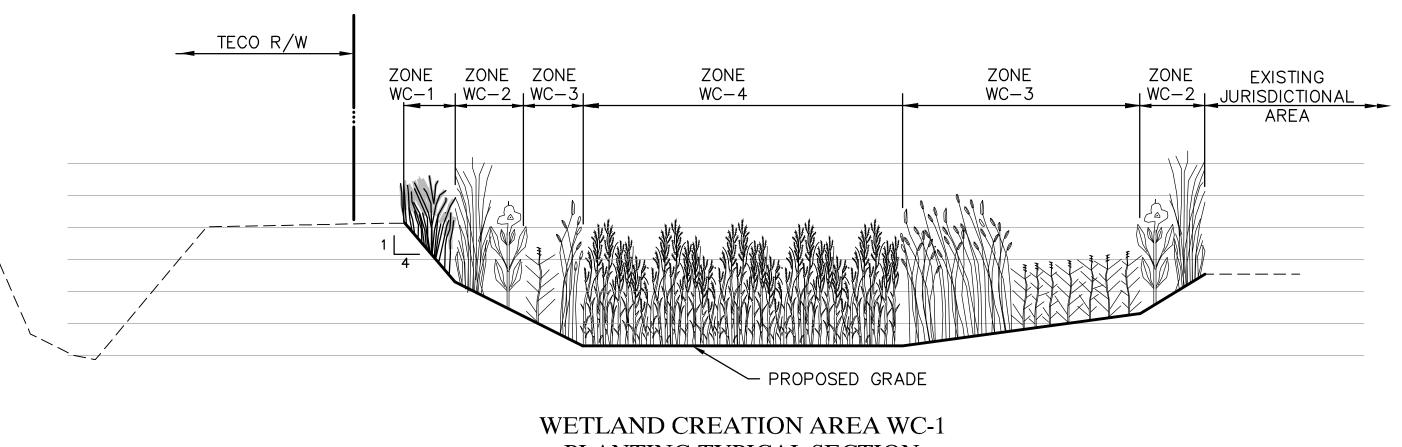
ZONE	SPECIES	COMMON NAME	PLANTING ELEVATION NAVD 88 DATUM	SIZE	SPACING	SHEET 19 # UNITS	SHEET 22 # UNITS	SHEET 23 # UNITS	STRATUM	% COVER
B-1	SPARTINA BAKERI	SAND CORDGRASS	>2.1	4" POT	3' O.C.	797	1073	907	G	80
B-2	SPARTINA PATENS	SALTMEADOW CORDGRASS	1.6 TO 2.1	4" POT	3' O.C.	137	110	24	G	40
D-2	DISTICHLIS SPICATA	SALT GRASS	1.6 TO 2.1	4" POT	3' O.C.	137	110	24	G	40
B-3	PASPALUM VAGINATUM	SEASHORE PASPALUM	0.6 TO 1.6	4" POT	3' O.C.	210	30	10	G	40
	JUNCUS ROEMERIANUS	BLACK NEEDLE RUSH	0.6 TO 1.6	4" POT	3' O.C.	210	30	10	G	40

WETLAND CREATION AREA WC-1 PLANTING SCHEDULE

	ZONE	SPECIES	COMMON NAME	PLANTING ELEVATION NAVD 88 DATUM	SIZE	SPACING	NO # UNITS	STRATUM	% COVER
	WC-1	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	>2.3	4" POT	3' O.C.	190	G	80
Ī	WC-2	SPARTINA BAKERI	SAND CORDGRASS	1.8 TO 2.3	4" POT	3' O.C.	181	G	40
	WC Z	CANNA FLACCIDA	GOLDEN CANNA	1.3 T 1.8	4" POT	3' O.C.	181	G	40
	\MC 7	PASPALUM VAGINATUM	SEASHORE PASPALUM	0.8 TO 1.3	4" POT	3' O.C.	119	G	40
	WC-3	ELEOCHARIS CELLULOSA	COASTAL SPIKERUSH	0.3 TO 0.8	4" POT	3' O.C.	119	G	40
	WC-4	SCIRPUS ROBUSTUS	BULRUSH	< 0.3	4" POT	3' O.C.	135	G	80

- 1) PLANTS TO BE OBTAINED FROM LOCAL, LICENSED NURSERY
- 2) ALL PLANTS WILL BE WELL ROOTED, CONTAINER GROWN MATERIAL

- 3) O.C. = ON CENTER
 4) PLANTING ELEVATION IS NAVD88 DATUM.
 5) PLANTS MAY BE INSTALLED IN NATURALISTIC GROUPINGS AT OWNERS DISCRETION.



PLANTING TYPICAL SECTION NTS

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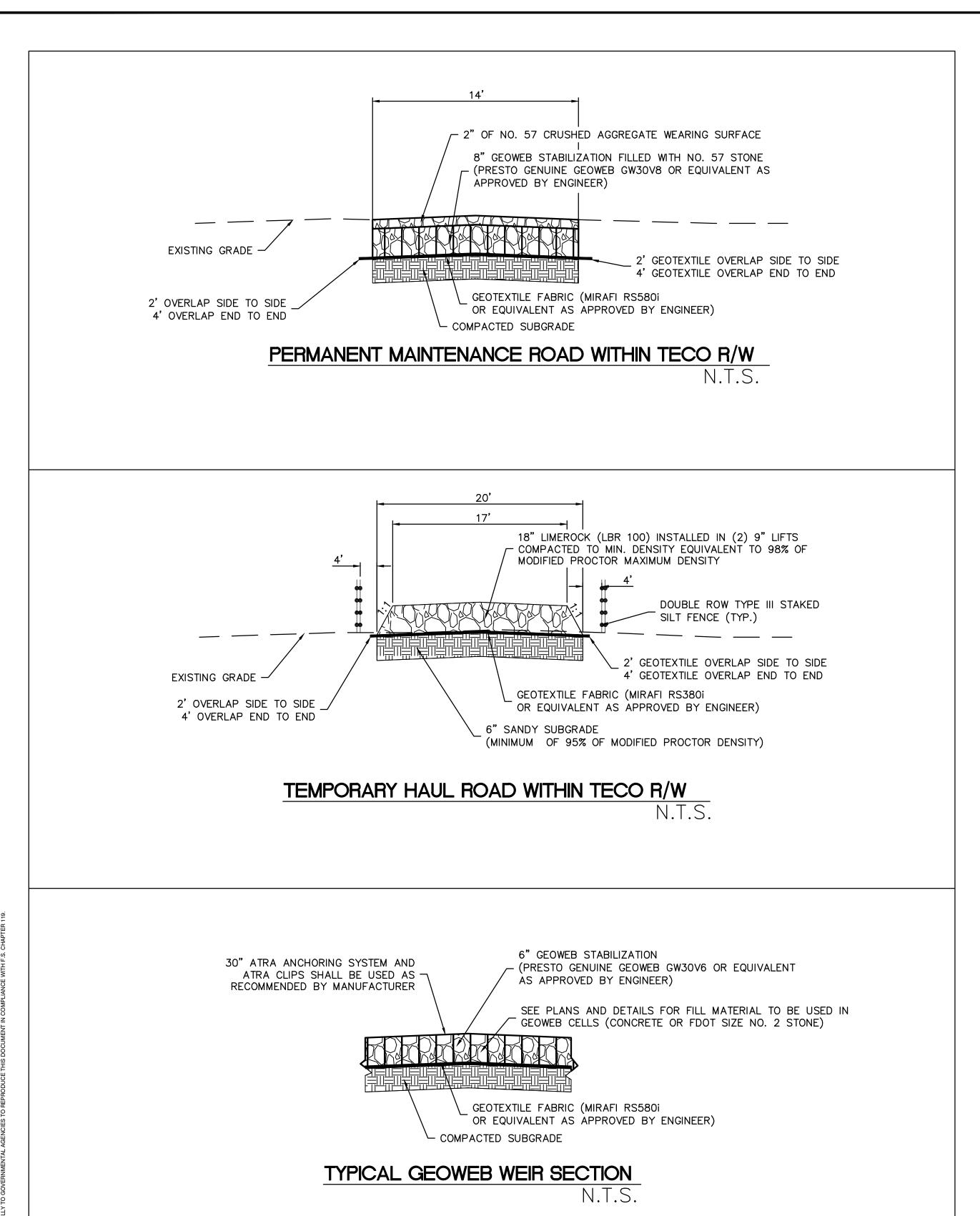
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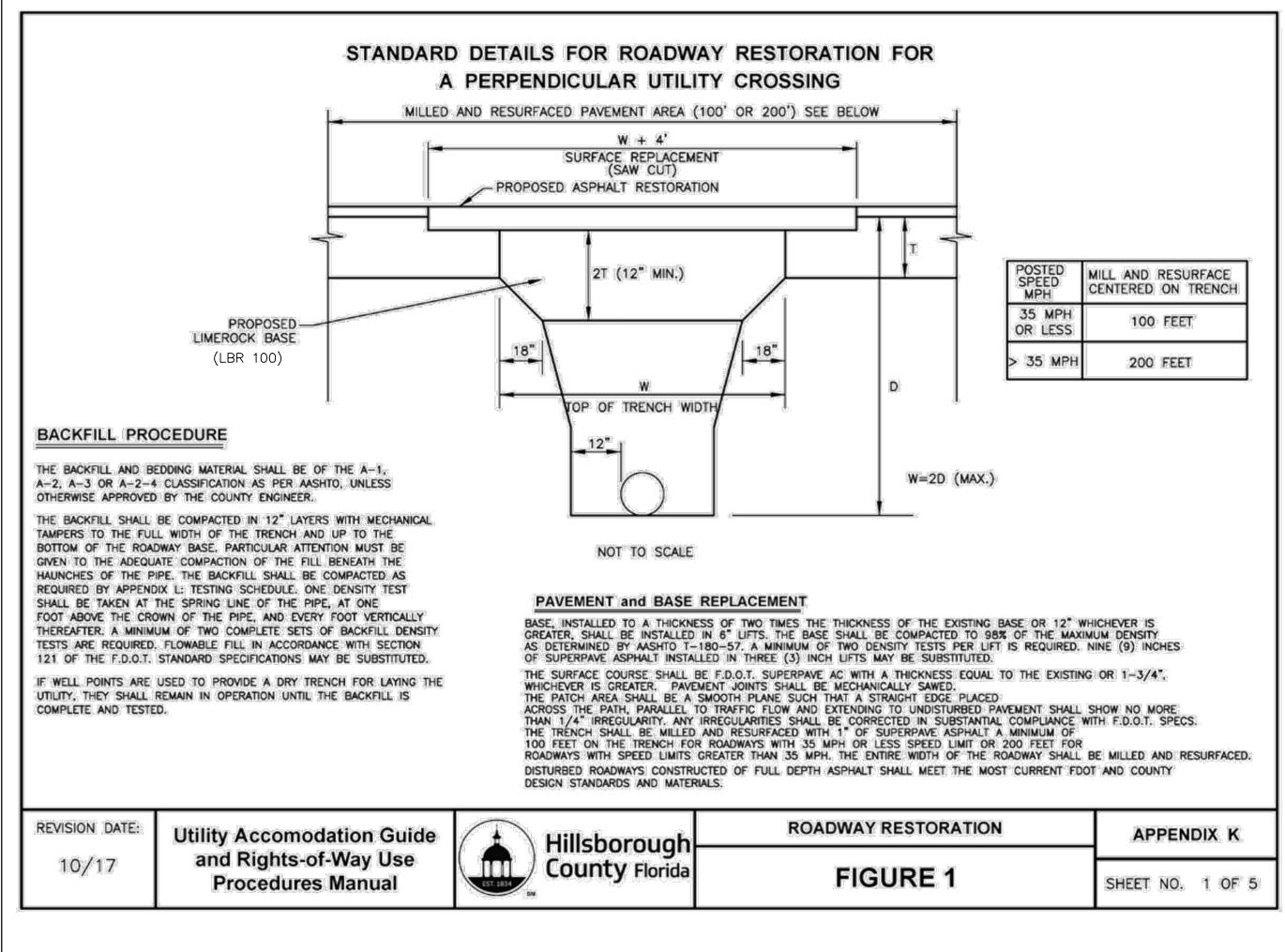
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT **RESTORATION SITES**

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PLANTING PLAN DETAILS

				JOB NO.	SHEET NO.
				5044-005-004	
				DATE:	
				12/22/2010	25
				SCALE:	100% PLANS
					MAY 28, 2015
				AS SHOWN	LIMITED UPDATE
NO.	DATE	DESCRIPTION	APP'D BY		JULY 22, 2020







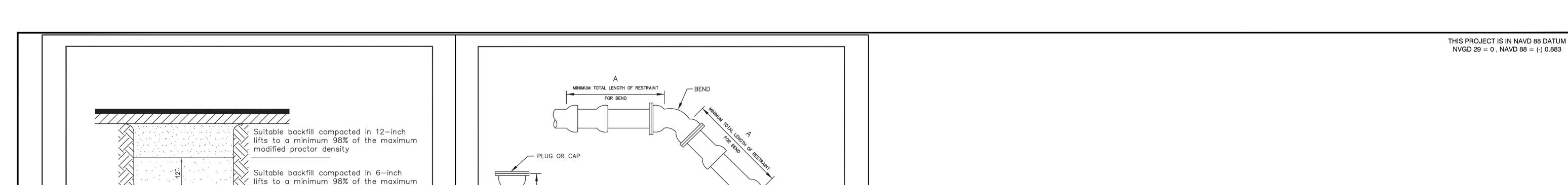
PALM RIVER RESTORATION (W367)

EAST Mc KAY BAY STORMWATER AND HABITAT RESTORATION SITES

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

TYPICAL SECTIONS

			JOB NO.	SHEET NO.
			5044-005-004	
			DATE:	
			12/22/2010	26
			SCALE:	100% PLANS
				MAY 28, 2015
			AS SHOWN	LIMITED UPDATE
DATE	DESCRIPTION APP	P'D BY		JULY 22, 2020



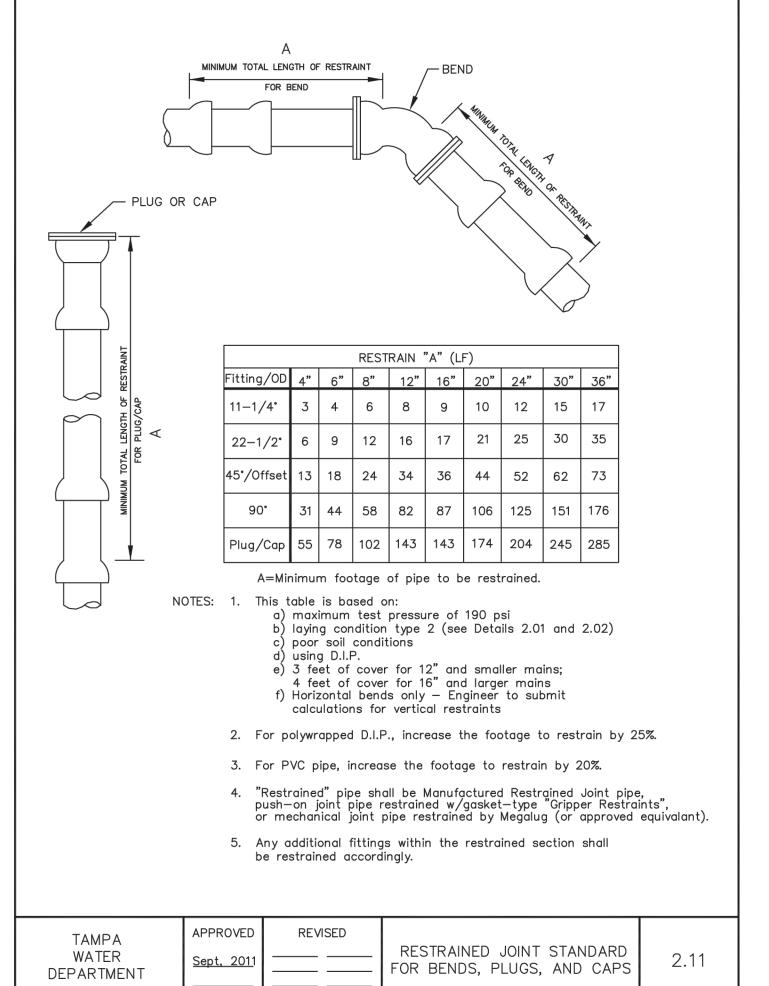
2. Ti s c 3. S fi b ir 4. N	ightly consolice this standard	date backfill to shall be utilized ards. The stan Right—of—Way ted by the Englishes, refuse, or stones, or of the Enginee	ed as material free clay, organic matter, other material that r is unsuitable. an any concrete or asphalt	

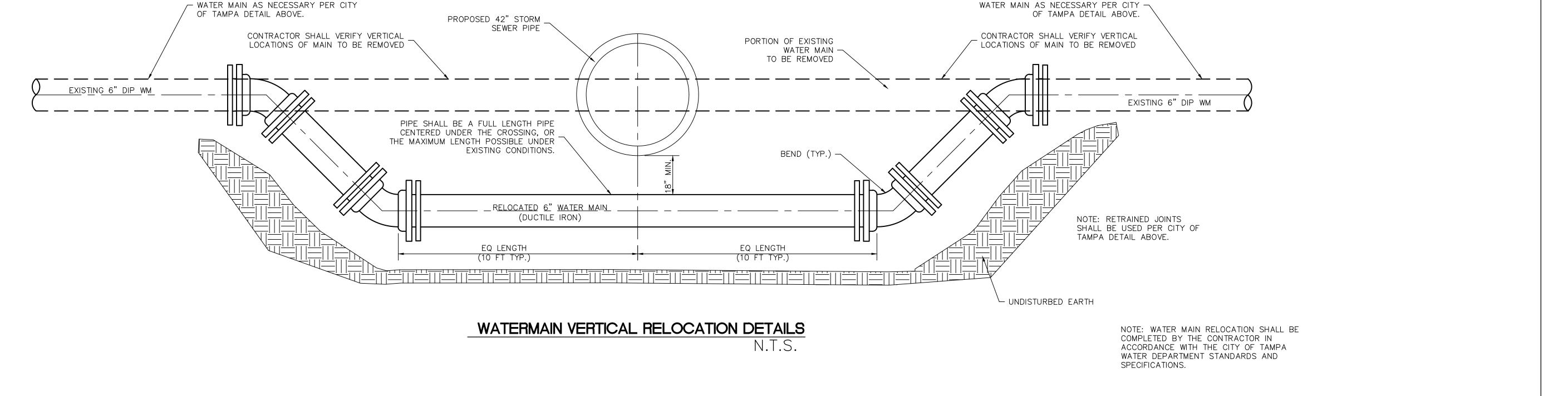
modified proctor density

to centerline

Compaction by hand in layers of

__ 6 inches, lightly consolidated





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PALM RIVER RESTORATION (W367)

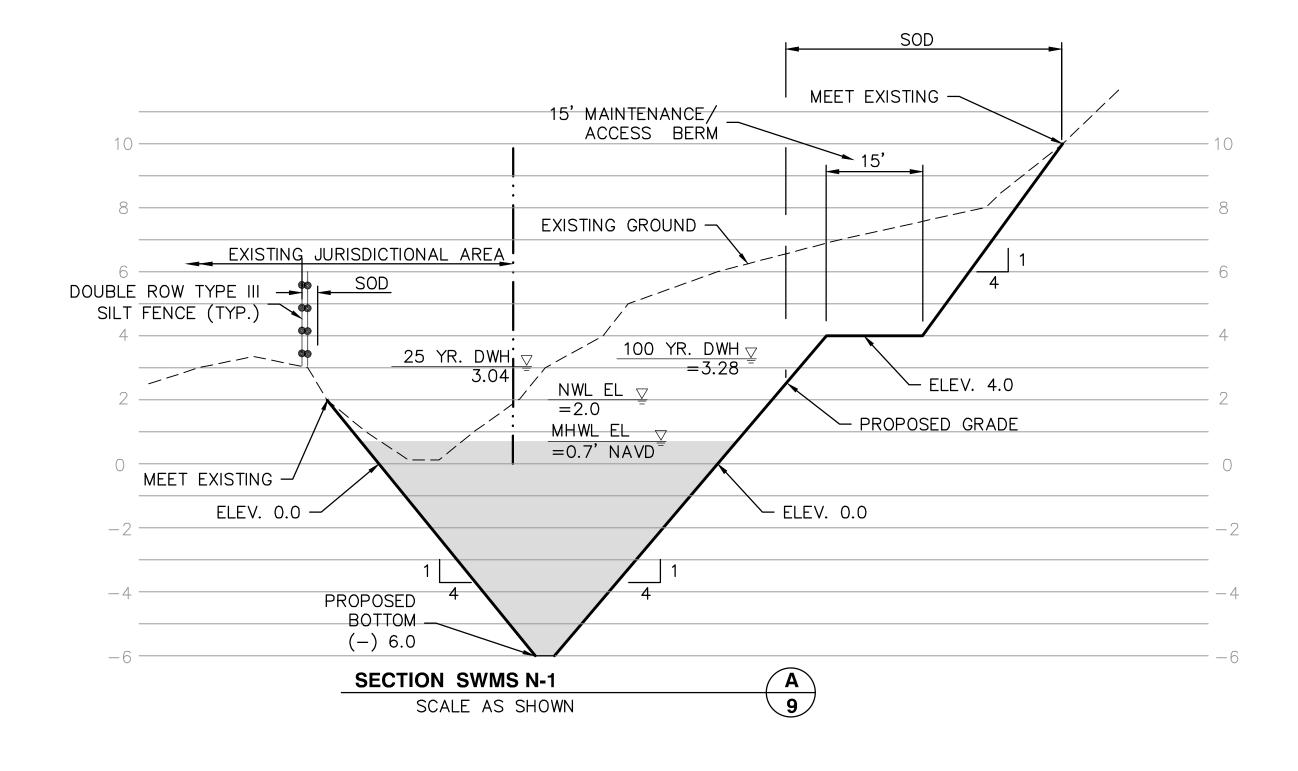
EAST Mc KAY BAY STORMWATER AND HABITAT **RESTORATION SITES**

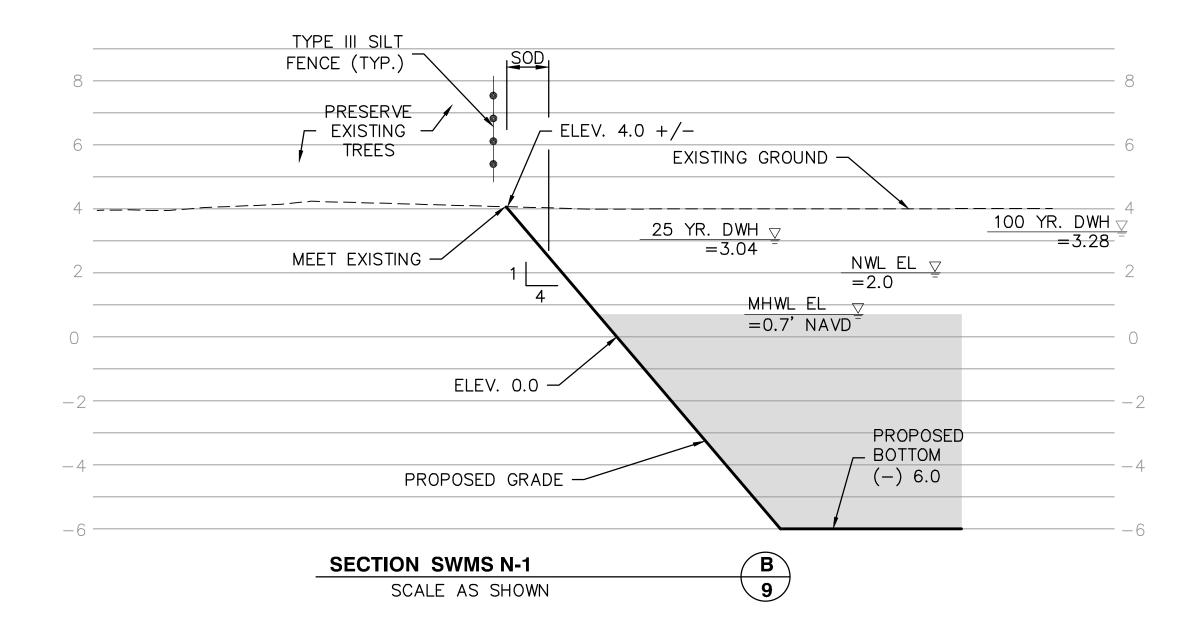
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

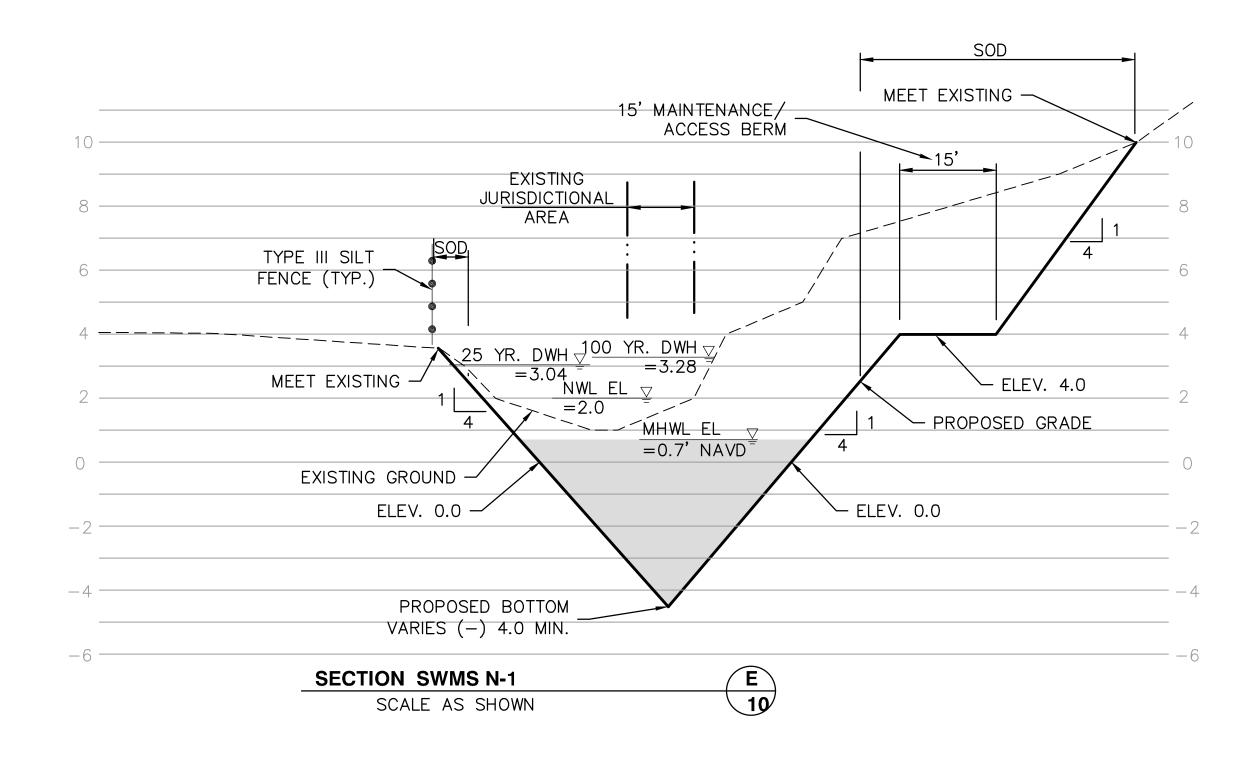
UTILITY RELOCATION DETAILS

CONTRACTOR TO RESTRAIN THE EXISTING

				JOB NO.	SHEET NO.
				5044-005-004	
				DATE:	
				12/22/2010	26.1
				SCALE:	100% PLANS
					MAY 28, 2015
				AS SHOWN	LIMITED UPDATE
NO.	DATE	DESCRIPTION	APP'D BY		JULY 22, 2020







SOD NOTE:

- 1. SOD SHALL BE PASPALUM UNLESS OTHERWISE DIRECTED BY DISTRICT REPRESENTATIVE.
- 2. LIMITS OF SOD WITHIN PONDS TO BE FROM 0.5' ABOVE NWL TO OUTSIDE LIMITS OF DISTURBANCE AS SHOWN ON SECTIONS.

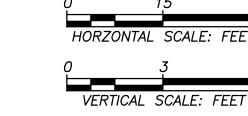
	4921 Memorial Highway One Memorial Center, Suite 300 Tampa, Florida 33634
ARDURRA COLLABORATE, INNOVATE, CREATE	Phone: (813) 880-8881 www.Ardurra.com License #2610

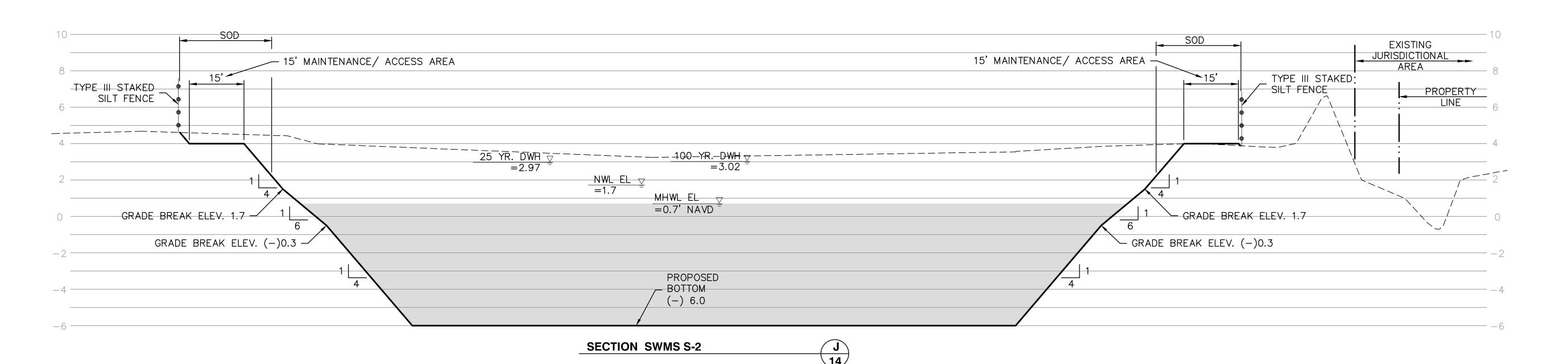
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EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES

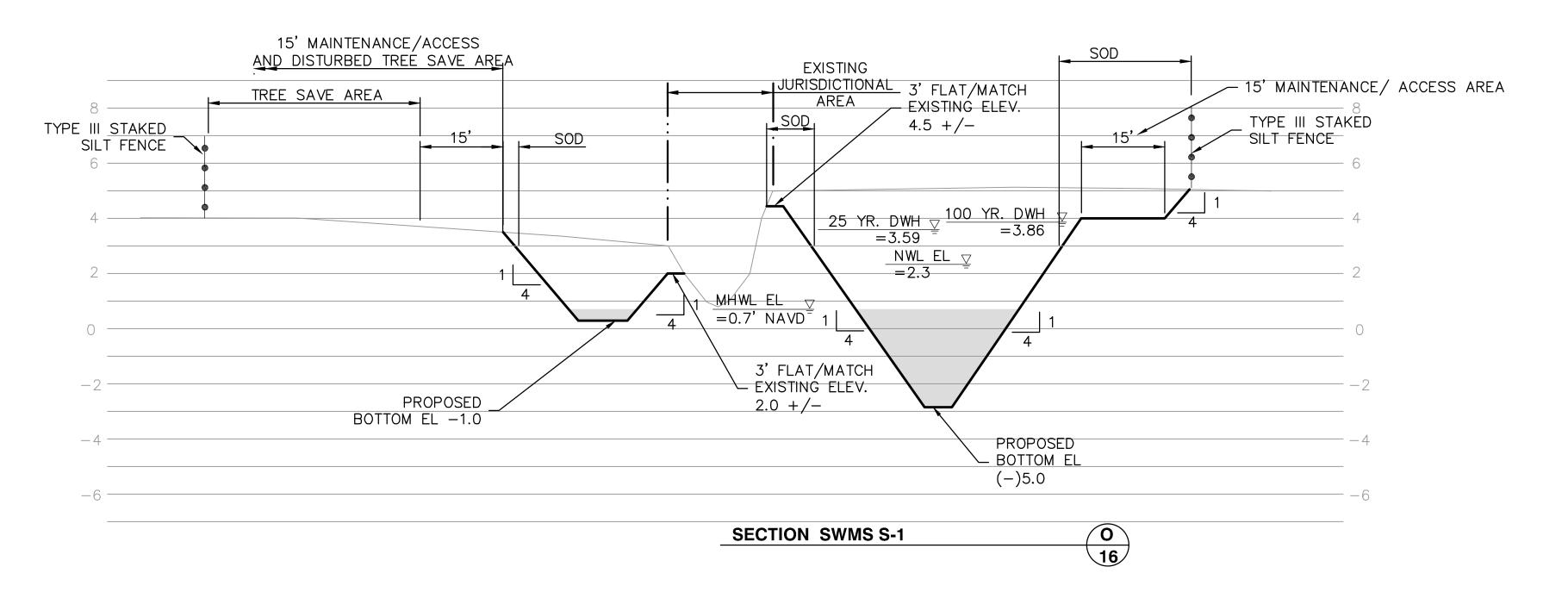
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

POND CROSS SECTIONS (1)

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				DATE:	
				12/22/2010	27
				SCALE:	100% PLANS
					MAY 28, 2015
				AS SHOWN	LIMITED UPDATE
NO.	DATE	DESCRIPTION	APP'D BY		JULY 22, 2020







SOD NOTE:

- 1. SOD SHALL BE PASPALUM UNLESS OTHERWISE DIRECTED BY DISTRICT REPRESENTATIVE.
- 2. LIMITS OF SOD WITHIN PONDS TO BE FROM 0.5' ABOVE NWL TO OUTSIDE LIMITS OF DISTURBANCE AS SHOWN ON SECTIONS.

4921 Memorial Highway
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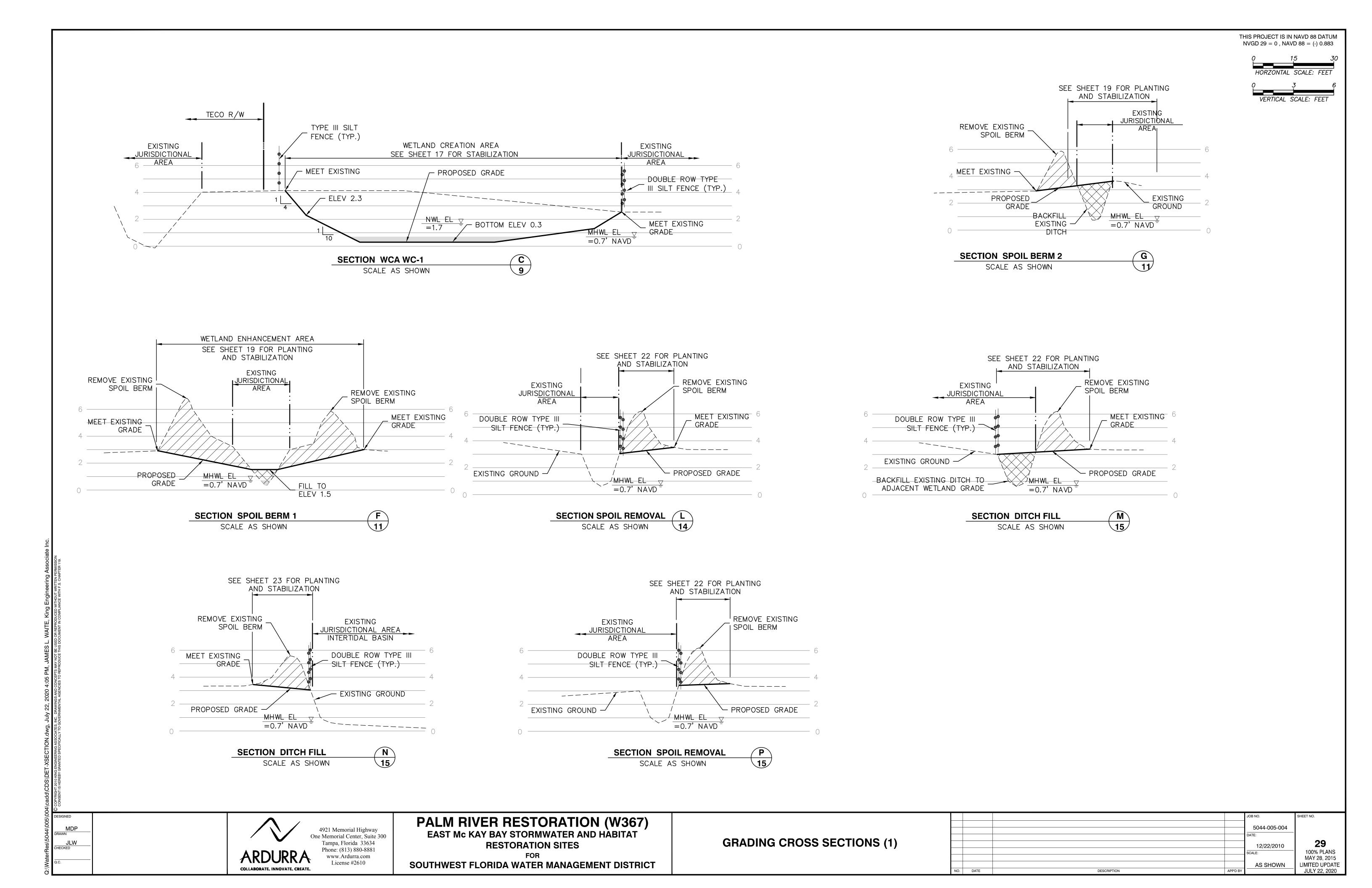
PALM RIVER RESTORATION (W367)
EAST Mc KAY BAY STORMWATER AND HABITAT
RESTORATION SITES

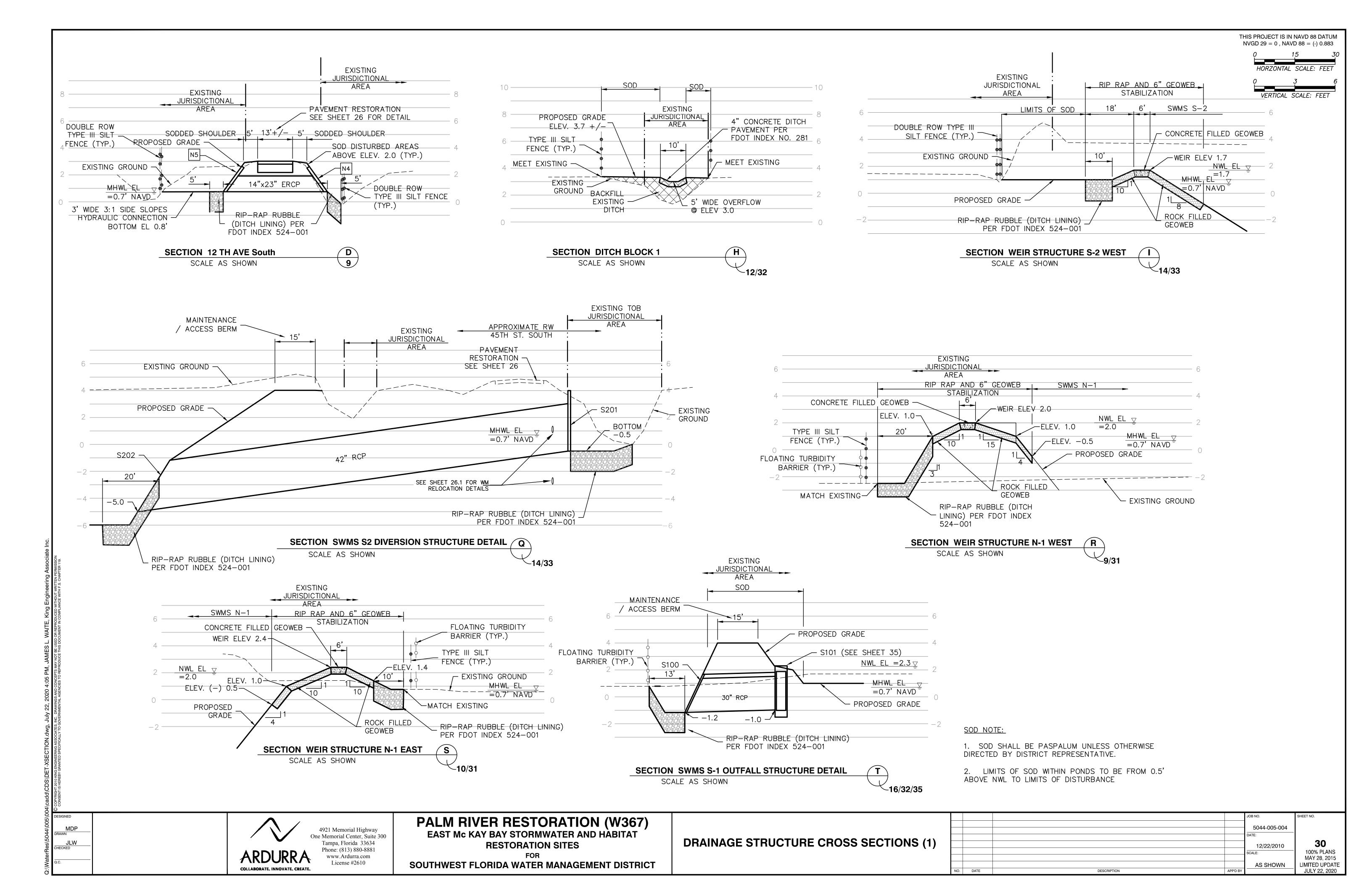
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

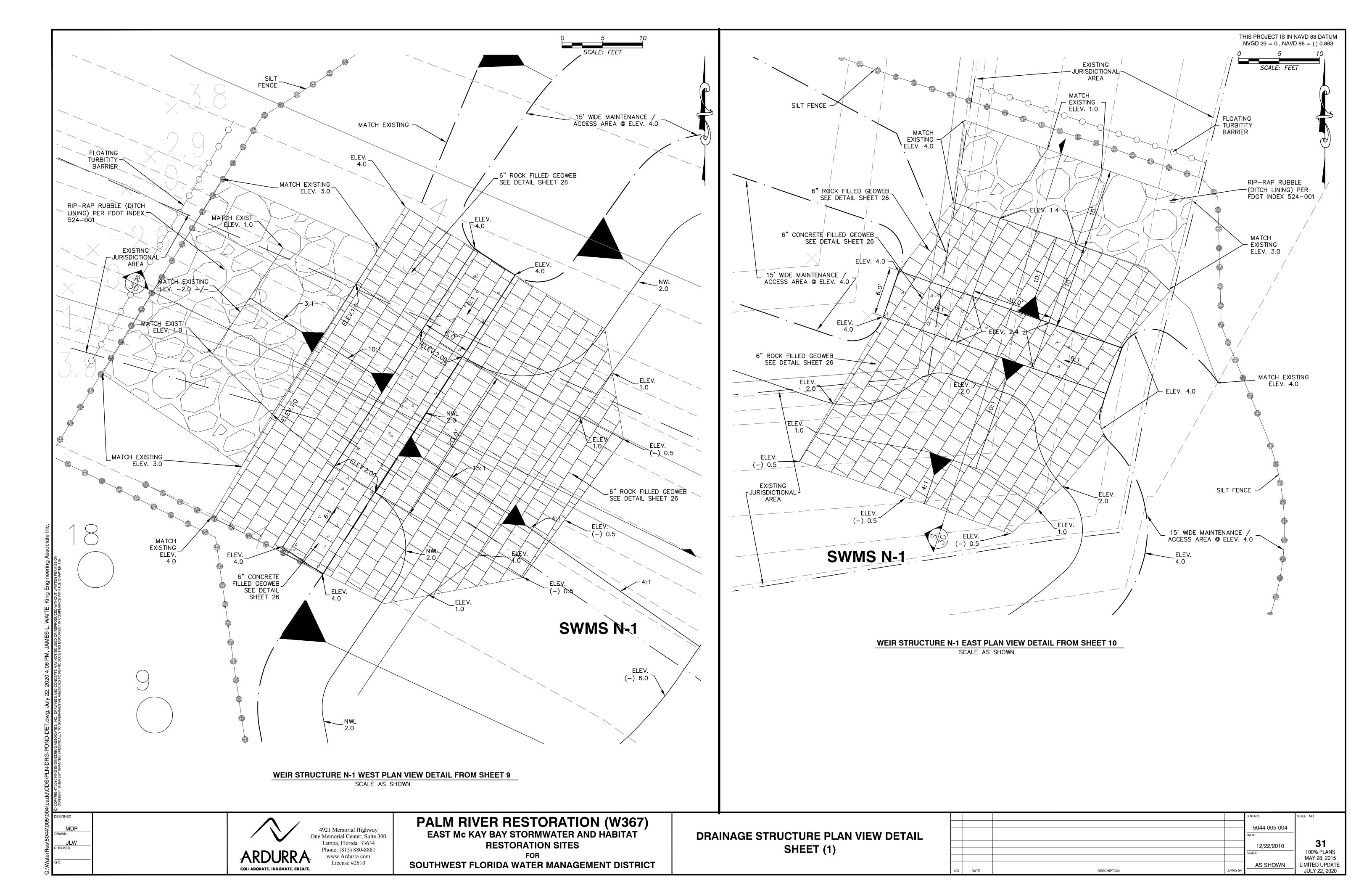
POND CROSS SECTIONS (2)

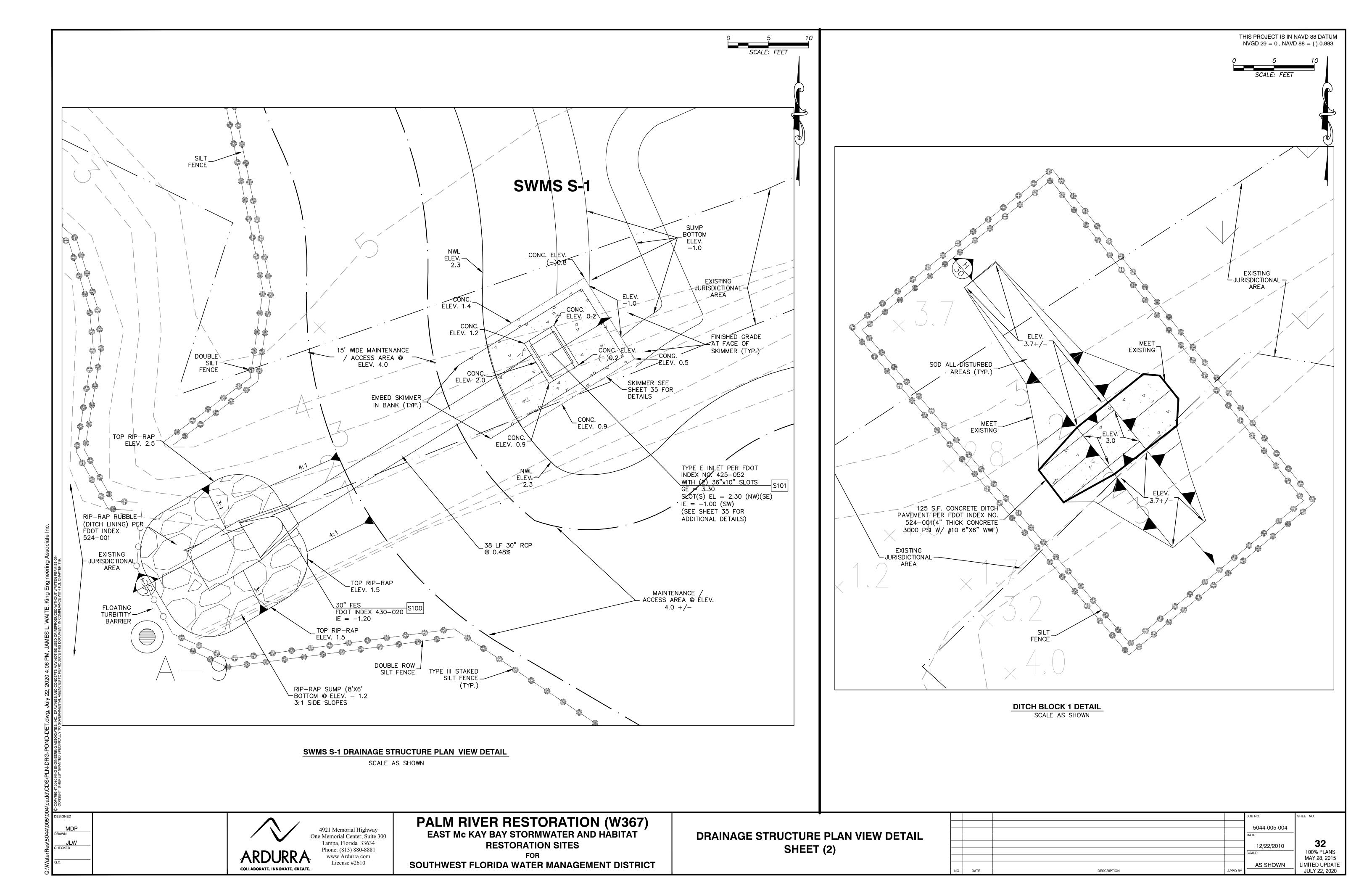
				JOB NO.
				5044-005-004
				5044-005-004
				DATE:
				12/22/2010
				12/22/2010
				SCALE:
				AS SHOWN
NO.	DATE	DESCRIPTION	APP'D BY	

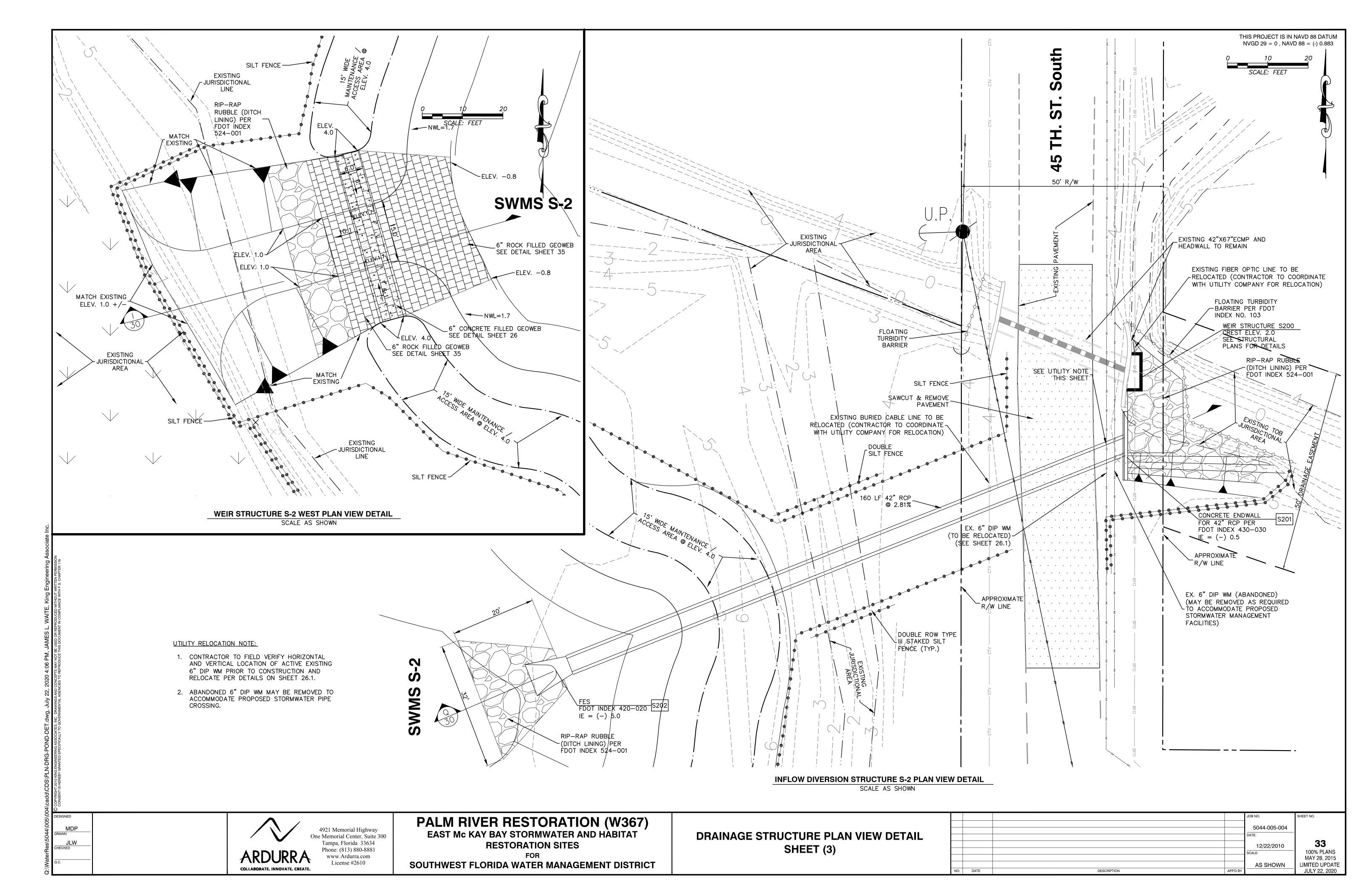
- **28**- 100% PLANS
MAY 28, 2015
LIMITED UPDATE
JULY 22, 2020

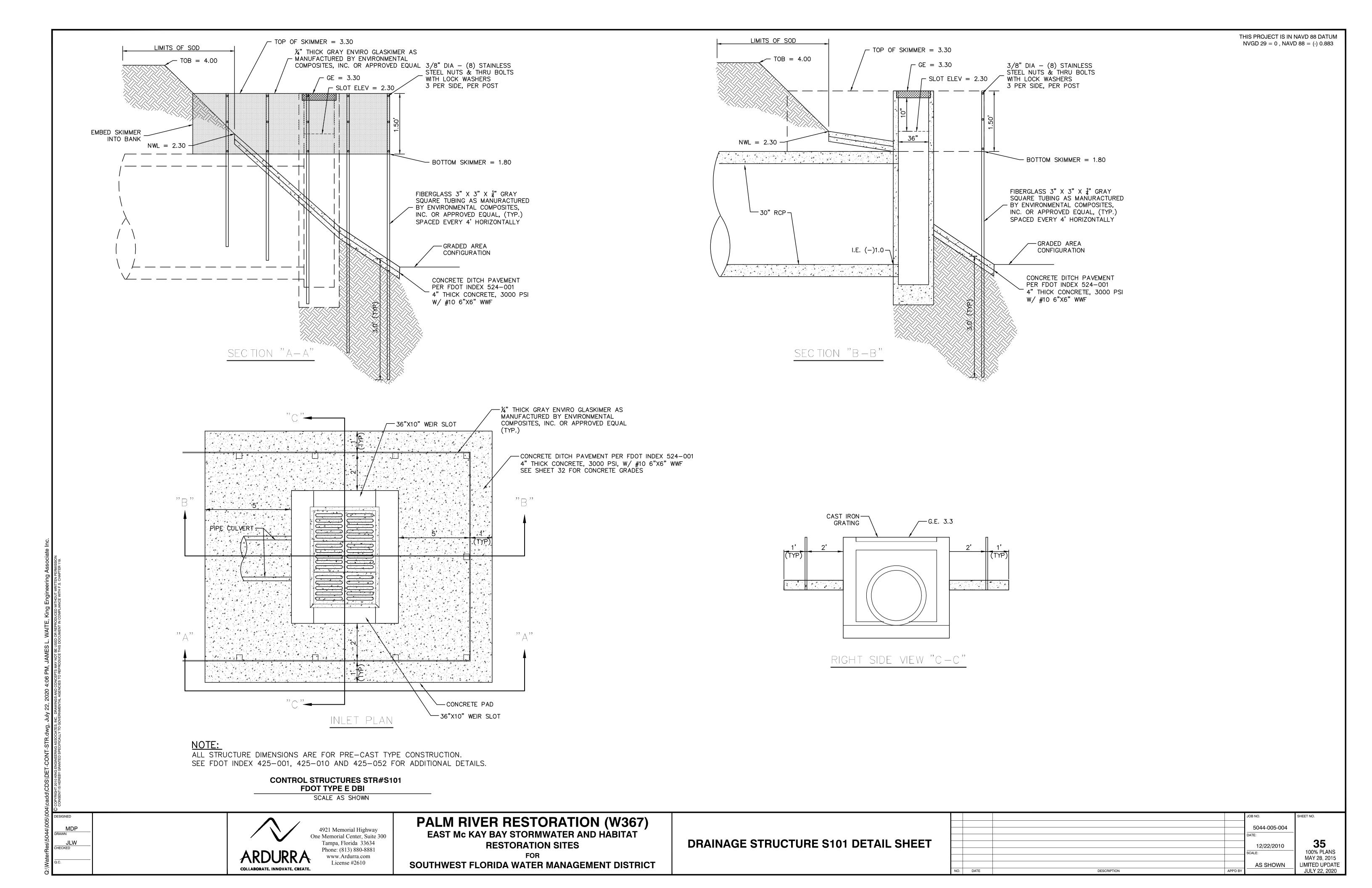


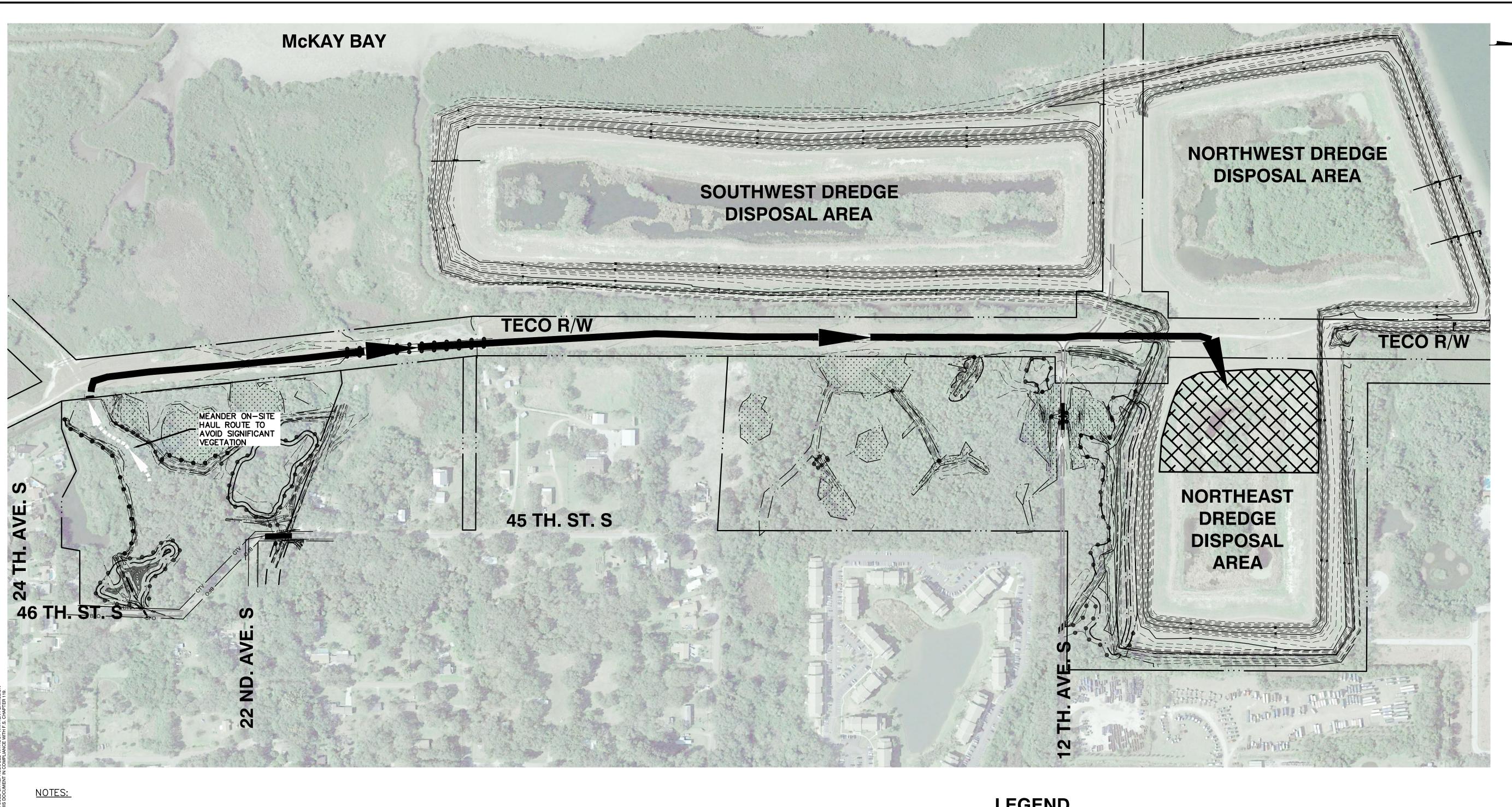












1. EXCESS EXCAVATED MATERIAL MAY BE PLACED ON EXISTING SLOPES AND BOTTOM AREA OF THE WESTERN PORTION OF THE NORTHEAST DREDGE DISPOSAL AREA WITHOUT ANY SITE CLEARING, MOWING OR OTHER SITE PREPARATION.

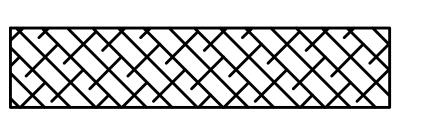
2. MATERIAL SHALL BE PLACED UNIFORMLY AND HEIGHT SHALL NOT EXCEED THE EXISTING TOP OF BANK ELEVATIONS.

- 3. COMPACTION OF MATERIAL MAY BE ACCOMPLISHED UTILIZING HAUL EQUIPMENT.
- 4. THE OUTER EDGES OF THE DISPOSAL AREA SHALL BE GRADED TO MATCH THE EXISTING SLOPES FOR MAINTENANCE.
- 5. ALL DISTURBED AREAS SHALL BE STABILIZED BY HYDROSEEDING PER PROJECT SPECIFICATIONS.

LEGEND

HAUL ROUTE

LIMITS OF EXCESS EXCAVATED MATERIAL DISPOSAL



COLLABORATE. INNOVATE. CREATE.

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PALM RIVER RESTORATION (W367) EAST Mc KAY BAY STORMWATER AND HABITAT

RESTORATION SITES

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

SPOIL DISPOSAL HAUL ROUTE PLAN

				JOB NO.
				5044-005-004
				DATE:
				DATE.
				12/22/2010
				SCALE:
				AS SHOWN
NO	DATE	DESCRIPTION	V DDiD RV	

100% PLANS MAY 28, 2015 LIMITED UPDATE JULY 22, 2020

THIS PROJECT IS IN NAVD 88 DATUM NVGD 29 = 0 , NAVD 88 = (-) 0.883