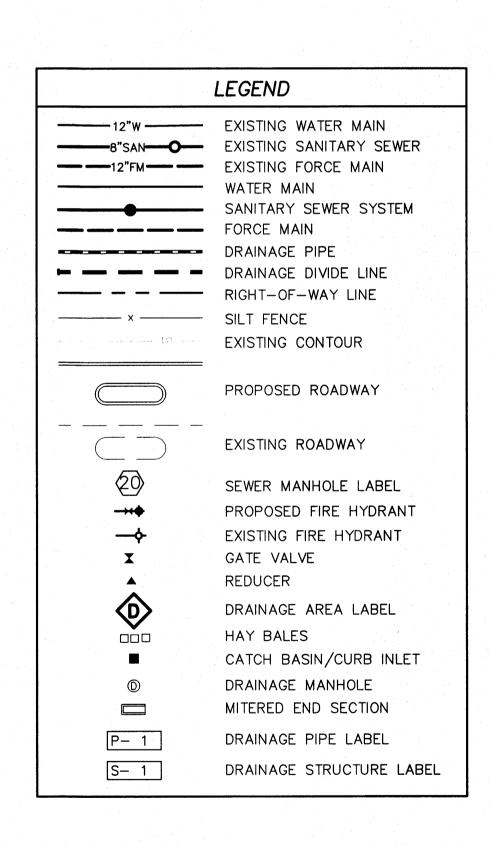
STABLES AT CARY FOREST

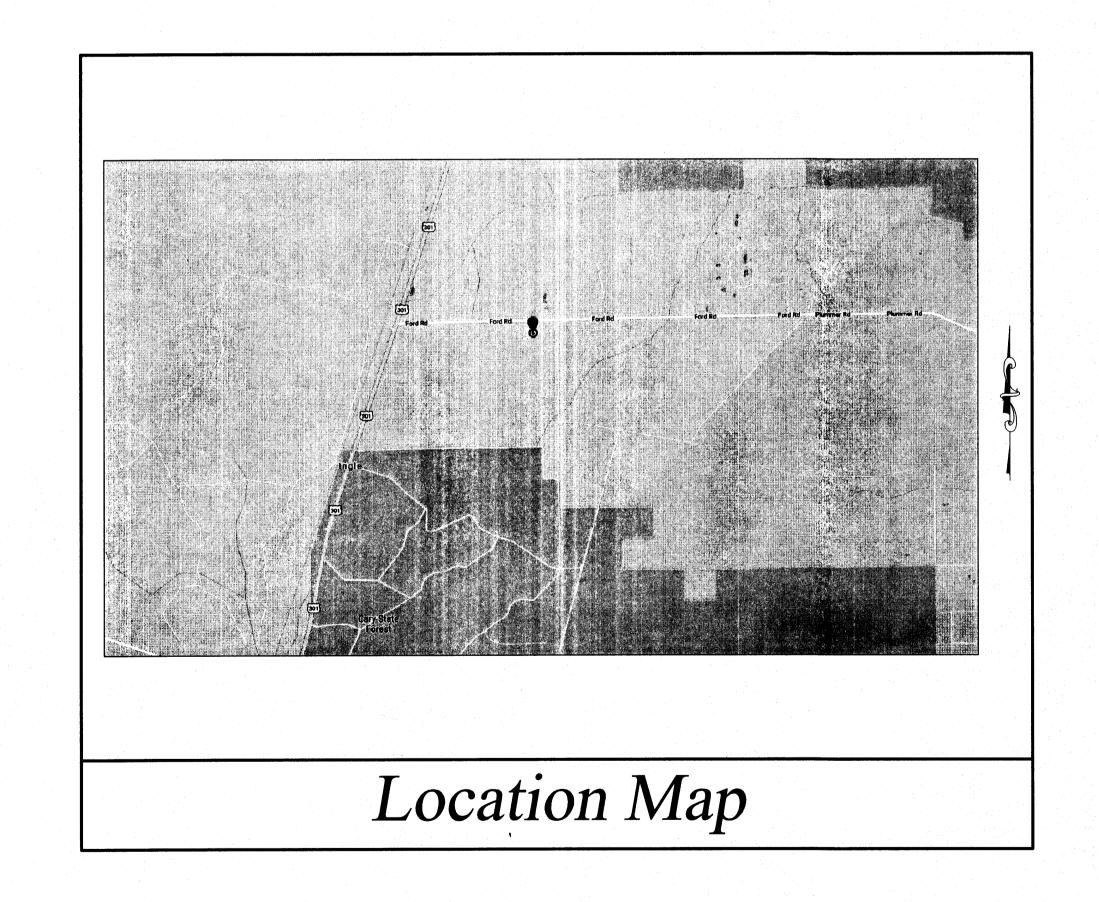
Nassau County, Florida FOR FORD INVESTMENTS, LLC

12443 SAN JOSE BLVD., SUITE 504 JACKSONVILLE FLORIDA 32223 904-292-0778

PARCEL IDENTIFICATION NUMBER:

09-15-24-0000-0001-0020





LIST OF SHEETS

1/8 Cover Sheet

2/8 General Notes & Details

3/8 Overall Site & Dry Hydrant Plan

4-5/8 Drainage Plans

M.O.T. Details

7/8 Storm Water Pollution Prevention Plan

8/8 Erosion & Sediment Control Notes and Details

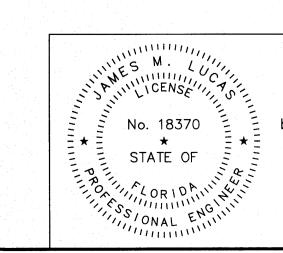
Prepared By:

1. Lucas & Associates, Inc.

DESIGN AND CONSULTING ENGINEERS
CERTIFICATE OF AUTHORIZATION NO. 3981

1305 CEDAR STREET - JACKSONVILLE, FL 32207 PHONE: (904) 396-3060 - FAX: (904) 396-3456 E-MAIL: lucascad@bellsouth.net JUNE 2020
PROJECT NUMBER: 2002

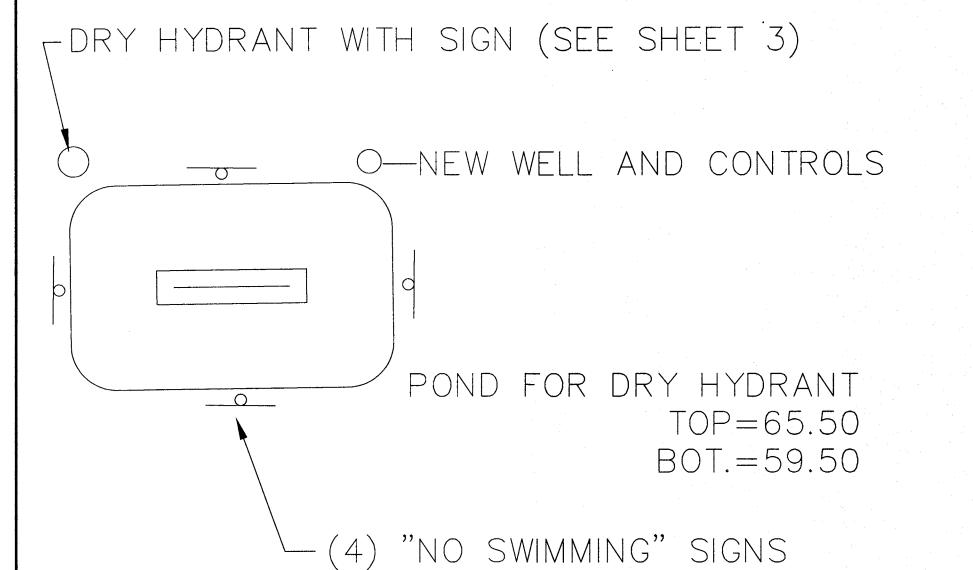




1 of 8

This item has been electronically signed and sealed by James M. Lucas, PE using a SHA authentication code.

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.



ONE ON EACH SIDE(12"x18")

GENERAL NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATION.
- 2. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE HIMSELF WITH JOB SITE CONDITIONS.
- 3. CONTRACTOR SHALL ARRANGE FOR AND PAY FOR ALL TESTING AS REQUIRED.
- 4. THE CONTRACTOR FILE WITH THE NASSAU COUNTY A SET OF REPRODUCIBLE
- MYLAR "AS BUILT" DWGS. FOR REVIEW AND APPROVAL. 5. ALL PAVING AND DRAINAGE WORK SHALL BE AS PER NASSAU
- COUNTY STANDARDS SPEC. UNLESS SHOWN OTHERWISE. 6. TOPOGRAPHIC INFORMATION PROVIDED BY THE OWNER.
- 7. THE CONTRACTORS SHALL ASSUME FULL RESPONSIBILITY FOR COMPLIANCE WITH ALL STATE AND / OR FEDERAL SAFETY LAWS.

CLEARING/GRUBBING & PAVING/DRAINAGE NOTES

- 1. THE CONTRACTOR SHALL ADHERE TO ALL GENERAL NOTES ON THIS SHEET, INCLUDING THE NOTES BELOW.
- 2. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS TO WORK IN EXISTING NASSAU COUNTY RIGHTS-OF-WAY.
- 3. ALL CONSTRUCTION LINES & GRADES SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR. OWNER SUPPLIES BOUNDARY AND BENCHMARK ONLY.
- 4. ALL PIPE LENGTHS ARE SCALED AND MAY REQUIRE SLIGHT FIELD ADJUSTMENTS TO FIT CONDITIONS.
- 5. CLEARING CONTRACTOR WILL CLEAR, GRUB AND DISPOSE OF ALL DEBRIS AND SURFACE ORGANICS TO FIRM MATERIAL ALL EASEMENTS, ROAD RIGHTS-OF-WAY AND DETENTION AREAS. DISPOSAL SHALL BE INCLUDED IN THE CONTRACT.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DOWNSTREAM TURBIDITY AND SILTATION CAUSED BY HIS CONSTRUCTION WITH HAY BALES, SCREENS, SILT BASINS AND/OR OTHER SUITABLE MEANS WITHIN ALL GOVERNMENTAL REGULATIONS.
- 7. LUMP SUM PRICE FOR CLEARING AND GRUBBING SHALL INCLUDE THE CLEARING AND GRUBBING ALL ELECTRIC EASEMENTS.

NASSAU COUNTY M.O.T. NOTES

- 1. NOTIFY THE ENGINEERING DIVISION [(904) 530-6225] A MINIMUM OF 5 WORKING DAYS PRIOR TO IMPLEMENTATION OF THE M.O.T.
- THE PROJECT WORK HOURS SHALL BE BETWEEN 7:00 AM TO 7:00 PM ON RESIDENTIAL STREETS AND 9:00 AM TO 4:00 PM ON COLLECTOR OR ARTERIAL STREETS.
- 3. NO LANE CLOSURES ARE ALLOWED FROM 7:00 AM TO 9:00 AM AND 4:00 PM TO 7:00 PM MONDAY THROUGH FRIDAY. 4. THE ROADWAY SHALL BE RESTORED TO AT LEAST A LIMEROCK

SURFACE BEFORE IT IS REOPENED TO TRAFFIC AND BEFORE THE

- CONTRACTOR MOVES TO THE NEXT CONSTRUCTION ZONE. THE CONTRACTOR SHALL CONFIRM THAT EXISTING SIGNAGE WILL NOT POSE A CONFLICT FOR WORK ZONE TRAFFIC CONTROL. THE CONTRACTOR
- SHALL COVER OR REMOVE ALL SIGNING IN CONFLICT WITH THE TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS. 6. ACCESS TO SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS
- SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. 7. NASSAU COUNTY PROHIBITS MID-BLOCK CROSSINGS OF PEDESTRIANS. WHEN AN ALTERNATE PAVED PEDESTRIAN ROUTE IS NOT FEASIBLE, THE
- CONTRACTOR SHALL MAINTAIN A 4 FT. WIDE STABLE PEDESTRIAN PATHWAY IN ACCORDANCE WITH FDOT INDEX 660. 8. CONSTRUCTION AREAS WITHIN COUNTY RIGHT-OF-WAY AND EASEMENTS
- SHALL BE TREATED WITH SOD TO PROTECT AGAINST EROSION. 9. M.O.T. SHALL BE IN ACCORDANCE WITH FDOTSTANDARD INDEX AND THE NASSAU COUNTY ROAD CLOSURE POLICY. AN M.O.T. PLAN PREPARED BY A FLORIDA ADVANCE M.O.T. CERTIFIED PERSONNEL WILL NEED TO BE SUBMITTED PRIOR TO THE PRE-CONSTRUCTION MEETING FOR COUNTY REVIEW.

- Contractor shall install a 3" well in accordance with standard practice. The well shall have a depth of 100' and shall include a 1 hp pump able to deliver a minimum of 15 gpm. Well pump shall include an internal pressure switch and small 42 gallon hydrotank.
- contractor shall also include an on-off float switch system that will activate the well at low water level and deactivate the pond a full level.

SITE PLAN AND DEVELOPMENT NOTES

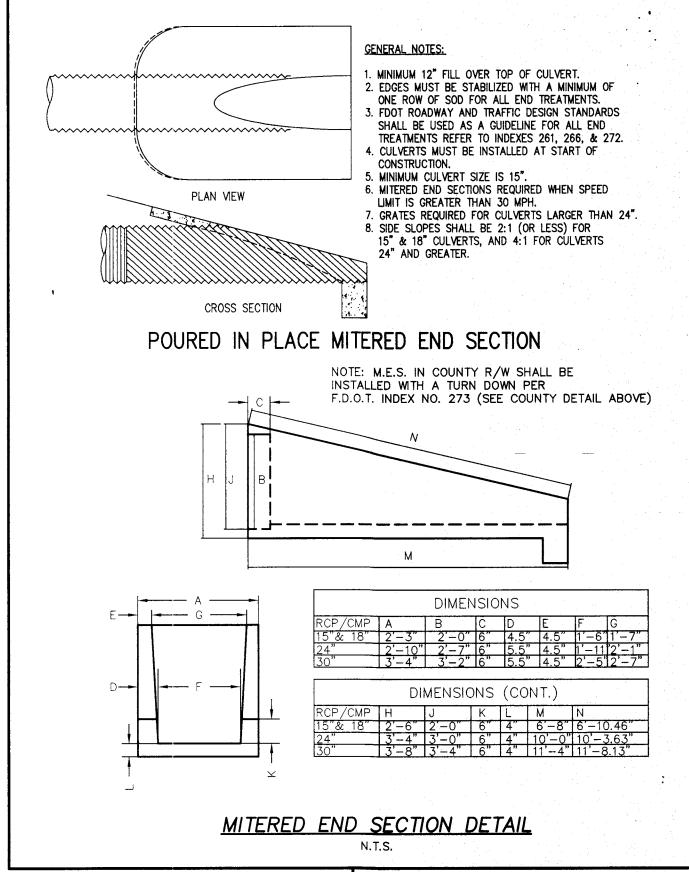
- INDIVIDUAL LOTS TO BE DEVELOPED SEPARATELY.
- 2. DRIVEWAY AND CULVERT INSTALLATIONS TO BE PERMITTED THROUGH NASSAU COUNTY AS REQUIRED.
- 3. EACH LOT SHALL HAVE A SEPARATE WELL AND SEPTIC SYSTEM THAT IS PERMITTED THROUGH THE HEALTH DEPARTMENT.
- 4. ELECTRIC SERVICE SHALL BE PROVIDED BY F.P.L. USING EXISTING OVERHEAD ALONG FORD ROAD. 5. MAXIMUM BUILDING HEIGHT SHALL BE 35 FEET.
- 6. THE SITE IS LOCATED ON COMMUNITY PANEL NO. 12089C0445F, DATED DECEMBER 17, 2010. THE PROPERTY IS IN ZONE 'X'.
- 7. THE HOME BUILDER SHALL BE RESPONSIBLE FOR PROVIDING THE FOLLOWING INFORMATION FOR ALL BUILDING PERMIT APPLICATIONS ACCORDING TO NASSAU COUNTY REQUIREMENTS: a. Project boundary with bearings and distances for each and every lot as
- WELL AS FOR THE OVERALL SITE.
- b. Proposed Building and other structures as well as all existing buildings AND OTHER STRUCTURES.
- c. DEPICT A BUILDING SETBACK FOOTPRINT AREA FOR EACH LOT ACCORDING TO ALL FRONT, REAR, SIDE SETBACK RESTRICTIONS.
- d. DEPICT THE DIMENSIONS AND DISTANCES FROM ALL PROPERTY LINES, WATER BODIES,
- WETLANDS TO ALL STRUCTURES. e. DEPICT THE HEIGHT OF EACH STRUCTURES, NUMBER OF STORIES, HEIGHT OF ROOF APPURTENANCES INCLUDING MECHANICAL FIXTURES, ELEVATOR SHAFTS, CHIMNEYS,
- 8. THE MAXIMUM FLOOR ELEVATION SHALL NOT EXCEED SIX (6) INCHES MORE THAN SPECIFIED
- ON THE ENGINEERING PLAN. 9. NET AREAS EXCLUDE ALL WETLAND AREAS AND UPLAND BUFFERS.

PARAPET WALLS, ETC.

- 10. FEE & TOPOGRAPHY AS SHOWN ON PLAN REFERENCED TO NAVD88 DATUM. 11. PROPOSED LOTS TO RETAIN EXISTING GRADES AS MUCH AS POSSIBLE. LOT GRADES SHOULD BE CONFINED TO TIE-IN GRADING FOR BUILDING FFE ONLY UNLESS OTHERWISE NOTED. LOT
- GRADING SHALL NOT AFFECT ADJACENT PROPERTIES. 12. A LOT GRADING PLAN IS REQUIRED WITH EACH LOT BUILDING PERMIT. THE GRADING PLAN SHOULD SHOW THE LOT GRADING WITH SPOT ELEVATIONS AND DEMONSTRATE THAT ANY FILL,
- DRAINS OR SWALES ON EACH LOT WILL NOT BLOCK FROM, DIVERT INTO, OR DIRECT ONTO FOR THE NATURAL FLOW OF STORMWATER RUNOFF TO OR FROM ADJACENT PROPERTIES. 13. LOTS FIVE, TEN AND ELEVEN WILL REQUIRE AN FDEP DREDGE AND FILL PERMIT TO COMPENSATE FOR THE WETLAND ENCROACHMENT FOR THE DRIVEWAY. A THIRTY (30) FOOT WIDE CORRIDOR
- IS SHOWN ON SHEETS 4 AND 5 FOR THIS ENCROACHMENT. 14. DEVELOPER SHALL PROVIDE A SIDEWALK BOND FOR THE CONSTRUCTION OF THE SIDEWALK FOR A TERM OF THREE (3) YEARS. SIDEWALK BOND SHALL BE USED TO CONSTRUCT
- UNBUILT SIDEWALKS PRIOR TO EXPIRING. 15. DEVELOPER SHALL PROVIDE A CONSTRUCTION BOND TO NASSAU COUNTY FOR A TERM OF THREE (3) YEARS FOR THE CONSTRUCTION OF THE SHARED DRIVEWAY BETWEEN LOTS 8 AND 9. BOND SHALL BE USED TO CONSTRUCT DRIVEWAY PRIOR TO EXPIRING.

UTILITY CONTACTS AMERICAN TELEPHONE & TELEGRAPH CO. (AT&T).... ..904-755--3414 BELLSOUTH TELEPHONE 904-350-2200 NASSAU COUNTY, PUBLIC WORKS DEPT. 904-530-6175 NASSAU COUNTY, PLANNING & ZONING 904-530-6300 NASSAU COUNTY, CODE ENFORCEMENT. 904-530-6200 DISTRIBUTION PROJECTS 904-665-6050 FLORIDA DEPARTMENT OF TRANSPORTATION ...904-381-8778 H. JEA - COLLECTION & DISTRIBUTION 904-630-3734 JEA - GENERAL INFORMATION . 904-665-6000 JEA - GroundsWorks / COMMUNITY OUTREACH 904-665-7500 K. JEA – POWER OUTAGÉS . 904-665-0300 JEA - SEWER PROBLEMS 904-630-3732 M. JEA - WATER PROBLEMS 904-630-3780 COMCAST 904-380-6419 MOBILE GAS 904-733-9533 904-443-7368 PEOPLES GAS Q. SUNSHINE ONE CALL 1-800-432-4770

OR 811



SITE DATA TABLE

USES 2.500 SF PER HOUSE + 500 SF PER DRIVEWAY.

(17 BUILDINGS AND DRIVEWAYS)

5,998,645 S

51,000 S.F

1,240,325 S.F.

42,500 S.F.

<u>12089C 0445F</u>

09-15-24-0000-0001-0020

3.9%

96.1%

3.2%

ZONE X

TOTAL SITE
TOTAL WETLANDS
NET ACREAGE
LOT AREA

TOTAL LOTS GROSS DENSITY

PROPOSED BUILDING

TOTAL IMPERVIOUS S

TOTAL PERVIOUS %

% BUILDING COVERAGE

TOTAL FLOOR AREA

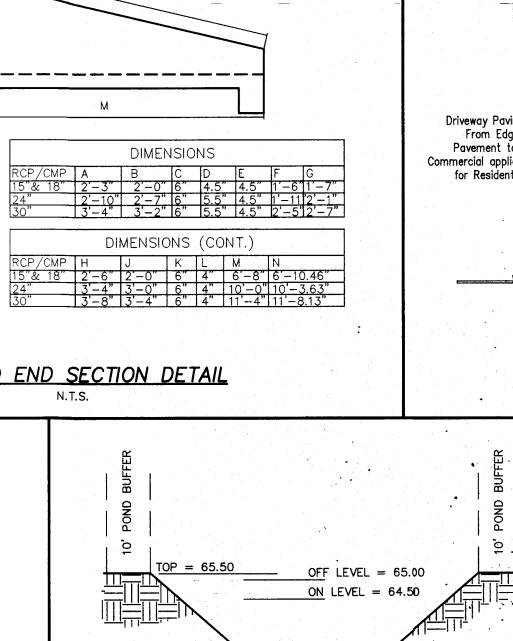
FEMA PANEL NUMBER

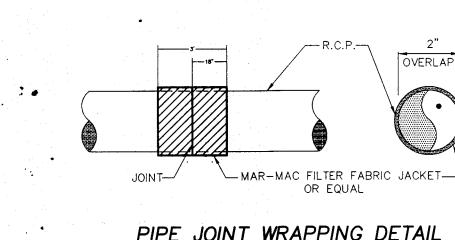
*PROPOSED BUILDING:

PARCEL NUMBER(S)

FLOOD ZONE

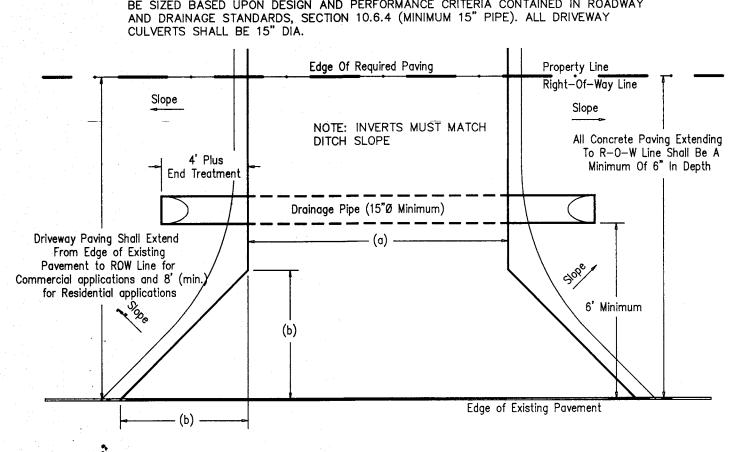
TOTAL PERVIOUS





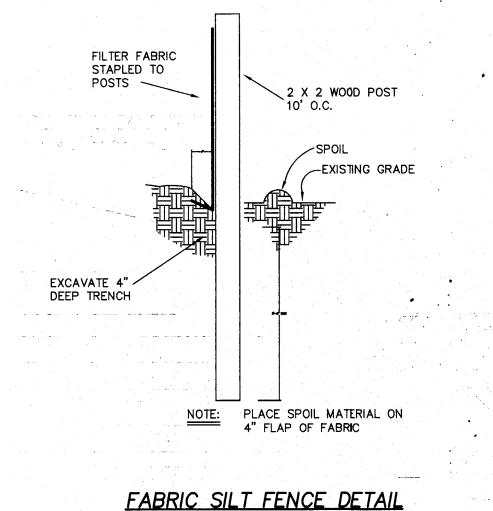
PIPE JOINT WRAPPING DETAIL

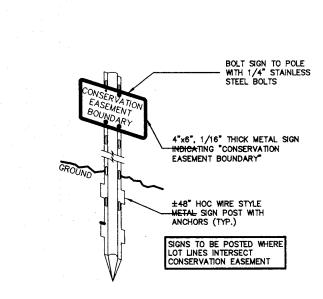
NOTE: A DRIVEWAY PERMIT WILL BE REQUIRED FROM NASSAU COUNTY AND CULVERTS SHALL BE SIZED BASED UPON DESIGN AND PERFORMANCE CRITERIA CONTAINED IN ROADWAY AND DRAINAGE STANDARDS, SECTION 10.6.4 (MINIMUM 15" PIPE). ALL DRIVEWAY



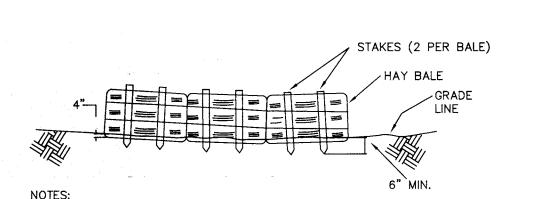
TYPICAL PAVED DRIVEWAY INSTALLATION DRAWING

TYPICAL POND 1 SECTION





CONSERVATION EASEMENT BOUNDARY SIGN



- 1. BALES TO BE STACKED IN A SINGLE ROW AND EMBEDDED IN THE SOIL TO A DEPTH OF 4 INCHES.
- 2. ALL BALES ARE TO BE BOUNDED WITH WIRE OR STRING. 3. EXTEND BALES AS SHOWN ON PLANS.
- 4. TOPS OF CENTER BALES MUST BE LOWER THAN BOTTOMS OF END BALES.

STAKED HAY BALES DETAIL

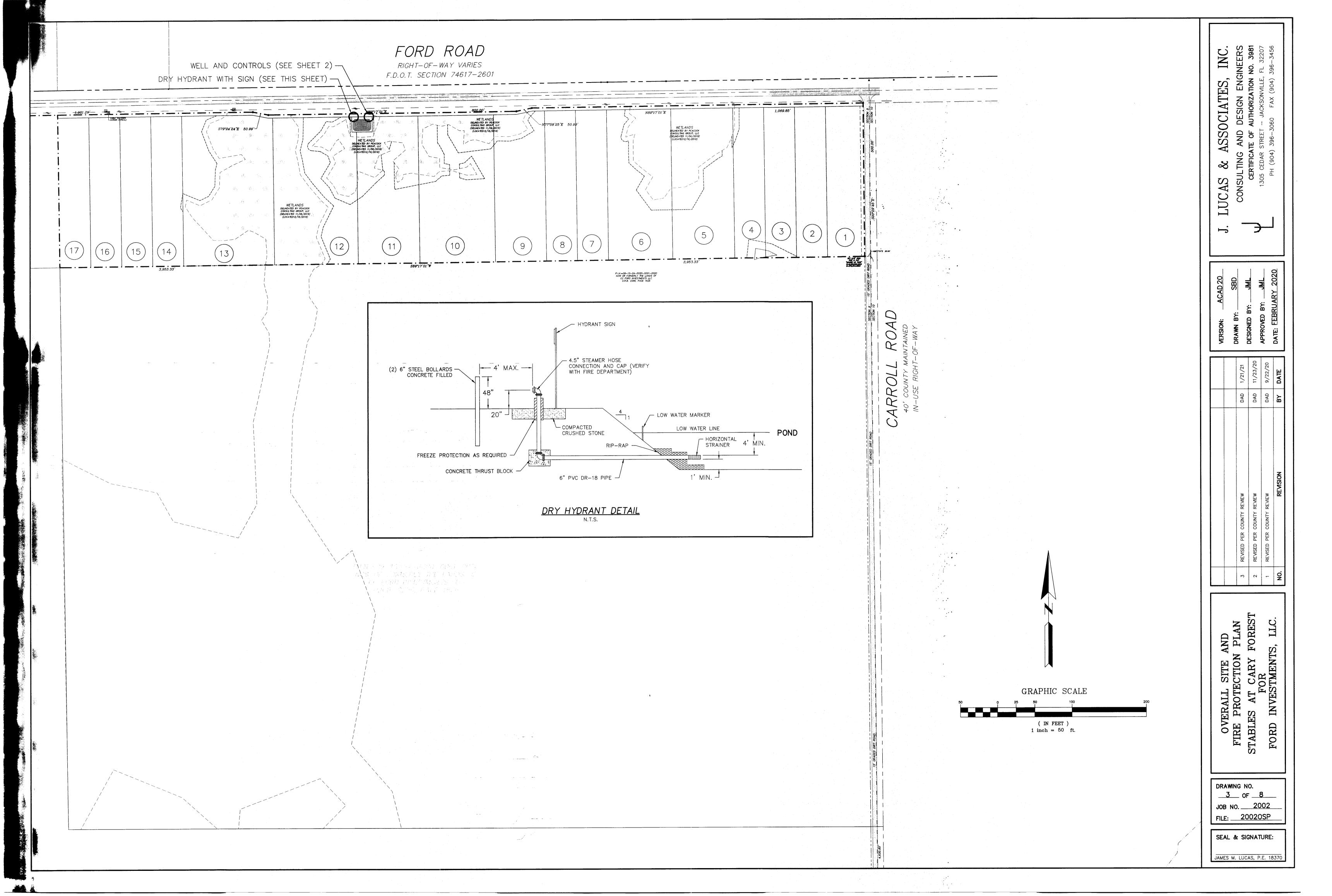
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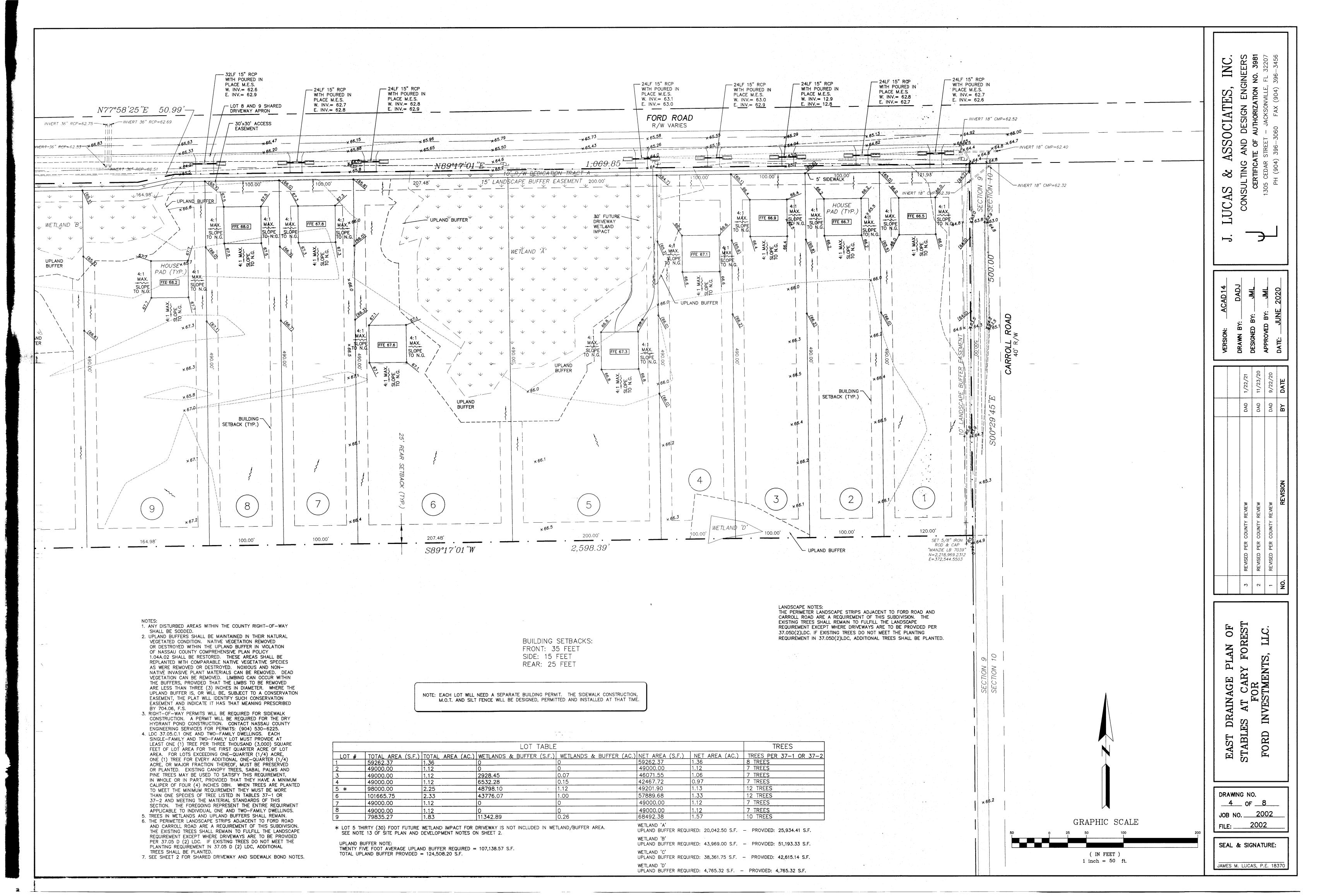
DADJ

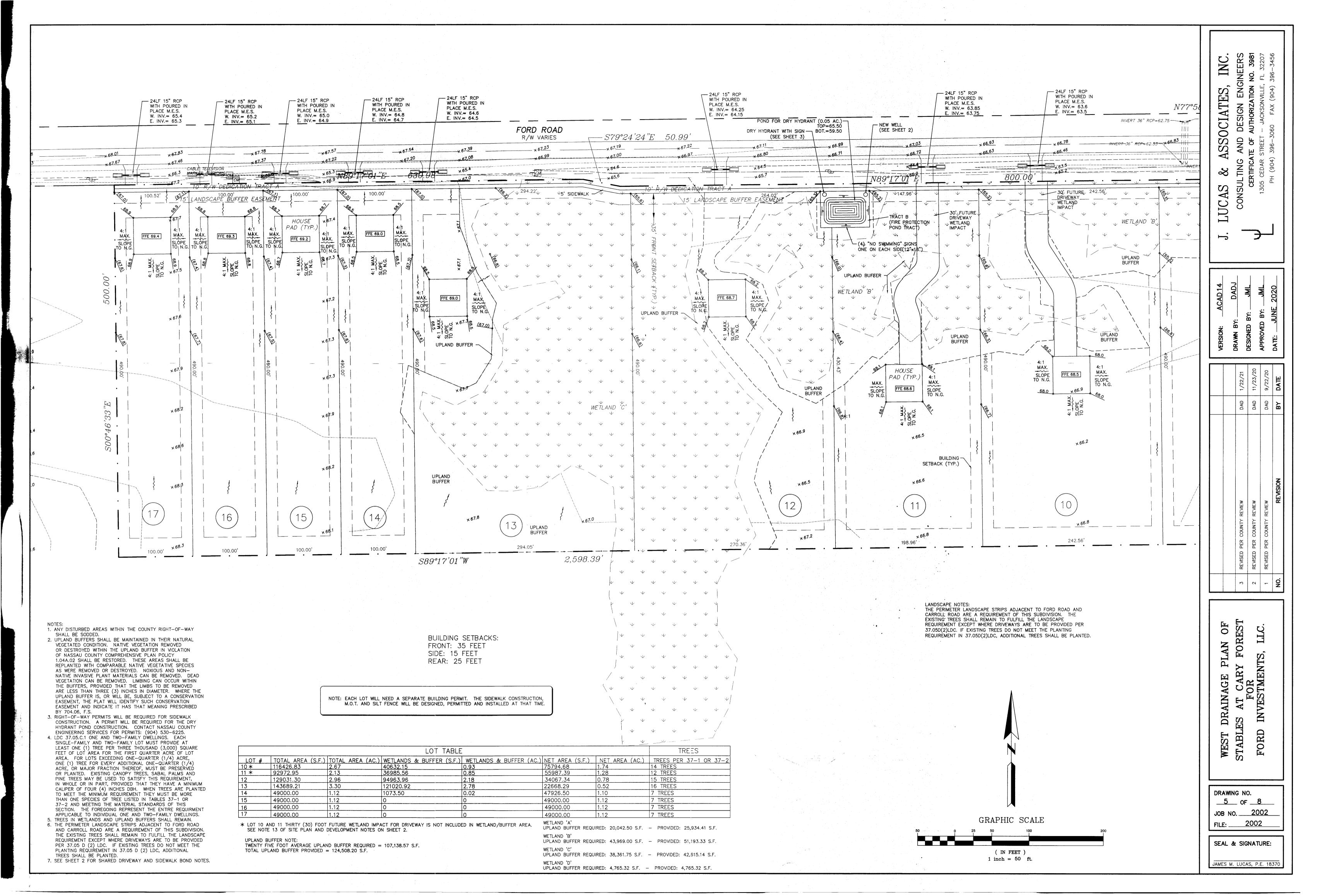
DRAWING NO. __2__ of ___8_ JOB NO. 2002 FILE: 2002GENNOTES

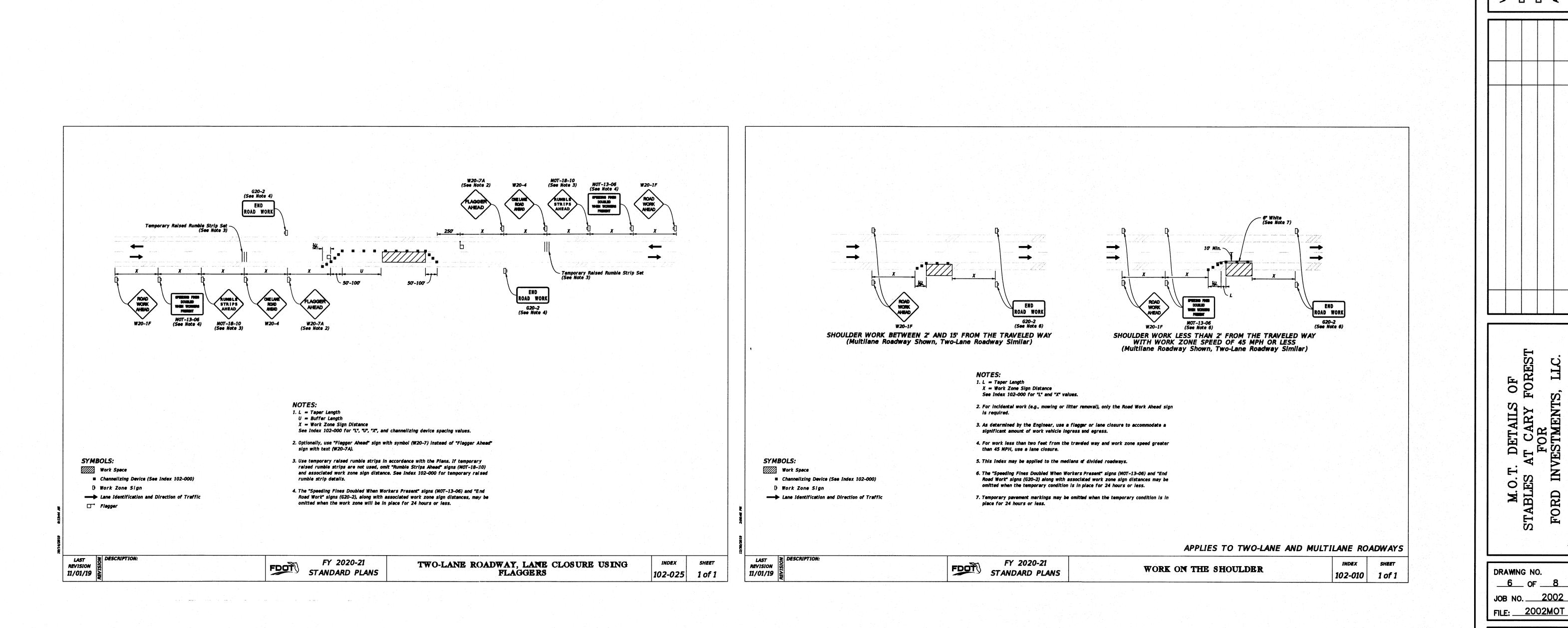
SEAL & SIGNATURE:

JAMES M. LUCAS, P.E. 18370









LUCAS & ASSOCIATES, INC.

CONSULTING AND DESIGN ENGINEERS

CERTIFICATE OF AUTHORIZATION NO. 3981

1305 CEDAR STREET - JACKSONVILLE, FL 32207

PH (904) 396-3060 FAX (904) 396-3456

SEAL & SIGNATURE:

6 of _8_

OF FOREST

O.T. DETAILS OES AT CARY FOF FOR INVESTMENTS,

FORD

JAMES M. LUCAS, P.E. 18370

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
- 2. INSTALL SILT FENCES AND HAY BALES ARE REQUIRED
- 3. CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN
- 4. CONSTRUCT SEDIMENTATION BASIN
- 5. CONTINUE CLEARING AND GRUBBING
- 6. STOCK PILE TOP SOIL IF REQUIRED
- 7. PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
- 8. STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICABLE
- 9. INSTALL STORM SEWER AND IRRIGATION 10. COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING
- 11. REMOVE ACCUMULATED SEDIMENT FROM BASINS
- 12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED. REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/SOD AS REQUIRED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES. THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION & TURBIDITY CONTROL PLAN.

CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED, AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL FROSION AND TURBIDITY CONTROL REQUIREMENTS. THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE EROSION AND TURBIDITY CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT

SITE BY THE REGULATORY AGENCIES. EROSION AND SEDIMENT CONTROLS

STABILIZATION PRACTICES

FILTER FABRIC BARRIER.

. HAY BALE BARRIER: HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS: A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. . WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS . EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT. IF NECESSARY, MEASURES

AGAINST WASHOUT REFER TO DETAIL SHEET FOR CONSTRUCTING THE HAY BALE BARRIER. ALSO REFER TO DETAIL SHEET FOR PROPER LOCATION, MATERIAL AND USAGE.

SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO ENSURE

2. FILTER FABRIC BARRIER: FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS: A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT. B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES. REFER TO DETAIL SHEET FOR PROPER CONSTRUCTION OF THE

3. BRUSH BARRIER WITH FILTER FABRIC: BRUSH BARRIER MAY BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WHERE ENOUGH RESIDUE MATERIAL IS AVAILABLE ON SITE.

4. LEVEL SPREADER: A LEVEL SPREADER MAY BE USED WHERE SEDIMENT-FREE STORM RUNOFF IS INTERCEPTED AND DIVERTED AWAY FROM THE GRADED AREAS ONTO UNDISTURBED STABILIZED AREAS. THIS PRACTICE APPLIES ONLY IN THOSE SITUATIONS WHERE THE SPREADER CAN BE CONSTRUCTED ON UNDISTURBED SOIL AND THE AREA BELOW THE LEVEL LIP IS STABILIZED, THE WATER SHOULD NOT BE ALLOWED TO RECONCENTRATE AFTER RELEASE. LEVEL SPREADER SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNMENTAL STANDARDS.

5. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY.

EXPOSED AREA LIMITATION: THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL NOT EXCEED 10 ACRES. THIS REQUIREMENT MAY BE WAIVED FOR LARGE PROJECTS WITH AN EROSION CONTROL PLAN WHICH DEMONSTRATES THAT OPENING OF ADDITIONAL AREAS WILL NOT SIGNFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.

7. INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.

8. TEMPORARY SEEDING: AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH PERMANENT GRASSING.

9. TEMPORARY SEEDING AND MULCHING: SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH 8 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.

10. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER. TEMPORARY GRASSING SHALL BE THE SAME MIX & AMOUNT REQUIRED FOR PERMANENT GRASSING IN THE CONTRACT SPECIFICATIONS.

11. TEMPORARY REGRASSING: IF AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINNIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRE.D VEGETATIVE COVER.

12. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

13.PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACITLITIES.

14.PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MININUM, BE SEEDED, THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEEDED AND MULCHED OR SODDED.

STRUCTURAL PRACTICES

- 1. TEMPORARY DIVERSION DIKE: TEMPORARY DIVERSION DIKES MAY BE USED TO DIVERT RUNOFF THROUGH A SEDIMENT-TRAPPING FACILITY. AND IT SHALL BE CONSTRUCTED AS PER DETAIL SHEET.
- 2. TEMPORARY SEDIMENT TRAP: A SEDIMENT TRAP SHALL BE INSTALLED IN A DRAINAGE WAY AT A STORM DRAIN INLET OR AT OTHER POINTS OF DISCHARGE FROM A DISTURBED AREA. THE FOLLOWING SEDIMENT TRAPS MAY BE CONSTRUCTED EITHER INDEPENDANTLY OR IN CONJUNCTION WITH A TEMPORARY DIVERSION
- A. BLOCK & GRAVEL SEDIMENT FILTER THIS PROTECTION IS APPLICABLE WHERE HEAVY FLOWS AND/OR WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. TO BE CONSTRUCTED PER GOVERNMENTAL STANDARDS.

CONTRACTOR'S REQUIREMENTS

B. GRAVEL SEDIMENT TRAP - - THIS PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES & UNPROTECTED AREAS, TO BE CONSTRUCTED PER GOVERNMENTAL STANDARDS.

C. DROP INLET SEDIMENT TRAP - THIS PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (S < 5%) AND WHERE SHEET OR OVERLAND FLOWS (Q < 0.5 CFS) ARE TYPICAL. THIS METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS SUCH AS IN STREET OR HIGHWAY MEDIANS. TO BE CONSTRUCTED PER GOVERNMENTAL STANDARDS.

3. OUTLET PROTECTION: APPLICABLE TO THE OUTLETS OF ALL PIPES AND PAVED CHANNEL SECTIONS WHERE THE FLOW COULD CAUSE EROSION & SEDIMENT PROBLEM TO THE RECEIVING WATER BODY, SILT FENCES & HAY BALES ARE TO BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE DISCHARGING STRUCTURE AS SHOWN ON THE OUTLET PROTECTION DETAIL.

4. SEDIMENT BASIN: WILL BE CONSTRUCTED AT THE COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH 10 OR MORE DISTURBED ACRES AT ONE TIME. THE PROPOSED STORM WATER PONDS (OR TEMPORARY PONDS) WILL BE CONSTRUCTED FOR USE AS SEDIMENT BASINS, THESE SEDIMENT BASINS MUST PROVIDE A MINNINUM OF 3,600' CUBIC FEET OF STORAGE PER ACRE DRAINED UNTIL FINAL STABLILIZATION OF THE SITE.

THE 3,600 CUBIC FEET OF STORAGE AREA PER ACRE DRAINED DOES NOT APPLY TO FLOWS FROM OFFSITE ARES AND FLOWS FROM ONSITE ARES THAT ARE EITHER UNDISTURBED OR HAVE UNDERGONE FINAL STABILIZATION WHERE SUCH FLOWS ARE DIVERTED AROUND BOTH THE DISTURBED AREA AND THE SEDIMENT BASIN. ANY TEMPORARY SEDIMENT BASINS CONSTRUCTED MUST BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS FOR STRUCTURAL FILL ALL SEDIMENT COLLECTED IN PERMANENT OR TEMPORARY SEDIMENT TRAPS MUST BE REMOVED UPON FINAL STABILIZATION.

OTHER CONTROLS

WASTE DISPOSAL

WASTE MATERIALS

ALL WASTE MATERIALS EXCEPT LAND CLEARING DEBRIS SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE DUMPSTER WILL BE EMPTIED AS NEEDED AND THE TRASH WILL BE HAULED TO A STATE APPROVED LANDFILL. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED AT THE CONSTRUCTION SITE BY THE CONSTRUCTION SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE SITE SUPERINTENDENT, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NEEDED TO PREVENT POSSIBLE SPILLAGE. THE WASTE WILL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL WASTE DISPOSAL REGULATIONS FOR SANITARY SEWER OR SEPTIC SYSTEMS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD. DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

CONCRETE	FERTILIZERS	WOOD
ASPHALT	PETROLEUM BASED PRODUCTS	MASONRY BLOCKS
TAR	CLEANING SOLVENTS	ROOFING MATERIALS
DETERGENTS	PAINTS	METAL STUDS

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

* AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.

* ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

* PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.

* SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

* WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSAL OF THE CONTAINER.

* MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

* THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE MATERIALS ONSITE RECEIVE PROPER USE AND DISPOSAL. HAZARDOUS PRODUCTS

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

* PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT

* ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.

* IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE

PRODUCT SPECIFIC PRACTICES

FERTILIZERS

PAINTS

CONCRETE TRUCKS

SPILL CONTROL PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE: PETROLEUM PRODUCTS

ALL ONSITE 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 ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

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 WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

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

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

MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMTED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, LIQUID ABSORBENT (I.E. KITTY LITTER OR EQUAL), SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

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

SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE OF THE SPILL.

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 SPILLS, 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/SHE WILL DESIGNATE AT LEAST ONE 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 IF APPLICABLE, IN THE OFFICE TRAILER ONSITE.

MAINTENANCE/INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

* NO MORE THAN 10 ACRES OF THE SITE WILL BE DENUDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

* ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT. THE PERSON RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.

* ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF

* 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 FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTATCHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

* THE SEDIMENT BASINS WILL BE INSPECTED FOR THE 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, WHICHEVER COMES FIRST.

* DIVERSION DIKES/SWALES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.

* TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.

* A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH

THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND

AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORM WATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.

* THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE

* PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.

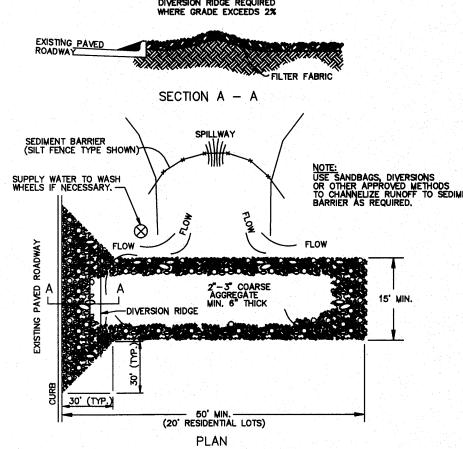
NON-STORM WATER DISCHARGES

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

* PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)

* UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION). ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE.

CONSTRUCTION ENTRANCE DETAIL



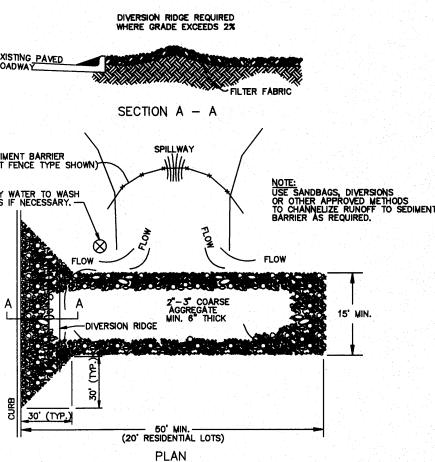
. THE ENTRANCE SHALL BE MAINTAINED IN A 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED CONDITION THAT WILL PREVENT TRACKING OR — PRIOR TO THE ENTRANCE ONTO PUBLIC RIGHT—OF—WA' FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS—
OF-WAY, THIS MAY REQUIRE TOP DRESSING,
REPAIR AND/OR CLEANOUT OF ANY MEASURES

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE
ON AN AREA STABLIZED WITH CRUSHED STONE
THAT DRAINS INTO AN APPROVED SEDIMENT TRAP USED TO TRAP SEDIMENT.

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE	BUSINESS NAME AND ADDRESS OF CONTRACTOR & ALL SUBS	RESPONSIBLE FOR/DUTIES
		GENERAL CONTRACTOR
		SUB-CONTRACTOR
<u> </u>		



OR SEDIMENT BASIN.

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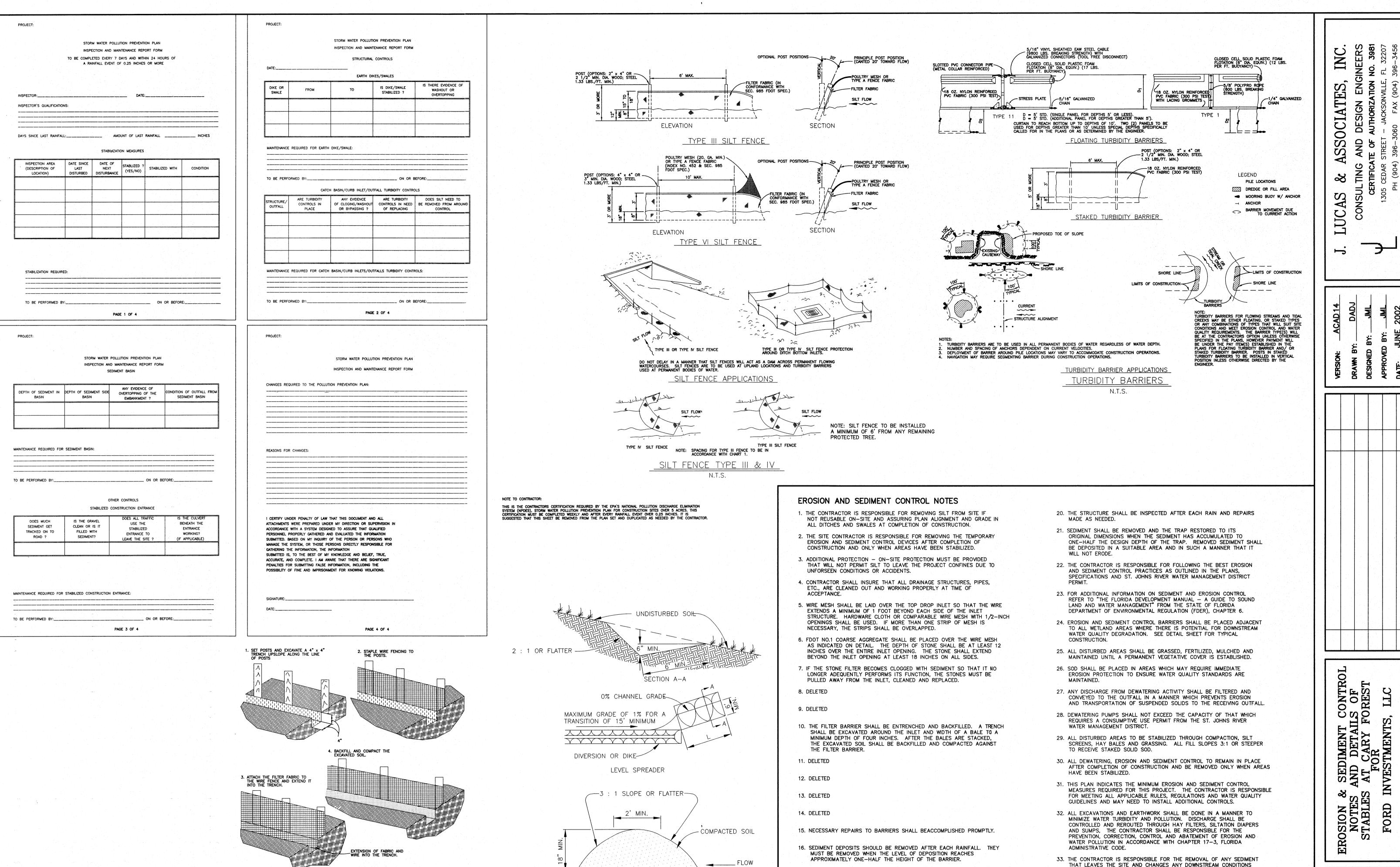
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DRAWING NO. __7__ of __8 JOB NO. 2002 FILE: 2002SWPPP

SEAL & SIGNATURE:



CUT OR FILL SLOPE

CONSTRUCTION DETAILS FOR SILT FENCES

4.5' MIN.

TEMPORARY DIVERSION DIKE

DIVERSION DIKE

N.T.S.

17. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE

THE EXISTING GRADE, PREPARED AND SEEDED.

REPLACED PROMPTLY.

BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO

18. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY

AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED

RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

19. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE

DRAWING NO. _8_ OF <u>8</u> JOB NO. 2002 FILE: 2002SWPPP

BY RAISING CHANNEL BOTTOMS AND/OR CLOGGING OUTFALL CULVERTS.

FROM ANY AGENCY THAT RESULTS IN FINES BEING ASSESSED TO THE OWNER BECAUSE OF THE CONTRACTOR'S FAILURE TO ELIMINATE TURBID

RUNOFF FROM LEAVING THE SITE AND RAISING BACKGROUND LEVELS

ABOVE EXISTING BACKGROUND LEVEL.

34. THE CONTRACTOR SHALL PAY FOR ANY WATER QUALITY CONTROL VIOLATIONS

SEAL & SIGNATURE: