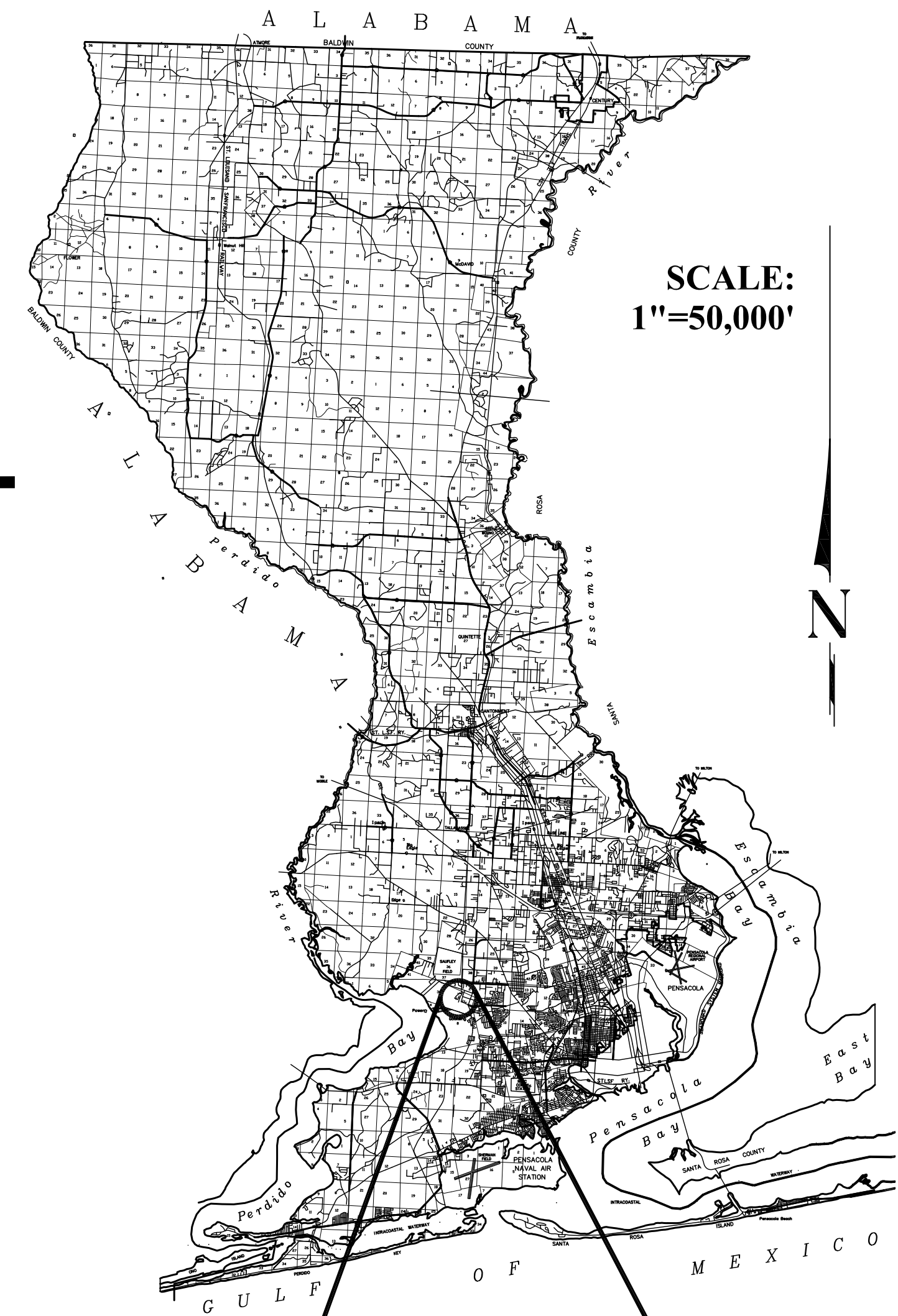




**BOARD OF COUNTY COMMISSIONERS
 ESCAMBIA COUNTY, FLORIDA
 PUBLIC WORKS BUREAU
 ENGINEERING DIVISION**



INDEX OF PLANS

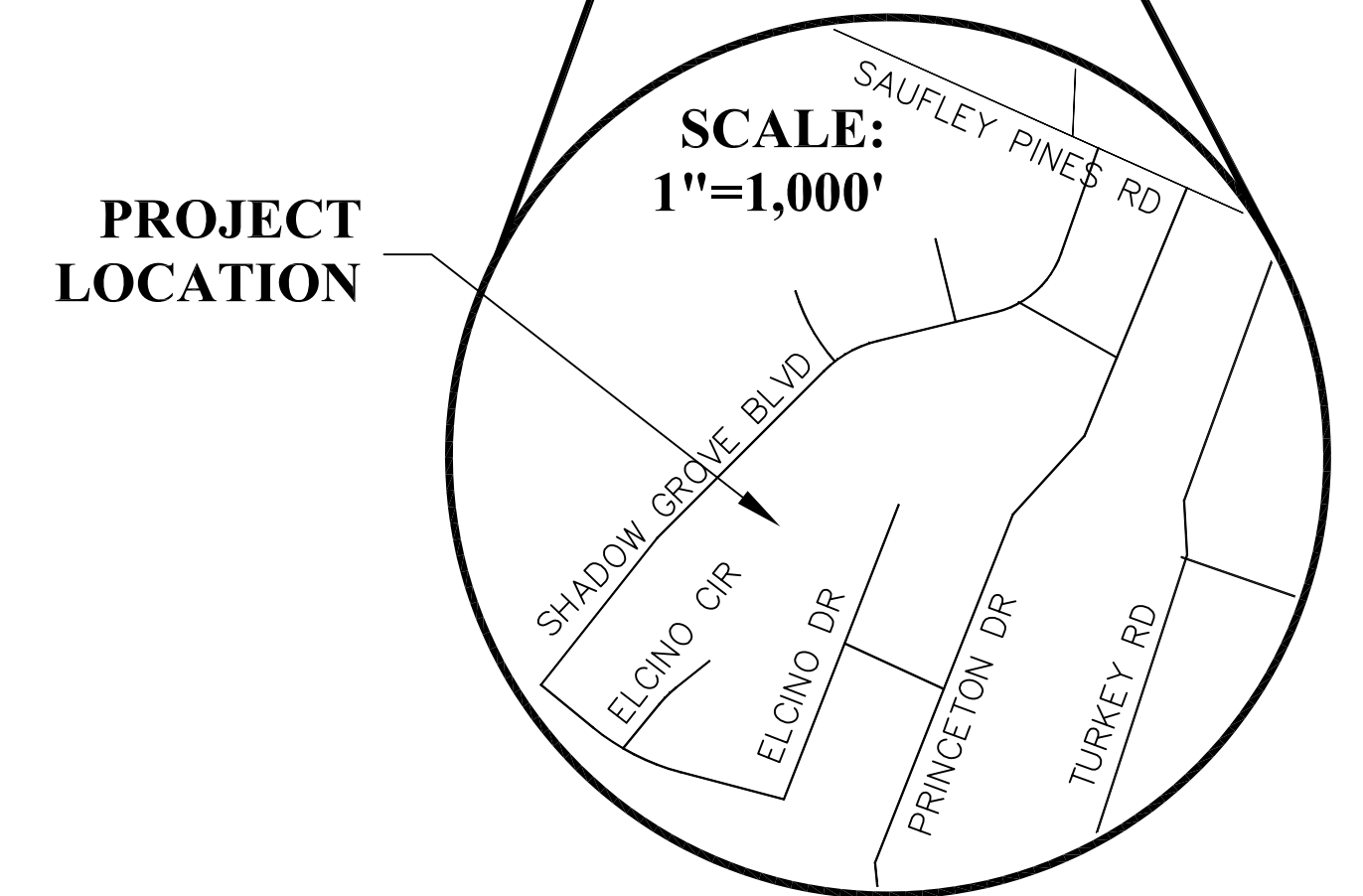
SHEET NO.	SHEET DESCRIPTION
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C6	DEMOLITION PLAN
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**PLANS PROPOSED FOR
 SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS**

ENG FLOOD 612-11

RELEASED FOR CONSTRUCTION

DECEMBER 2016



TASK ORDER: 02-03.79.46.13. ENG

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE LATEST ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.

COMMISSIONERS

- DISTRICT ONE** **JEFF BERGOSH, VICE CHAIRMAN**
- DISTRICT TWO** **DOUG UNDERHILL, CHAIRMAN**
- DISTRICT THREE** **LUMON MAY**
- DISTRICT FOUR** **GROVER ROBINSON IV**
- DISTRICT FIVE** **STEVEN BARRY**

VICINITY MAP

PROJECT MANAGER: N. CHAUVIN	
SECTION / TOWNSHIP / RANGE: 36 / 2S / 31W	DISTRICT: 1
PROJECT ENGINEER: T. HAMMOND	REG FLA ENG NO: 54574
SIGNATURE:	DATE:

NO.	DATE	REVISIONS

GENERAL NOTES:

- THE CONTRACTORS SHALL NOTIFY THE COUNTY DESIGN ENGINEER OR DESIGNEE 48 HOURS PRIOR TO CONSTRUCTION.
- ALL CONDITIONS AND STIPULATIONS OF THE CONSTRUCTION PERMITS AND THE APPROVALS ISSUED BY THE ESCAMBIA COUNTY ENGINEER SHALL BE COMPLIED WITH IN EVERY DETAIL.
- ALL ROADS DAMAGED BY CONSTRUCTION OPERATIONS ARE TO BE PATCHED OR RECONSTRUCTED AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
- THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PREVENT EROSION AND ANY OFF SITE SEDIMENT TRANSPORT RESULTING FROM INCREASED RUNOFF DURING CONSTRUCTION BY PROVIDING SILT FENCE AND/OR STAKED HAY BALES AS REQUIRED BY FDOT INDEX 102, THE FLORIDA STORMWATER, EROSION, AND SEDIMENT CONTROL INSPECTOR'S MANUAL, 2000 EDITION, OR AS INDICATED ON THE PLANS. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ASSOCIATED DISTURBED AREAS ARE STABILIZED AS TO REDUCE SEDIMENT RUNOFF, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR DESIGNEE.
- ANY NECESSARY PERMITS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ESCAMBIA COUNTY OR ITS DESIGNEE WILL ASSIST CONTRACTOR WITH REQUIRED PERMITS.
- THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING AND/OR CONSTRUCTION.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PRESERVE OR RELOCATE ALL BENCHMARKS (VERTICAL CONTROL) AS NEEDED DURING CONSTRUCTION. ALL PUBLIC OR PRIVATE CORNER MONUMENTATION SHALL BE PROTECTED. IF A PUBLIC OR PRIVATE CORNER MONUMENTATION IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR DESIGNEE IMMEDIATELY. ANY ESCAMBIA COUNTY HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A HARN/GPS NETWORK MONUMENTS OR BUREAU OF SURVEY AND MAPPING GPS NETWORK MONUMENTS ARE DISTURBED OR DESTROYED THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF THE MONUMENTS AND HAVE THE MONUMENTS POSITION DETERMINED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER USING GUIDELINES AS ESTABLISHED BY NATIONAL GEODETIC SURVEY FOR BLUE BOOKING AND APPROVAL.
- EXISTING DRAINAGE FEATURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL MATCH EXISTING CONDITIONS AT THE BEGINNING AND END OF CONSTRUCTION AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE.
- EXISTING STREETS AND DRIVES SHALL BE MAINTAINED TO LOCAL TRAFFIC AND PROPERTY OWNERS.
- ALL ROADWAY CONSTRUCTION SHALL COMPLY WITH THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
- ALL MATERIALS, TESTING AND CONSTRUCTION METHODS SHALL CONFORM TO THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS, LATEST EDITION.
- ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.
- EXISTING STREET AND ROAD NAME SIGNS ON THE PROJECT SHALL BE KEPT VISIBLE AT ALL TIMES FOR THE FACILITATION OF ACCESS BY EMERGENCY VEHICLES. ALL OTHER EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE TAKEN DOWN AND STOCKPILED WITHIN THE R/W LIMITS BY THE CONTRACTOR AS DIRECTED BY THE COUNTY ENGINEER OR DESIGNEE. ANY EXISTING SIGNS THAT ARE TO BE RELOCATED AND ARE DAMAGED BEYOND USE BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE 10' OPEN LANE AT ALL TIMES. NO OPEN EXCAVATION SHALL REMAIN OVER NIGHT. CONTRACTOR SHALL RESTORE ROAD TO TWO LANES OF TRAFFIC AT THE END OF EACH WORK DAY.
- CONTRACTOR SHALL COMPLY WITH ALL F.D.E.P. AND ARMY CORP. OF ENGINEERS REQUIREMENTS.
- ONLY ACCESS TO THE ROAD R/W AS SHOWN IS GUARANTEED BY THE COUNTY. PRIVATE R/W REQUIRED BY THE CONTRACTOR TO FACILITATE CONSTRUCTION SHALL BE ACQUIRED BY THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION OR ASSISTANCE FROM THE COUNTY.
- IN THE EVENT THAT SURVEY MONUMENTATION OR REFERENCE POINTS ARE MISSING OR HAVE BEEN DESTROYED, PLEASE CONTACT:

DANNY R. SWAIN, PLS ESCAMBIA COUNTY SURVEYOR 3363 WEST PARK PLACE PENSACOLA, FLORIDA 32505 PH (850) 595-3427	ANDREW STARKEY, P.L.S MERRILL PARKER SHAW, INC 4928 N. DAVIS HWY PENSACOLA, FL 32503 PH (850) 478-4923
--	--
- VEGETATION ON R/W AND EASEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION UNLESS OTHERWISE NOTED ON THE PLAN SHEETS. COST OF SAID RESTORATION SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.
- GRADED AGGREGATE BASE SHALL BE REQUIRED WHERE THE SEASONAL HIGH GROUND WATER ENCROACHES WITHIN TWO (2) FEET OF THE BOTTOM OF BASE.
- ALL TREES WITHIN LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS OTHERWISE NOTED IN PLANS.
- ALL COMPACTED FILL SHALL BE PLACED IN 4" LIFTS FOR HAND POWERED TAMPERS AND 8" LIFTS FOR HEAVY EQUIPMENT OPERATED TAMPERS.
- MAINTENANCE OF TRAFFIC AS PER FDOT INDEX 600.
- ALL SPEED BUMPS THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED TO THE LATEST ESCAMBIA COUNTY DESIGN SPECIFICATIONS. ALL COSTS FOR REPLACEMENT OF SAID SPEED BUMPS SHALL BE INCIDENTAL TO OTHER ITEMS AND NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED.
- ALL EXISTING MAILBOXES INTERFERING WITH NEW CONSTRUCTION SHALL BE RELOCATED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH POSTAL REQUIREMENTS AND IN ACCORDANCE WITH ESCAMBIA COUNTY TECHNICAL SPECIFICATION, FDOT DESIGN STANDARDS AND UNITED POSTAL REQUIREMENTS. ALL EXISTING BRICK MAILBOXES WITHIN LIMITS OF CONSTRUCTION OR COUNTY RIGHT OF WAY SHALL BE REMOVED AND PLACED ON THE PROPERTY LINE OF THE OWNER. CONTRACTOR SHALL RE-INSTALL EXISTING BRICK MAILBOX WHENEVER POSSIBLE.
- THE CONTRACTOR SHALL, AT A MINIMUM, MATCH EXISTING SIGNING AND PAVEMENT MARKINGS. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE LATEST FDOT DESIGN STANDARDS. THE CONTRACTOR SHALL CONTACT THE COUNTY TRAFFIC DEPARTMENT PRIOR TO INSTALLATION OF ANY SIGNING AND PAVEMENT MARKINGS.
- WHERE UNSUITABLE MATERIAL, AS DEFINED BY THE COUNTY SPECIFICATIONS SECTION 02300, 1.3(1), IS ENCOUNTERED IN THE AREAS PROPOSED FOR PAVING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY ENGINEER OR DESIGNEE PRIOR TO ANY EXCAVATION.
- PIPE LENGTHS SHOWN IN THE PLANS DO NOT INCLUDE THE LENGTH OF PIPE THAT MUST BE INSTALLED WITH THE MITERED END SECTION. THEREFORE, ALL PIPES LENGTHS ASSOCIATED WITH MITERED END SECTIONS SHALL BE PAID FOR IN THE UNIT COST OF THE MITERED END SECTION.

29. IF ARCHAEOLOGICAL MATERIAL/PREHISTORIC ARTIFACTS SUCH AS POTTERY OR CERAMICS, STONE TOOLS OR METAL IMPLEMENTS, OR ANY OTHER PHYSICAL REMAINS THAT COULD BE ASSOCIATED WITH NATIVE AMERICAN CULTURES, OR EARLY COLONIAL OR AMERICAN SETTLEMENT ARE ENCOUNTERED AT ANY TIME, THE PROJECT SHOULD CEASE ALL ACTIVITIES INVOLVING SUBSURFACE DISTURBANCE IN THE IMMEDIATE VICINITY OF SUCH DISCOVERIES. THE APPLICANT/RECIPIENT, OR OTHER DESIGNEE, SHOULD CONTACT THE FLORIDA DEPARTMENT OF STATE, DIVISION OF HISTORICAL RESOURCES, THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AND THE DSH/FEMA REGION IV ENVIRONMENTAL OFFICER AND FDEM STATE ENVIRONMENTAL LIAISON OFFICER FOR FURTHER GUIDANCE. PROJECT ACTIVITIES SHOULD NOT RESUME WITHOUT VERBAL AND/OR WRITTEN AUTHORIZATION FROM THE DIVISION OF HISTORICAL RESOURCES.

30. IN THE EVENT THAT UNMARKED HUMAN REMAINS ARE ENCOUNTERED DURING PERMITTED ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY AND THE PROPER AUTHORITIES NOTIFIED IN ACCORDANCE WITH F.S. 872.05.

31. AS DESIGNED, THE PROPOSED MIDDLE POND WILL NOT ATTENUATE THE RUNOFF FROM A 100 YEAR STORM EVENT. THE MIDDLE POND WILL EXCEED ITS BANKS IN A 1 HOUR-50 YEAR STORM, IN A 1 HOUR-100 YEAR STORM AND A 2 HOUR-100 YEAR STORM.

UTILITY NOTES:

- THE LOCATION SHOWN FOR EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR AGREES TO BE COMPLETELY RESPONSIBLE FOR ALL DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.
- UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION SO THAT THE UTILITY OWNER CAN SPOT VERIFY AND/OR EXPOSE THEIR UTILITIES. KNOWN UTILITIES OWNERS INCLUDE:

SEWER/WATER – EMERALD COAST UTILITY AUTHORITY MR. BRANDON KNIGHT, P.E P.O. BOX 15311 PENSACOLA, FL. 32514 PH: (850) 969-3310 BKNIGHT@ECUA.ORG	ELECTRIC – GULF POWER MR. CHAD SWAILS 5120 DOGWOOD DRIVE MILTON, FL. 32570 PH: (850) 429-2446 CESWAILS@SOUTHERNCO.COM	
NATURAL GAS – PENSACOLA ENERGY MS. DIANE MOORE 1625 ATWOOD DRIVE PENSACOLA, FL. 32514 PH: (850) 474-5319 DMOORE@CITYOFPENSACOLA.COM	CABLE – COX CABLE MR. TROY YOUNG 3405 MCLEMORE DRIVE PENSACOLA, FL. 32514 PH: (850) 857-4510 TROY.YOUNG@COX.COM	
TELEPHONE – AT&T FLORIDA MR. DON HIERHOLZER 6915 PINE FOREST ROAD PENSACOLA, FL. 32526 PH: (850) 436-1215 DH0762@ATT.COM	SUNSHINE STATE ONE-CALL 7200 LAKE ELLENOR DRIVE, SUITE 200 ORLANDO, FL. 32809 PH: (800) 432-4770	
TRAFFIC DEPARTMENT – ESCAMBIA COUNTY PUBLIC WORKS MRS. JOHNNY COX 3363 WEST PARK PLACE PENSACOLA, FL. 32505 PH:(850) 595-3404		

- AT&T FLORIDA WILL COMPLETE ALL WORK DURING THE HOURS OF 7:30 AM – 4:30 PM, MONDAY THRU FRIDAY. NO NIGHT OR WEEKEND WORK.
- ALL CABLE DAMAGE MUST BE REPORTED TO THE ATT FLORIDA REPAIR SERVICE DEPARTMENT AT 611 FROM A LAND LINE OR 877-737-2478 IF USING A CELL PHONE.
- ALL LOOP DETECTOR INSTALLATION SHALL BE DONE AS PER FDOT INDEX 17781.
- CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.
- UTILITIES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. NECESSARY REPAIRS SHALL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS AND SHALL BE TO THE SATISFACTION OF UTILITY OWNERS.

LEGEND:

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- EX. CONTOUR LINE
- WOODS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND GAS LINE
- UNDERGROUND SEWER LINE
- OVERHEAD UTILITY LINE
- LANE STRIPING LINE
- SILT FENCE
- TURBIDITY BARRIER
- SAWCUT
- PRPOSED CONTOUR LINE
- ASPHALT PAVING
- NEW ASPHALT
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION

- POWER POLE
- GUY WIRE
- TELEPHONE PEDESTAL
- ELECTRIC METER
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- SPRINKLER HEAD
- MAILBOX
- BRICK MAILBOX
- SIGN
- SANITARY SEWER MANHOLE
- UNDERGROUND UTILITY MARK-OUT BY OTHERS
- SHRUBS OR LANSCAPING
- F.F.E. – FINISH FLOOR ELEVATION
- TBM – TEMPRARY BENCHMARK
- R/W – RIGHT-OF-WAY
- O.R. BOOK – OFFICIAL RECORD BOOK
- I.D.# – IDENTIFICATION NUMBER
- P.V.C. – POLYVINYL CHLORIDE
- C.L.F. – CHAIN LINK FENCE
- W.P.F. – WOOD PRIVACY FENCE
- MEG – MATCH EXISTING GRADE

PHASE _____ REVIEW _____	DATE _____	ORIGINATOR (RP) _____	DATE _____
SIGNATURE: _____	DATE _____	CHECKER (RP) _____	DATE _____
PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	DATE _____	CORRECT (GREEN HIGHLIGHTER) CHANGE (RED PEN)	DATE _____
CHANGE INCORPORATION	DATE _____	CORRECT (PINK HIGHLIGHTER)	DATE _____
ORIGINATOR (GR) _____	DATE _____	CHECKER (OR) _____	DATE _____
REMARK INCORPORATION	DATE _____	CORRECT (BLUE HIGHLIGHTER)	DATE _____
ORIGINATOR VERIFICATION	DATE _____	CORRECT (BLUE HIGHLIGHTER)	DATE _____

**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**

HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: _____ DATE: _____
 T. HAMMOND/R. SIEG T. HAMMOND
 PROJECT MANAGER: _____
 N. CHALVIN

APPROVED BY: _____ DATE: 7/12/16
 J. JONES

CHECKED BY: _____ DATE: 5/45/74
 T. HAMMOND

REVISIONS AS PER ESCAMBIA COUNTY COMMENTS

DISTRICT: ONE

DRAWING NUMBER: **14-023**

PROJECT NUMBER

SURVEY NUMBER

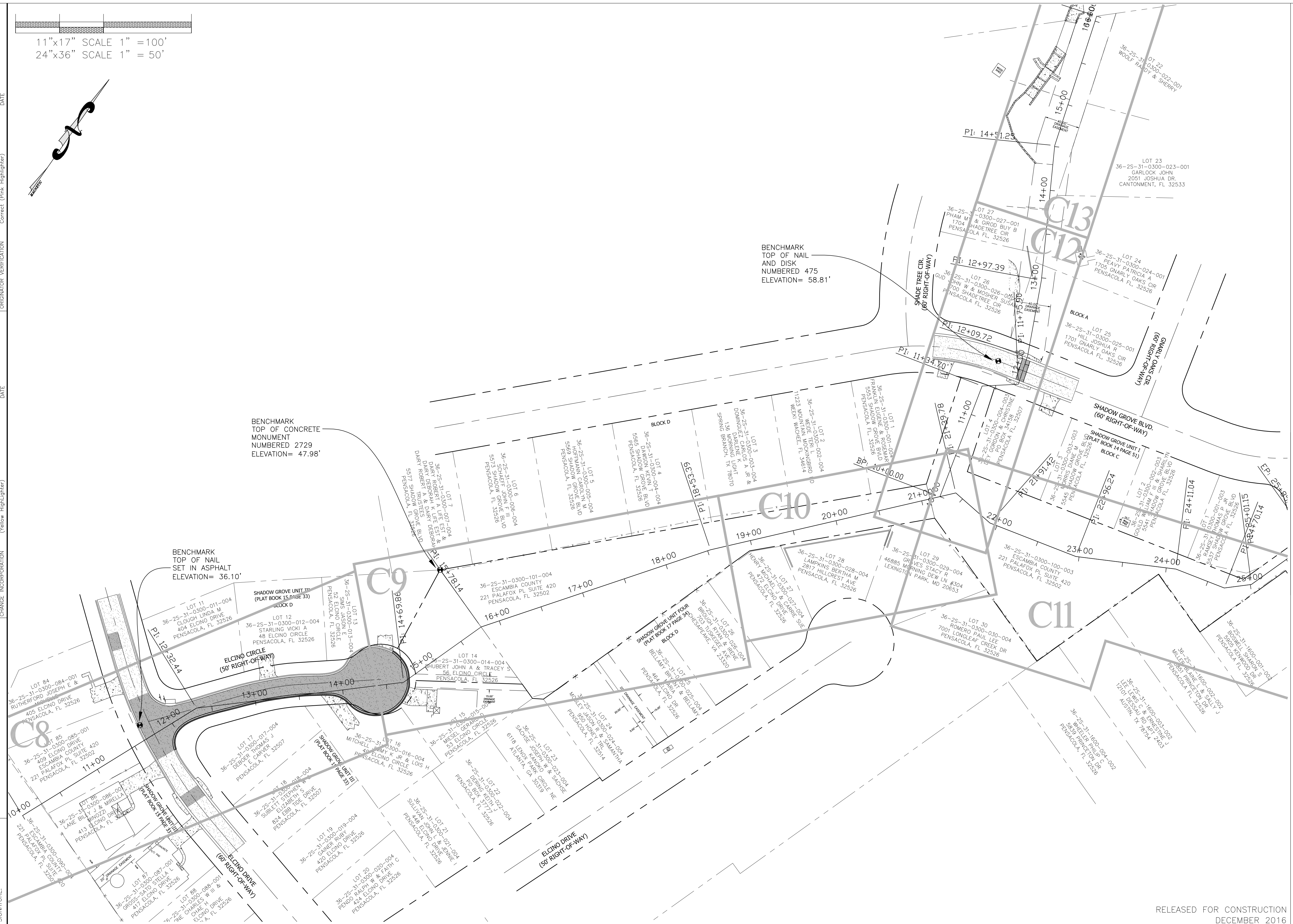
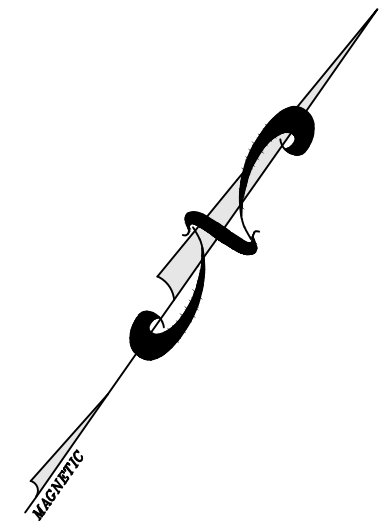
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RELEASED FOR CONSTRUCTION
DECEMBER 2016

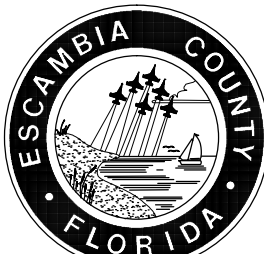
GENERAL NOTES

PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	DATE	ORIGINATOR (GR)	Correct (Green Highlighter)	Change (Red Pen)	DATE	VERIFICATION, CHECKER (GR)	(Blue Highlighter)
SIGNATURE:			CHECKER (RP)	REMARK INCORPORATION	DATE	CHECKER (GR)	(Blue Highlighter)	REMARK INCORPORATION	DATE	ORIGINATOR VERIFICATION	Correct (Pink Highlighter)
			CHANGE INCORPORATION	(Yellow Highlighter)	DATE						

11"x17" SCALE 1" = 100'
24"x36" SCALE 1" = 50'



SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS



HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY:	CHECKED BY:	REG. P.A. ENG. NO.:	DATE:
T. HAMMOND/R. SIEG	T. HAMMOND	54574	
DRAWN BY:	PROJECT MANAGER:	DISTRICT:	SIGNATURE:
N. CHALVIN	N. CHALVIN	ONE	
DATE:	MARCH 2016		

REVISIONS	DATE	APPROVED BY:
AS PER ESCAMBIA COUNTY COMMENTS	7/12/16	J. JONES

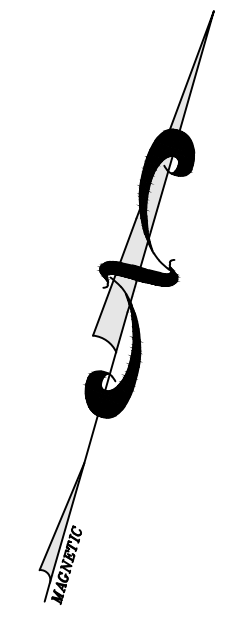
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PROJECT NUMBER:	
SURVEY NUMBER:	

RELEASED FOR CONSTRUCTION
DECEMBER 2016

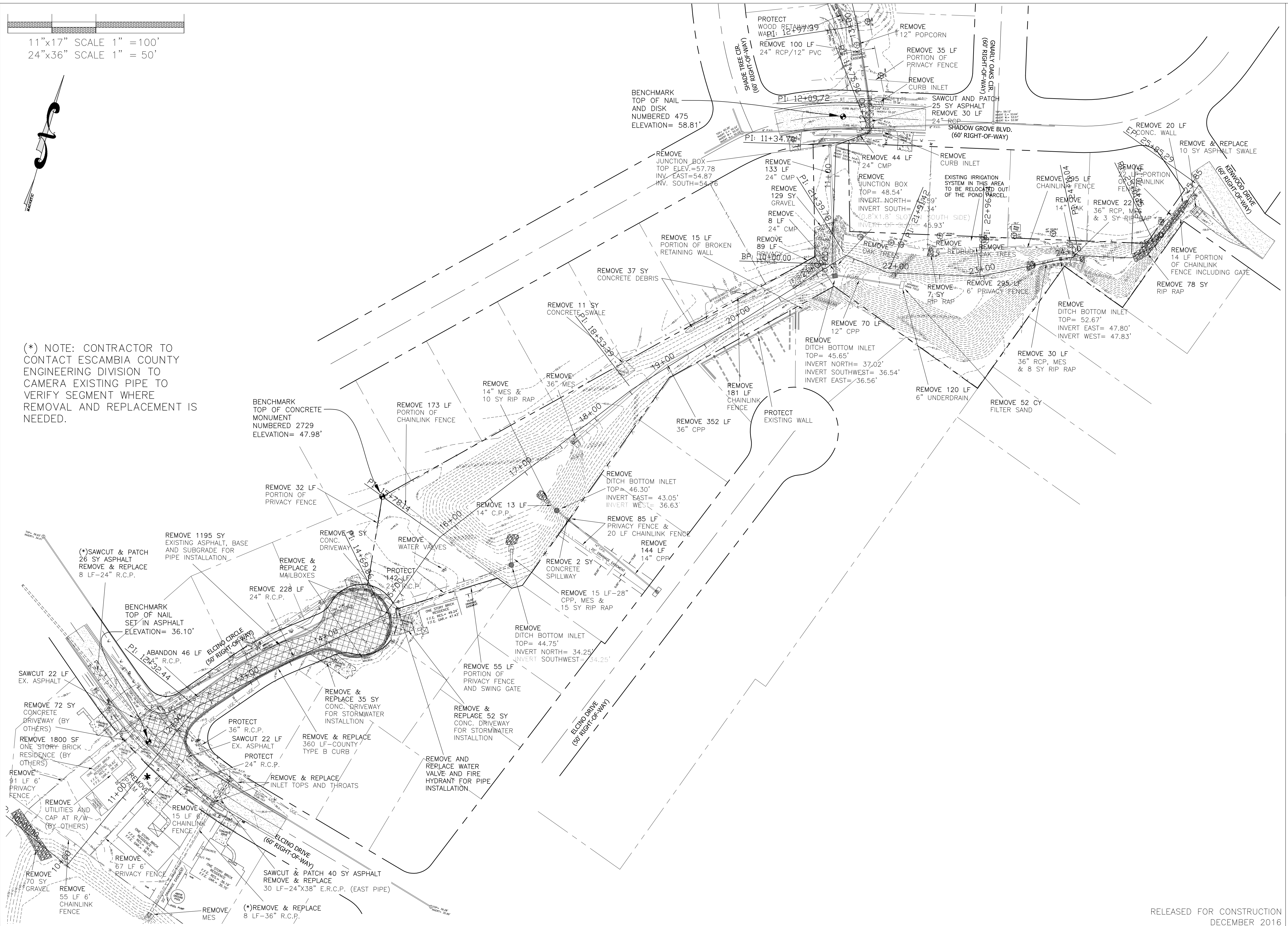
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SIGNATURE:			CHECKER (RP)	CHANGE INCORPORATION	DATE	CHECKER (GR)	(Red Pen X-Out to Disagree or Remark)	DATE	REMARK INCORPORATION	(Blue Highlighter)
									ORIGINATOR VERIFICATION	Correct (Pink Highlighter)

11"x17" SCALE 1" = 100'
24"x36" SCALE 1" = 50'



(* NOTE: CONTRACTOR TO CONTACT ESCAMBIA COUNTY ENGINEERING DIVISION TO CAMERA EXISTING PIPE TO VERIFY SEGMENT WHERE REMOVAL AND REPLACEMENT IS NEEDED.



SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY:	T. HAMMOND/R. SIEG	CHECKED BY:	T. HAMMOND	REG. P.A. ENG. NO.:	54574
DATE:	MARCH 2016	PROJECT MANAGER:	N. CHALVIN	DISTRICT:	ONE
SIGNATURE:		SIGNATURE:			

APPROVED BY: J. JONES

DATE: 7/12/16

REVISIONS: AS PER ESCAMBIA COUNTY COMMENTS

RELEASING AGENCY: ESCAMBIA COUNTY

DATE: 7/12/16

PROJECT NUMBER: 14-023

DRAWING NUMBER: 14-023

SURVEY NUMBER: 14-023

DATE: 7/12/16

SCALE: 1" = 100'

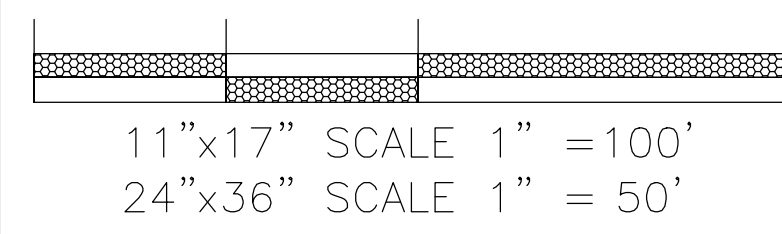
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DATE: 7/12/16

RELEASED FOR CONSTRUCTION
DECEMBER 2016

SHEET **C6**

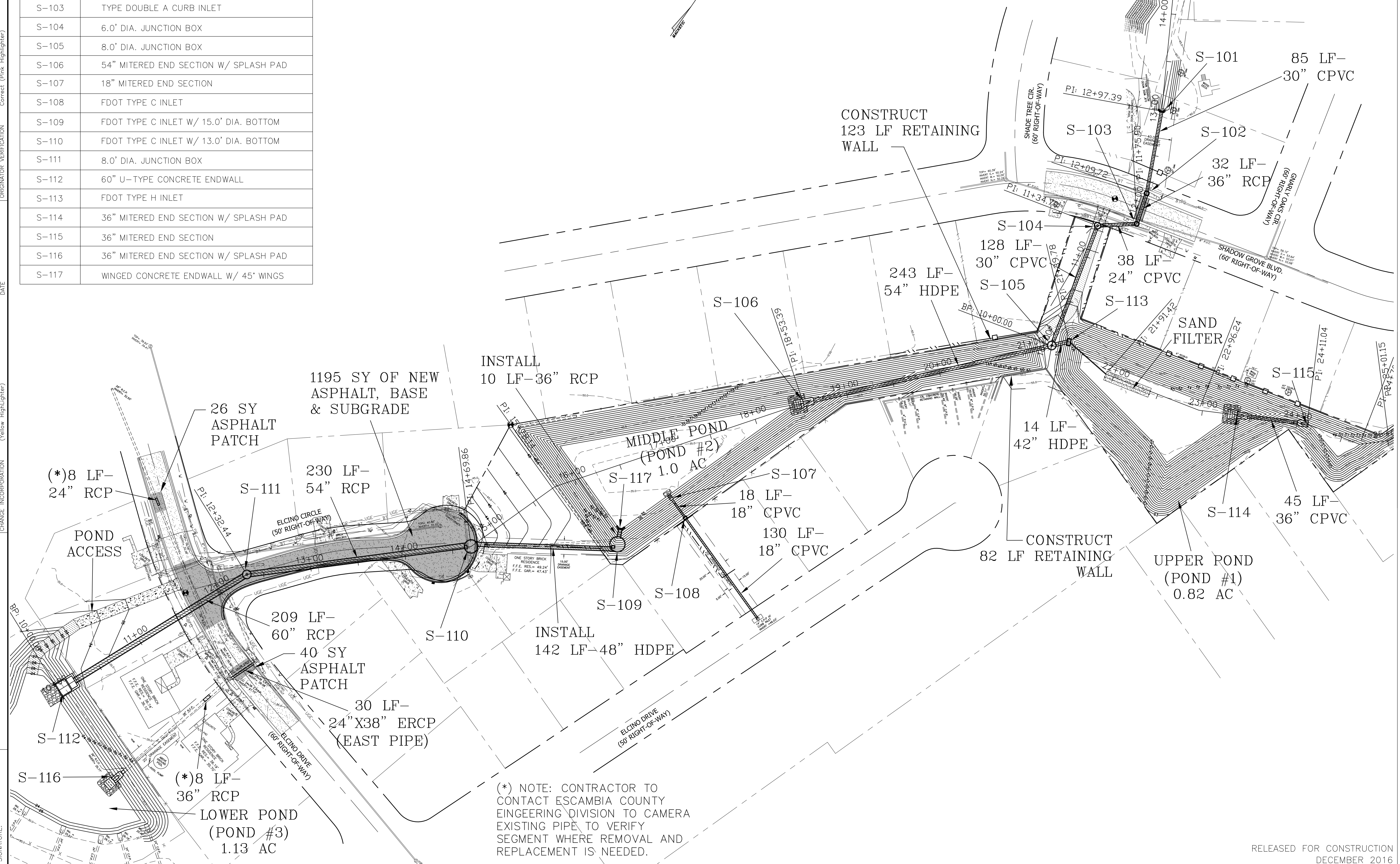
PHASE REVIEW DATE ORIGINATOR (RP) PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP) CHECKER (RP) ORIGINATOR (GR) CORRECT (Green Highlighter) Change (Red Pen) DATE VERIFICATION, CHECKER (OR) REMARK INCORPORATION (Blue Highlighter) ORIGINATOR VERIFICATION CORRECT (Pink Highlighter) DATE



NOTE: ALL INLETS GRATES TO BE TRAFFIC RATED CAST IRON.

STORMWATER STRUCTURES	
S-101	FDOT WINGED ENDWALL
S-102	TYPE DOUBLE A CURB INLET
S-103	TYPE DOUBLE A CURB INLET
S-104	6.0' DIA. JUNCTION BOX
S-105	8.0' DIA. JUNCTION BOX
S-106	54" MITERED END SECTION W/ SPLASH PAD
S-107	18" MITERED END SECTION
S-108	FDOT TYPE C INLET
S-109	FDOT TYPE C INLET W/ 15.0' DIA. BOTTOM
S-110	FDOT TYPE C INLET W/ 13.0' DIA. BOTTOM
S-111	8.0' DIA. JUNCTION BOX
S-112	60" U-TYPE CONCRETE ENDWALL
S-113	FDOT TYPE H INLET
S-114	36" MITERED END SECTION W/ SPLASH PAD
S-115	36" MITERED END SECTION
S-116	36" MITERED END SECTION W/ SPLASH PAD
S-117	WINGED CONCRETE ENDWALL W/ 45° WINGS

CLEAR AND GRUB SIDE SLOPE FROM EXISTING WALL TO TOP OF BANK. RE-GRADE SIDE SLOPE AT 2:1. INSTALL 358 SY TRM BACKED TIED CONCRETE BLOCK MAT.



(* NOTE: CONTRACTOR TO CONTACT ESCAMBIA COUNTY ENGINEERING DIVISION TO CAMERA EXISTING PIPE TO VERIFY SEGMENT WHERE REMOVAL AND REPLACEMENT IS NEEDED.

SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS

PROPOSED IMPROVEMENT PLAN

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
CHECKED BY: T. HAMMOND
DATE: MARCH 2016
PROJECT MANAGER: N. CHALVIN
DISTRICT: ONE
SIGNATURE: _____

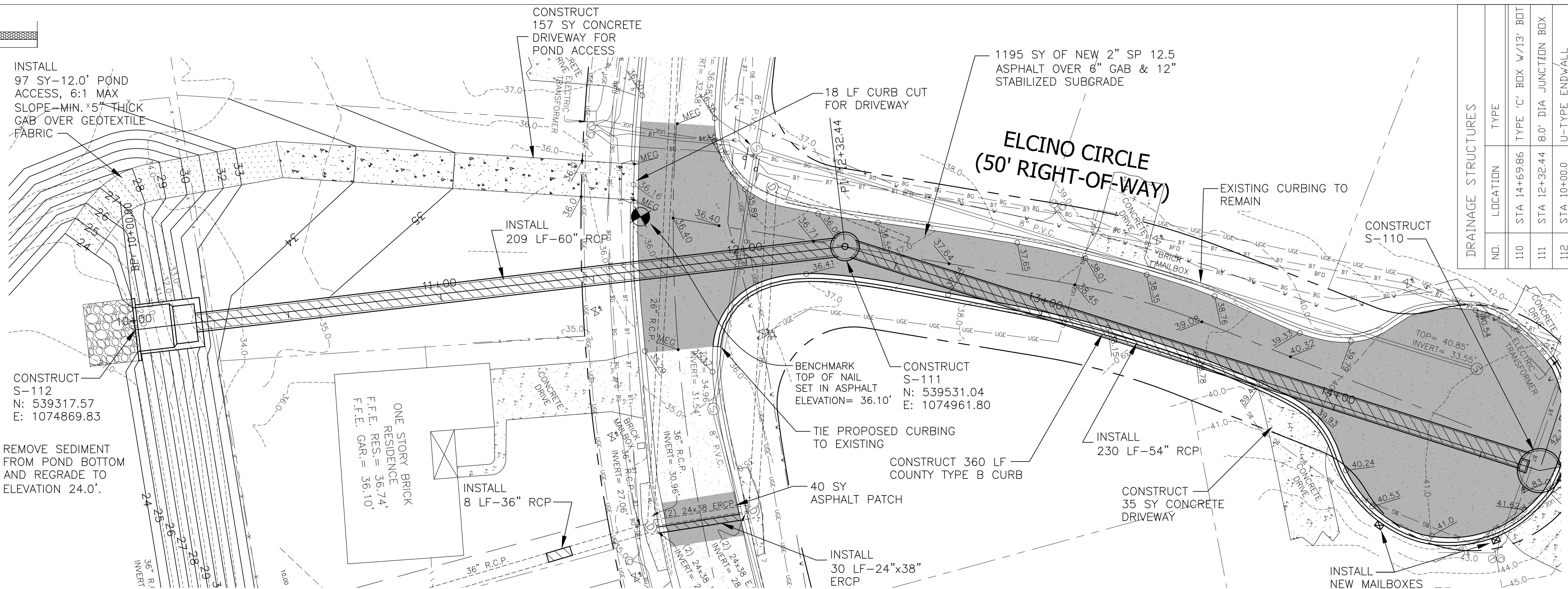
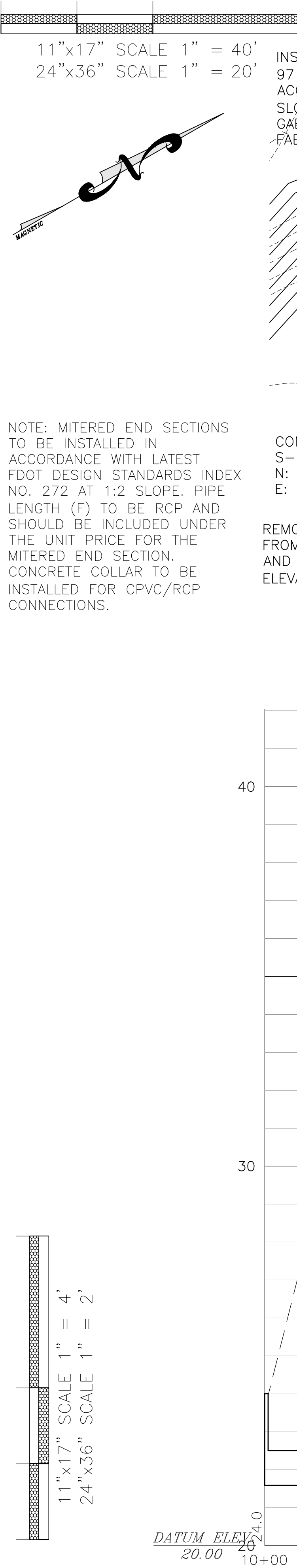
APPROVED BY: J. JONES
DATE: 7/12/16
AS PER ESCAMBIA COUNTY COMMENTS

DRAWING NUMBER: 14-023

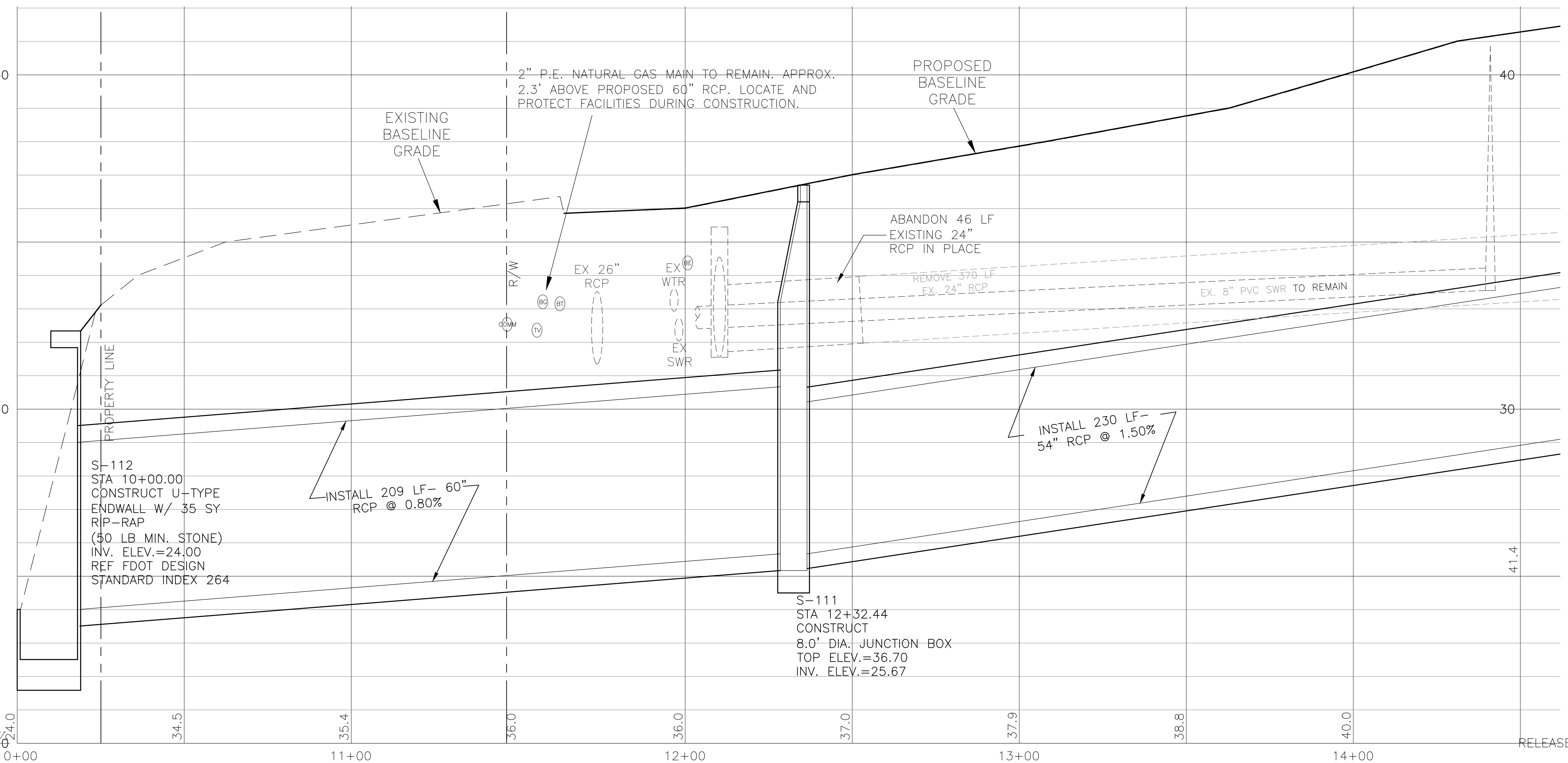
RELEASED FOR CONSTRUCTION
DECEMBER 2016

SHEET **C7**

PHASE	REVIEW	DATE	ORIGINATOR (RP)	CHECKER (RP)	ORIGINATOR (GR)	CHECKER (GR)	VERIFICATION, CHECKER (OR)	DATE
			PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL		Correct (Green Highlighter)	Change (Red Pen)	(Blue Highlighter)	
SIGNATURE:			CHANGE INCORPORATION	REMARK INCORPORATION	Correct (Pink Highlighter)	Correct (Correct)		



DRAINAGE STRUCTURES		
NO.	LOCATION	TYPE
110	STA 14+69.86	TYPE 'C' BOX W/13' BOT
111	STA 12+32.44	18.0" DIA JUNCTION BOX
112	STA 10+00.00	U-TYPE ENDWALL



**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**

OUTFLOW SPECIAL PROFILE

HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
 CHECKED BY: T. HAMMOND
 DATE: MARCH 2016
 PROJECT MANAGER: N. CHALVIN
 DISTRICT: ONE
 SIGNATURE: _____

APPROVED BY: J. JONES
 DATE: 7/12/16

REVISIONS: AS PER ESCAMBIA COUNTY COMMENTS

NUMBER: 1
 DRAWING NUMBER: 14-023
 PROJECT NUMBER: _____
 SURVEY NUMBER: _____

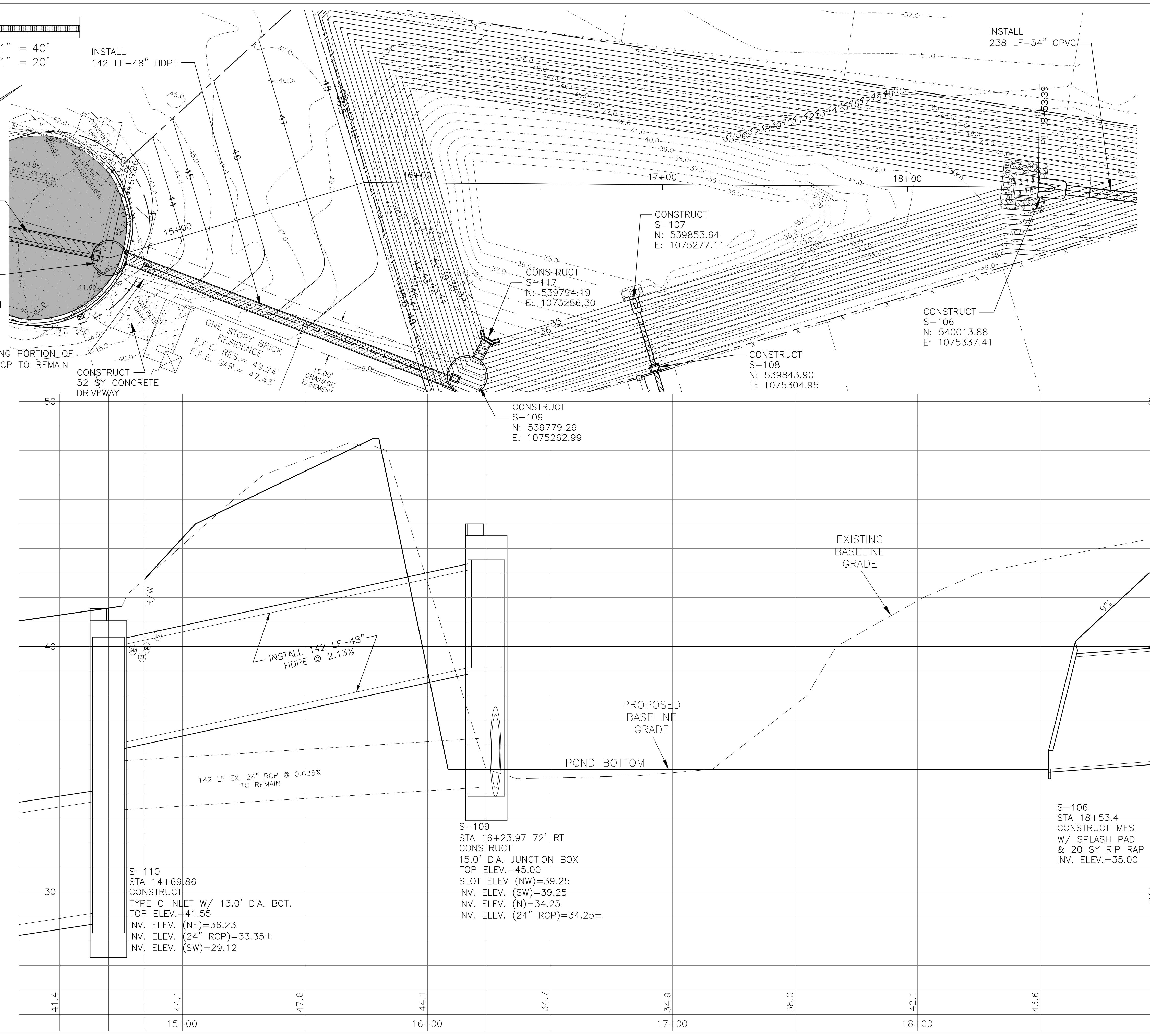
RELEASED FOR CONSTRUCTION
DECEMBER 2016

SHEET **C8**

PHASE REVIEW
 SIGNATURE: _____ DATE _____
 ORIGINATOR (RP) DATE _____
 PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP) CHECKER (RP) DATE _____
 CHANGE INCORPORATION (Yellow Highlighter)
 ORIGINATOR (GR) Correct (Green Highlighter) Change (Red Pen) DATE _____
 CHECKER (RF) (Red Pen X-Out to Disagree or Remark) DATE _____
 VERIFICATION, CHECKER (OR) (Blue Highlighter) DATE _____
 REMARK INCORPORATION (Blue Highlighter) DATE _____
 ORIGINATOR VERIFICATION Correct (Pink Highlighter) DATE _____

11"x17" SCALE 1" = 40'
 24"x36" SCALE 1" = 20'

11"x17" SCALE 1" = 4'
 24"x36" SCALE 1" = 2'



DRAINAGE STRUCTURES		
NO.	LOCATION	TYPE
106	STA 18+48.59	MES W/ SPLASH PAD
107	STA 16+83.83, 47' RT	18" MES
109	STA 16+23.97, 72' RT	TYPE 'C' INLET W/ 15' DIA. BOT.
110	STA 14+69.86	TYPE 'C' INLET W/ 13' DIA. BOT.
117	STA 16+28.85, 63' RT	36" WINGED CONC. ENDWALL

**SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS
 ALTERNATE A, MIDDLE POND OUTFALL PROFILE**

HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG T. HAMMOND
 CHECKED BY: N. CHALVIN
 DRAWN BY: ARS
 DATE: MARCH 2016
 PROJECT MANAGER: N. CHALVIN
 DISTRICT: ONE
 SIGNATURE: _____
 REG. P.A. ENG. NO. 54574

REVISIONS	DATE	APPROVED BY
AS PER ESCAMBIA COUNTY COMMENTS	7/12/16	J. JONES

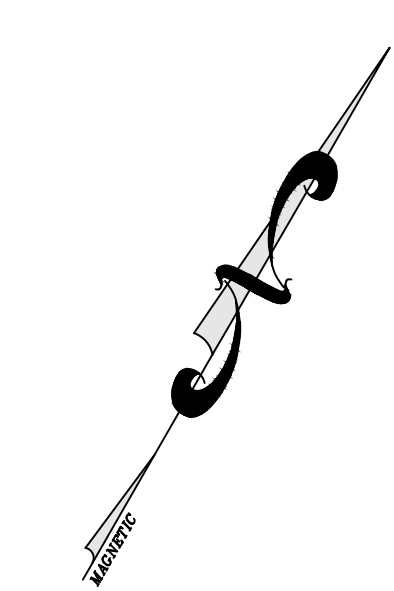
NUMBER 1.
 DRAWING NUMBER 14-023
 PROJECT NUMBER
 SURVEY NUMBER

RELEASED FOR CONSTRUCTION
 DECEMBER 2016

SHEET **C9**

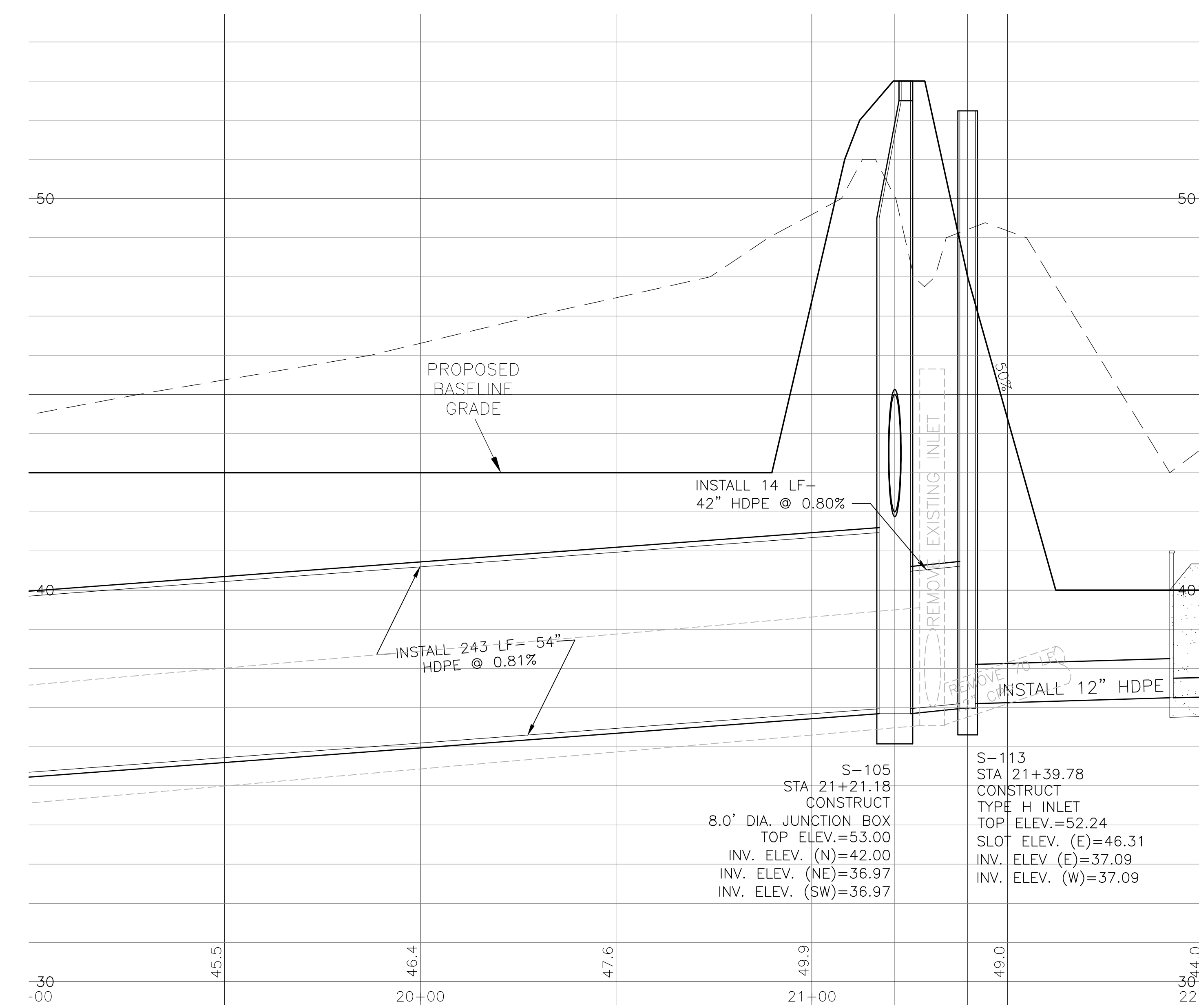
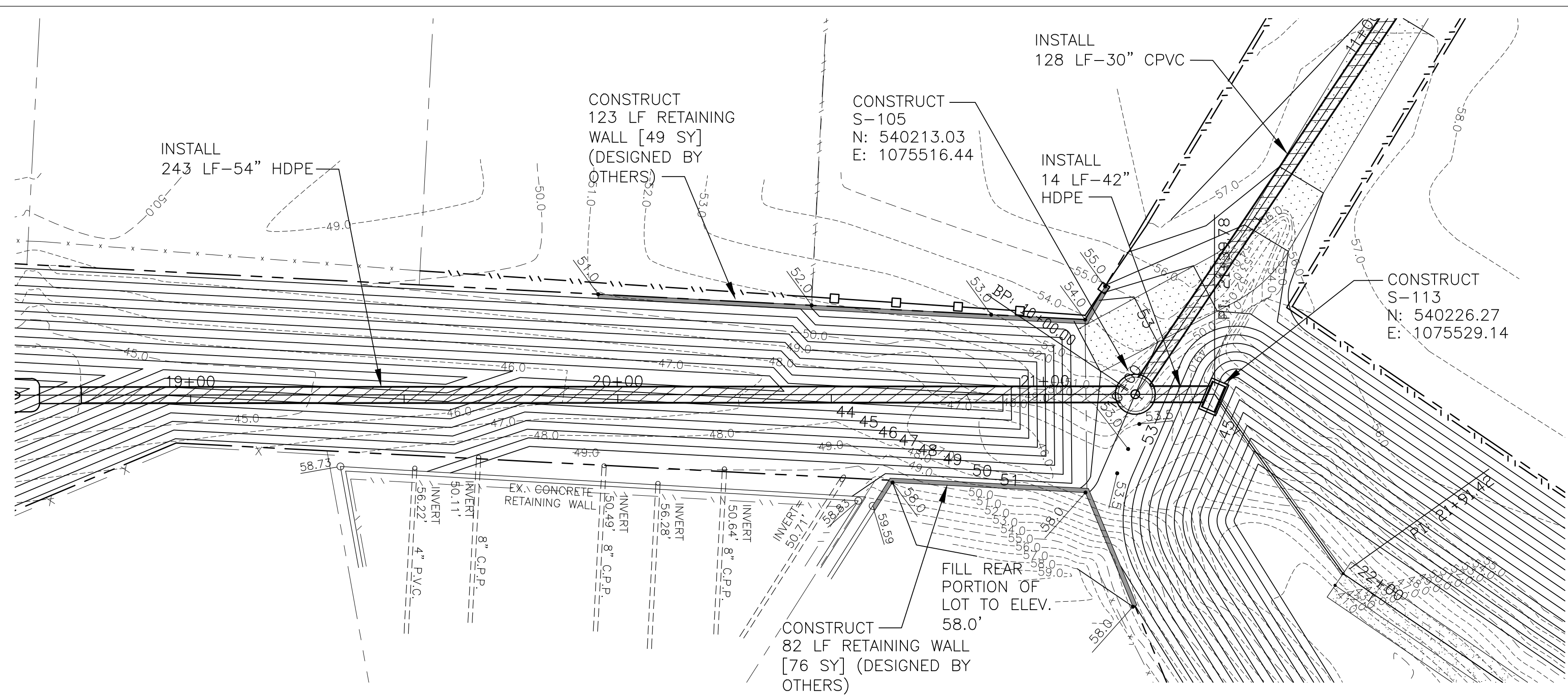
PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	REVIEW (RP)	DATE	ORIGINATOR (GR)	Correct (Green Highlighter) Change (Red Pen)	DATE	VERIFICATION, CHECKER (OR)	(Blue Highlighter)
SIGNATURE:				CHECKER (RF)	(Red Pen X-Out to Disagree or Remark)	DATE	CHECKER (RF)	(Red Pen X-Out to Disagree or Remark)	DATE	REMARK INCORPORATION	(Blue Highlighter)
				CHANGE INCORPORATION	(Yellow Highlighter)	DATE	ORIGINATOR VERIFICATION	Correct (Pink Highlighter)	DATE		

11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'




NOTE: MITERED END SECTIONS TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 272 AT 1:2 SLOPE. PIPE LENGTH (F) TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE MITERED END SECTION. CONCRETE COLLAR TO BE INSTALLED FOR CPVC/RCP CONNECTIONS.

11"x17" SCALE 1" = 4'
24"x36" SCALE 1" = 2'



DRAINAGE STRUCTURES		
NO.	LOCATION	TYPE
105	STA 21+00.00	8.0' DIA JUNCTION BOX
113	STA 21+34.97	TYPE H INLET



**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**

OUTFLOW SPECIAL PROFILE

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

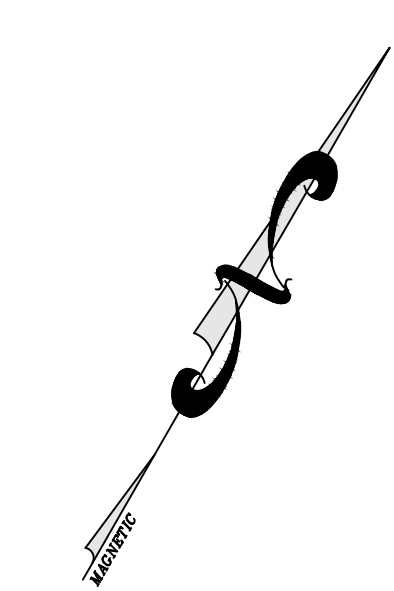
DESIGNED BY: T. HAMMOND/R. SIEG	CHECKED BY: T. HAMMOND	REG. P.A. ENG. NO. 54574	DATE: MARCH 2016
DRAWN BY: N. CHALVIN	PROJECT MANAGER: N. CHALVIN	DISTRICT: ONE	SIGNATURE:

REVISIONS	DATE	APPROVED BY
AS PER ESCAMBIA COUNTY COMMENTS	7/12/16	J. JONES

NUMBER	1
DRAWING NUMBER	14-023
PROJECT NUMBER	
SURVEY NUMBER	

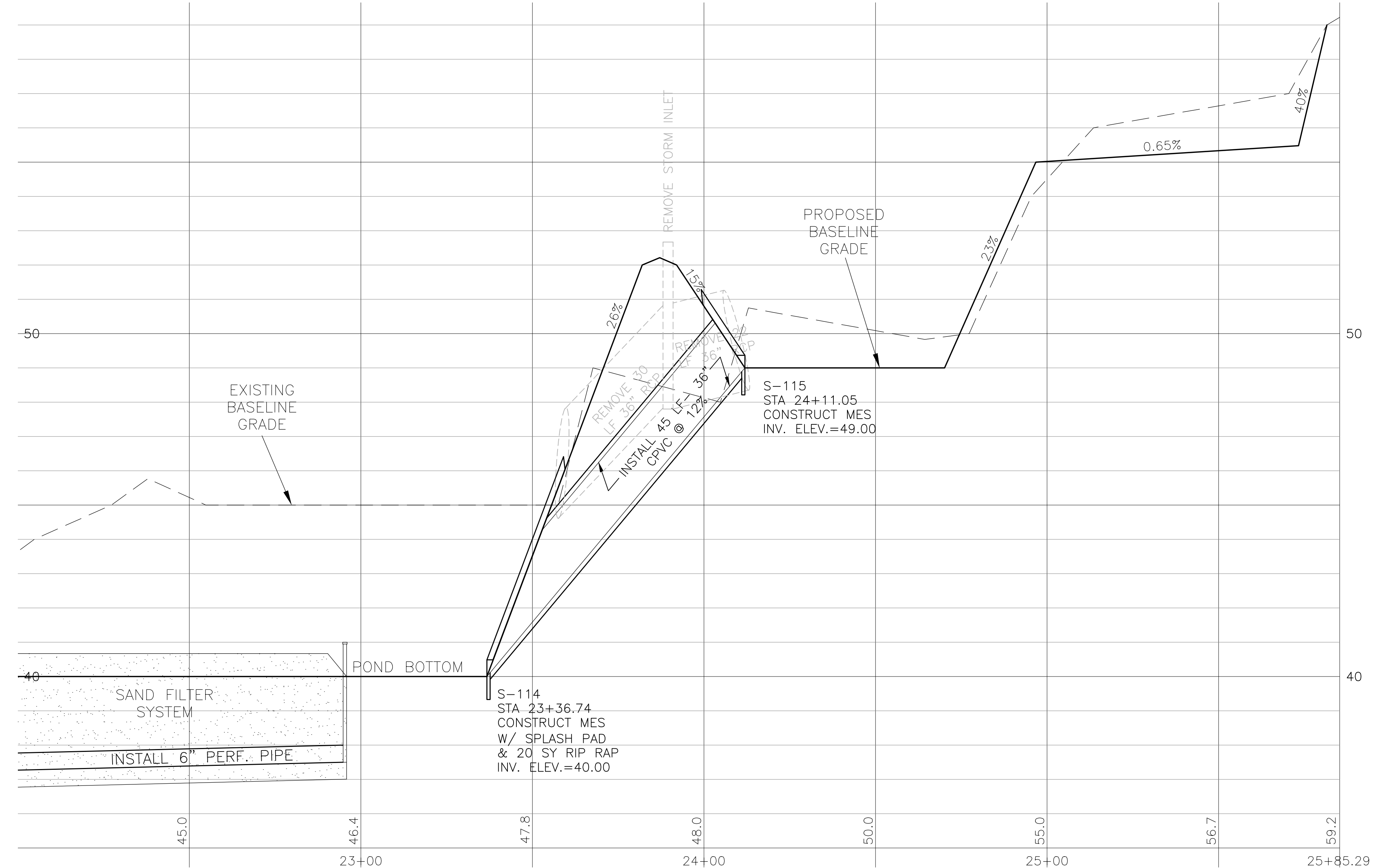
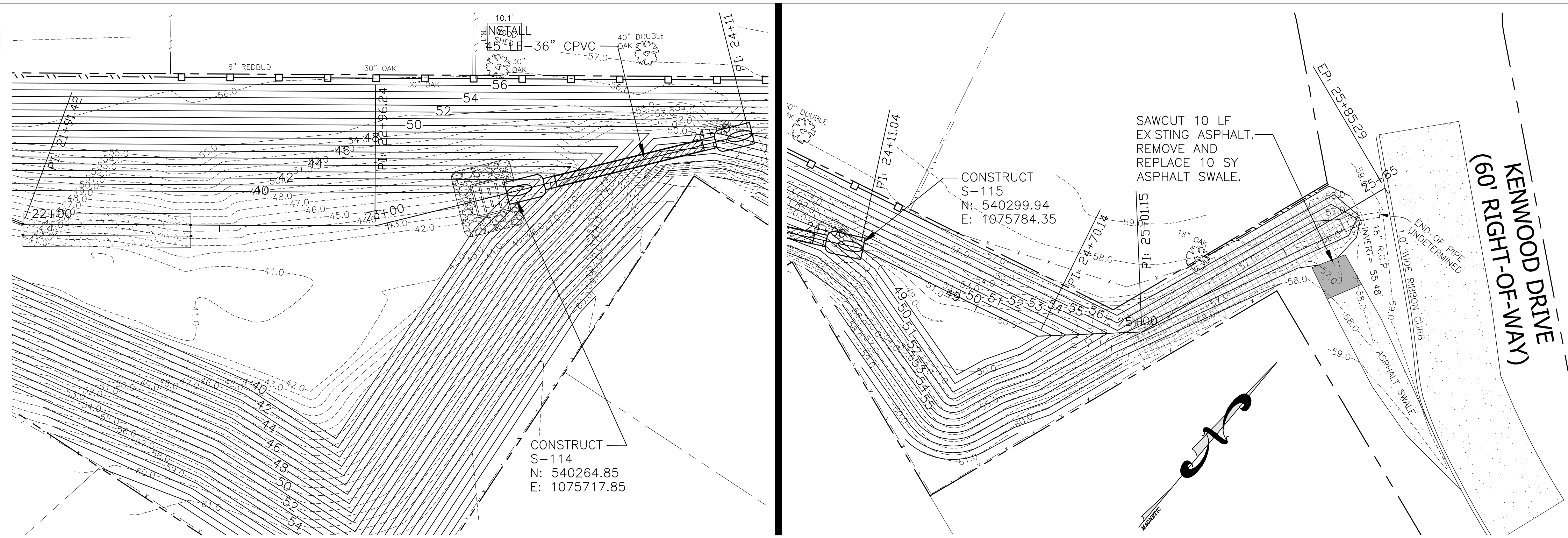
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SIGNATURE:			CHECKER (RP)	CHANGE INCORPORATION	DATE	CHECKER (GR)	(Red Pen X-Out to Disagree or Remark)	DATE	REMARK INCORPORATION	(Blue Highlighter)	DATE
									ORIGINATOR VERIFICATION	Correct (Pink Highlighter)	DATE

11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'



NOTE: MITERED END SECTIONS TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 272 AT 1:2 SLOPE. PIPE LENGTH (F) TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE MITERED END SECTION. CONCRETE COLLAR TO BE INSTALLED FOR CPVC/RCP CONNECTIONS.

11"x17" SCALE 1" = 4'
24"x36" SCALE 1" = 2'



DRAINAGE STRUCTURES	
NO.	LOCATION
114	STA 23+31.93 MES W/ SPLASH PAD
115	STA 24+06.24 MITERED END SECTION

**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**

OUTFLOW SPECIAL PROFILE



HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

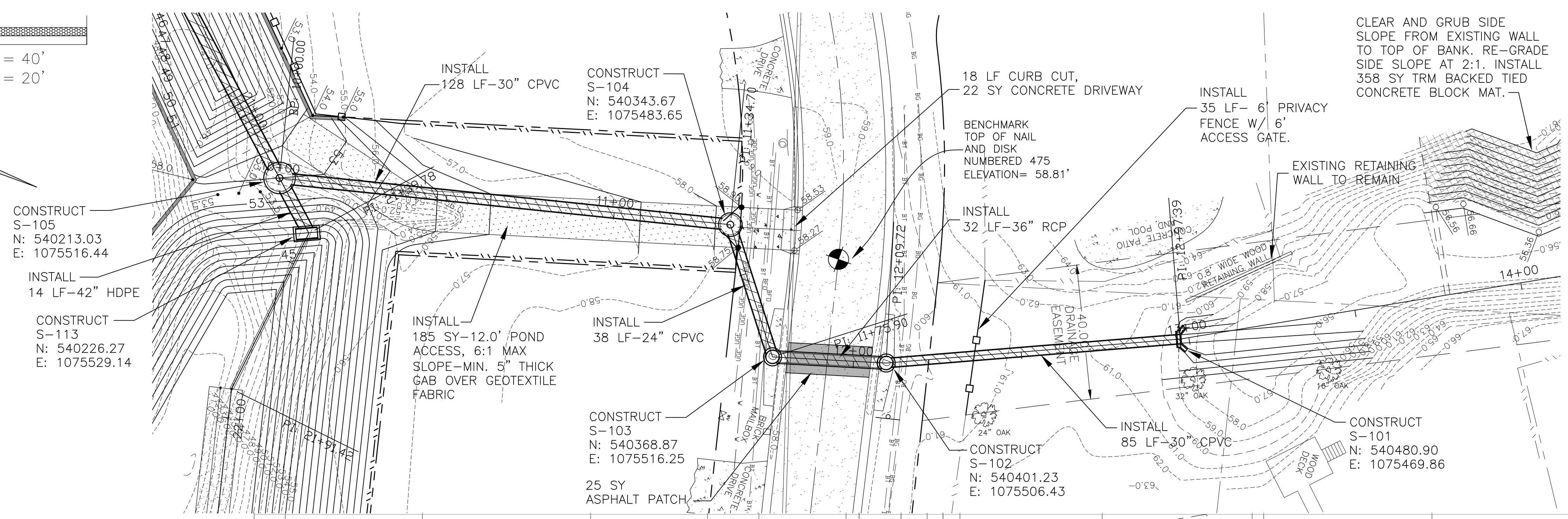
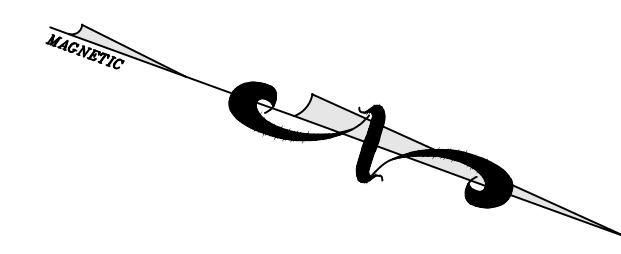
DESIGNED BY: T. HAMMOND/R. SIEG
CHECKED BY: T. HAMMOND
DATE: MARCH 2016

DRAWN BY: N. CHALVIN
PROJECT MANAGER: N. CHALVIN
DISTRICT: ONE

APPROVED BY:	J. JONES	DATE:	7/12/16
REVISIONS:	AS PER ESCAMBIA COUNTY COMMENTS		
NUMBER:	1		
DRAWING NUMBER:	14-023		
PROJECT NUMBER:			
SURVEY NUMBER:			

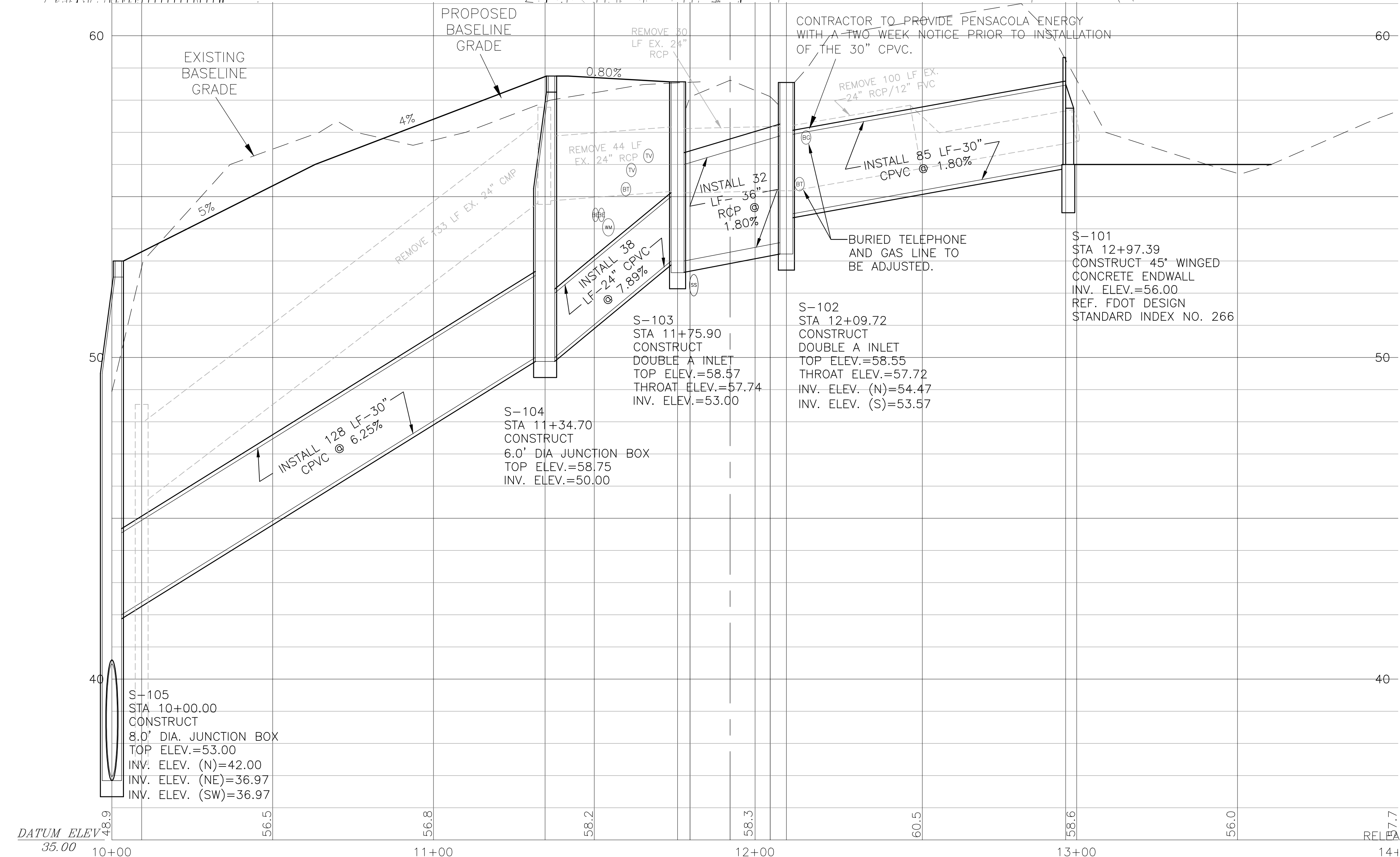
PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	DATE	ORIGINATOR (GR)	Correct (Green Highlighter)	Change (Red Pen)	DATE	VERIFICATION, CHECKER (OR)	(Blue Highlighter)
SIGNATURE:						CHECKER (RP)	(Red Pen X-Out to Disagree or Remark)			REMARK INCORPORATION	(Blue Highlighter)
						CHANGE INCORPORATION	(Yellow Highlighter)			ORIGINATOR VERIFICATION	Correct (Pink Highlighter)

11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'



NOTE: WINGWALL TO BE INSTALLED IN ACCORDANCE WITH LATEST FDOT DESIGN STANDARDS INDEX NO. 266. LAST 8' OF PIPE RUN INTO ENDWALL TO BE RCP AND SHOULD BE INCLUDED UNDER THE UNIT PRICE FOR THE WINGED ENDWALL. CONCRETE COLLAR TO BE INSTALLED FOR CPVC/RCP CONNECTIONS.

11"x17" SCALE 1" = 4'
24"x36" SCALE 1" = 2'



DRAINAGE STRUCTURES	
NO.	LOCATION
105	STA 10+00.00
104	STA 11+44.24
103	STA 11+85.45
102	STA 12+19.27
101	STA 13+06.10

NO.	LOCATION	TYPE
105	STA 10+00.00	8.0' DIA JUNCTION BOX
104	STA 11+44.24	6.0' DIA JUNCTION BOX
103	STA 11+85.45	DOUBLE A INLET
102	STA 12+19.27	DOUBLE A INLET
101	STA 13+06.10	WINGED CONC. ENDWALL

SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS



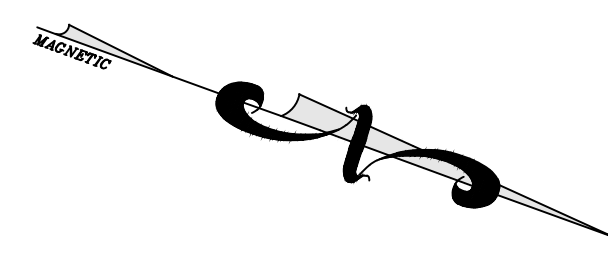
HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
CHECKED BY: T. HAMMOND
PROJECT MANAGER: N. CHALVIN
DISTRICT: ONE
DATE: MARCH 2016

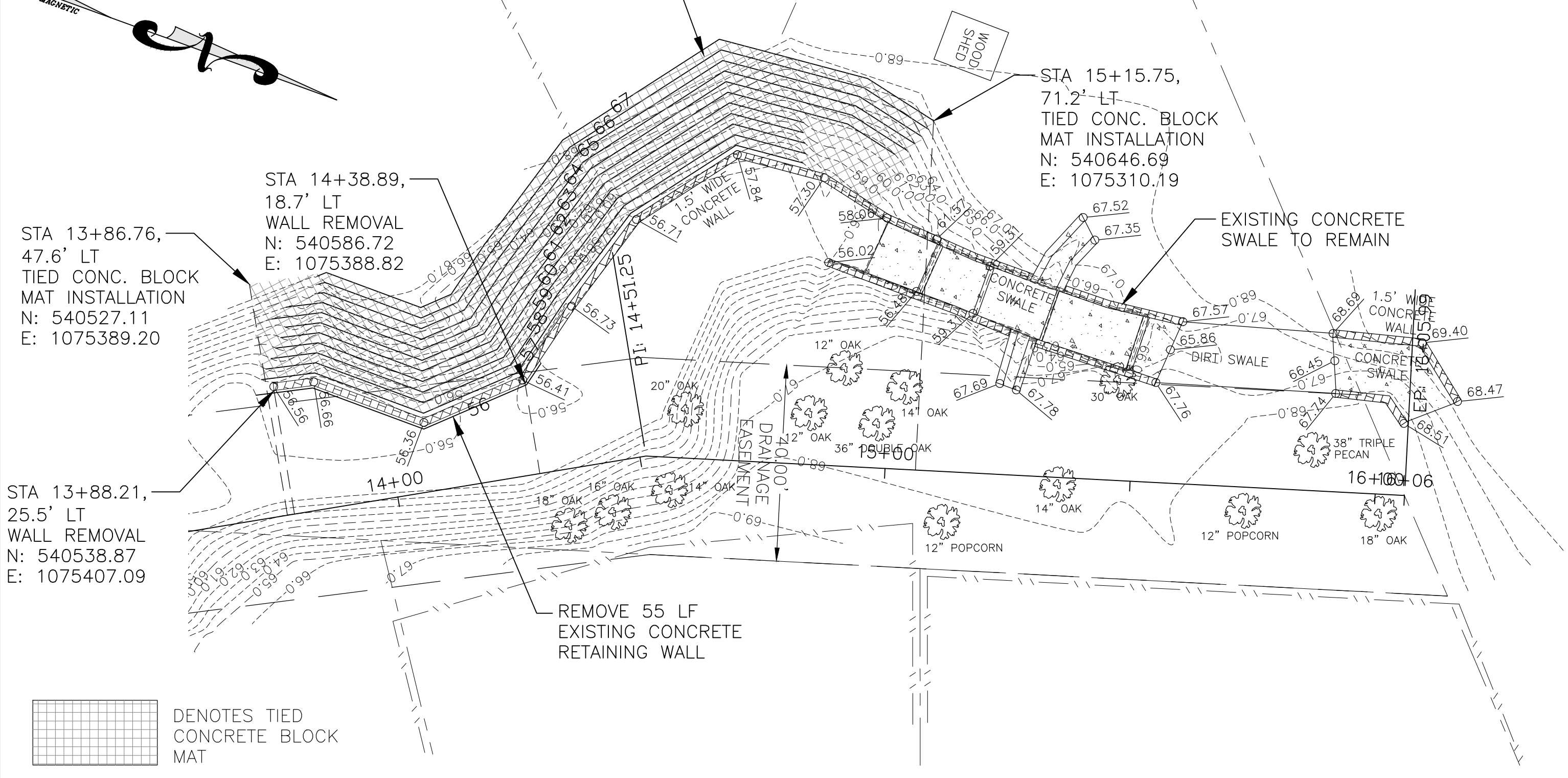
APPROVED BY:	J. JONES
DATE:	7/12/16
REVISIONS:	AS PER ESCAMBIA COUNTY COMMENTS
NUMBER:	1
DRAWING NUMBER:	14-023
PROJECT NUMBER:	
SURVEY NUMBER:	

PHASE REVIEW
 SIGNATURE: _____ DATE _____
 ORIGINATOR (RP) PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP) CHECKER (RP) DATE 7/12/16 APPROVED BY J. JONES
 ORIGINATOR (GR) CORRECT (Green Highlighter) CHANGE (Red Pen) DATE _____
 CHECKER (RF) (Red Pen X-Out to Disagree or Remark) DATE _____
 CHANGE INCORPORATION (Yellow Highlighter) DATE _____
 VERIFICATION, CHECKER (OR) (Blue Highlighter) DATE _____
 REMARK INCORPORATION (Blue Highlighter) DATE _____
 ORIGINATOR VERIFICATION CORRECT (Pink Highlighter) DATE _____

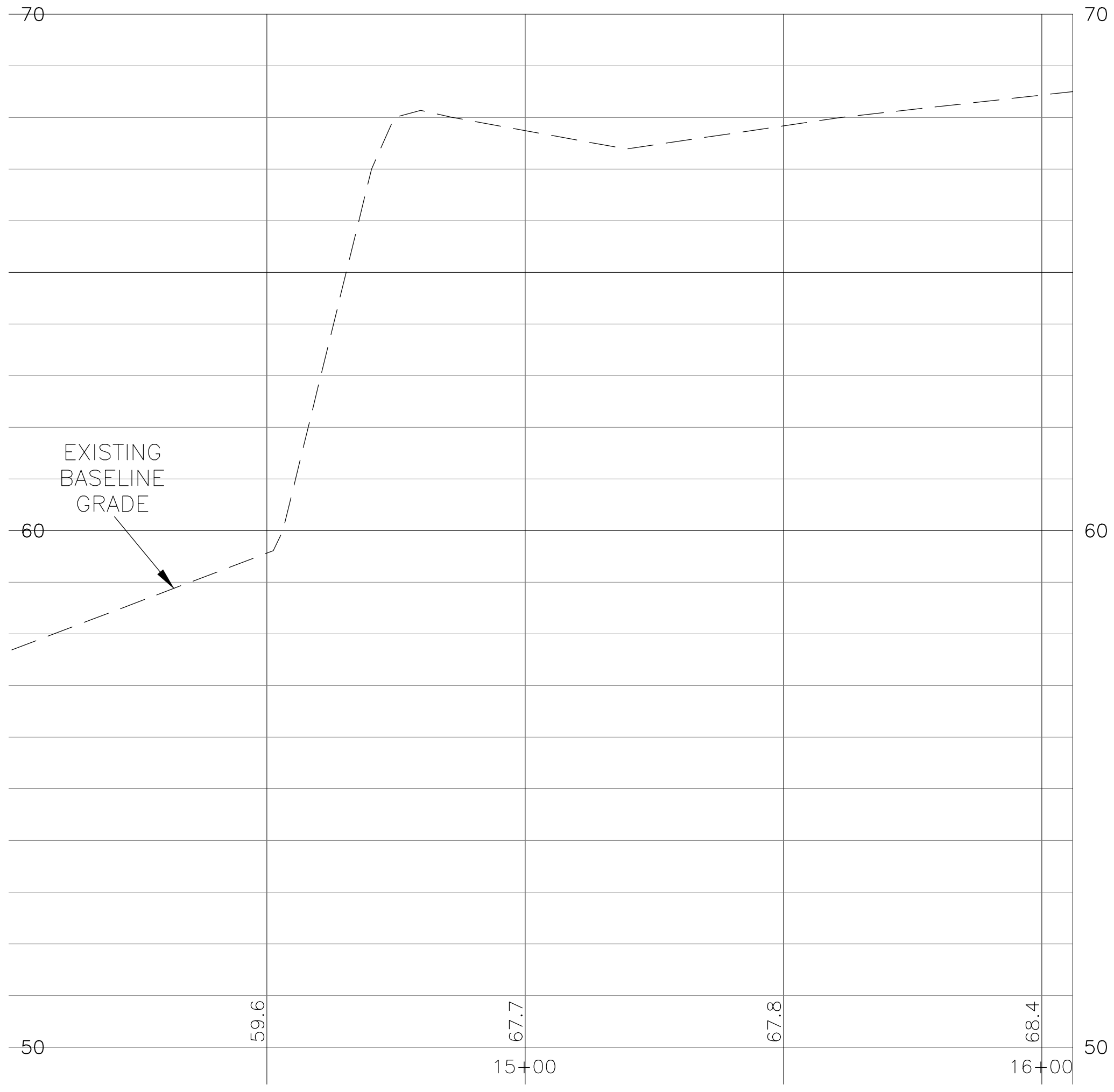
11"x17" SCALE 1" = 40'
 24"x36" SCALE 1" = 20'



CLEAR AND GRUB SIDE SLOPE FROM EXISTING WALL TO TOP OF BANK. RE-GRADE SIDE SLOPE AT 2:1. INSTALL 358 SY TRM BACKED TIED CONCRETE BLOCK MAT.



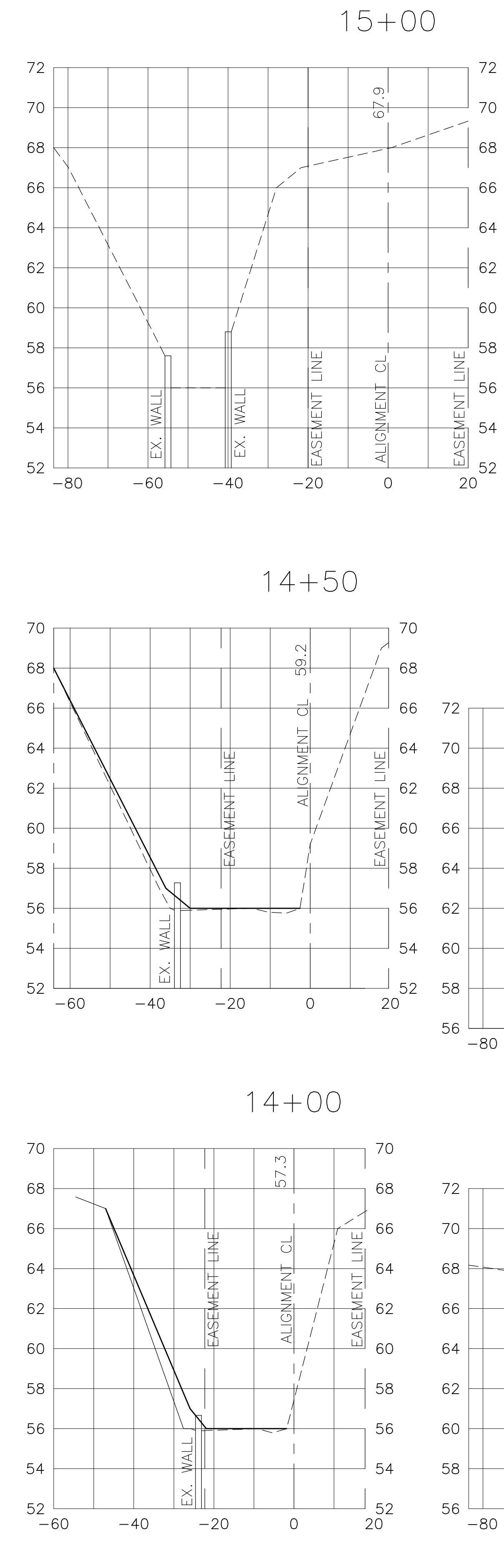
DENOTES TIED CONCRETE BLOCK MAT



11"x17" SCALE 1" = 4'
 24"x36" SCALE 1" = 2'

11"x17" SCALE 1" = 40'
 24"x36" SCALE 1" = 20'

11"x17" SCALE 1" = 8'
 24"x36" SCALE 1" = 16'



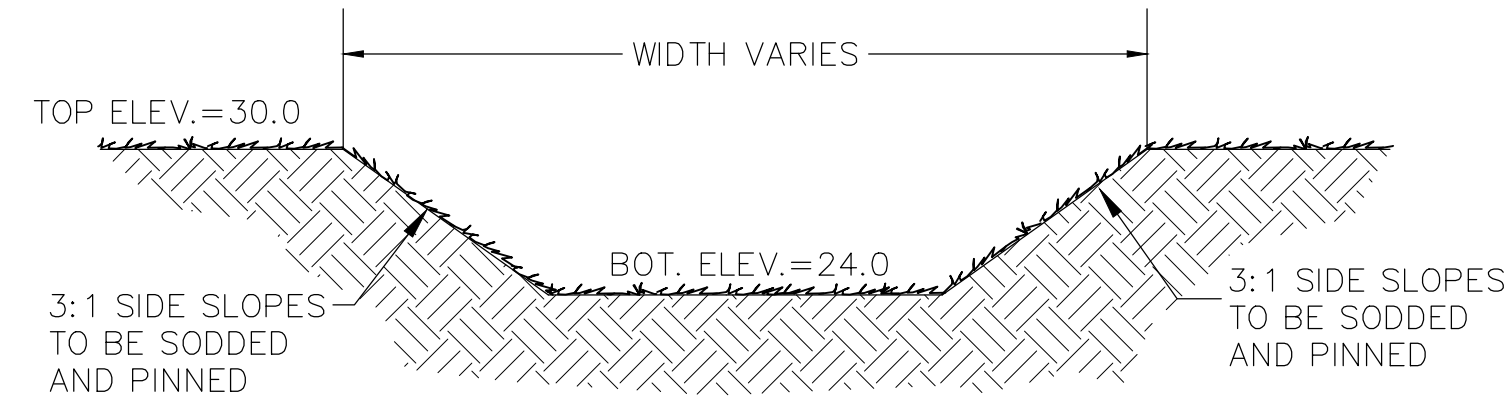
HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG	CHECKED BY: T. HAMMOND	REG. P.A. ENG. NO.: 54574	DATE: MARCH 2016
DRAWN BY: ARS	PROJECT MANAGER: N. CHALVIN	DISTRICT: ONE	SIGNATURE: _____
REVISIONS: AS PER ESCAMBIA COUNTY COMMENTS	DATE: 7/12/16	APPROVED BY: J. JONES	
NUMBER: 1			
DRAWING NUMBER: 14-023			
PROJECT NUMBER			
SURVEY NUMBER			

**SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS**

INFLOW SPECIAL PROFILE

11"x17" SCALE 1" = 40'
 24"x36" SCALE 1" = 20'



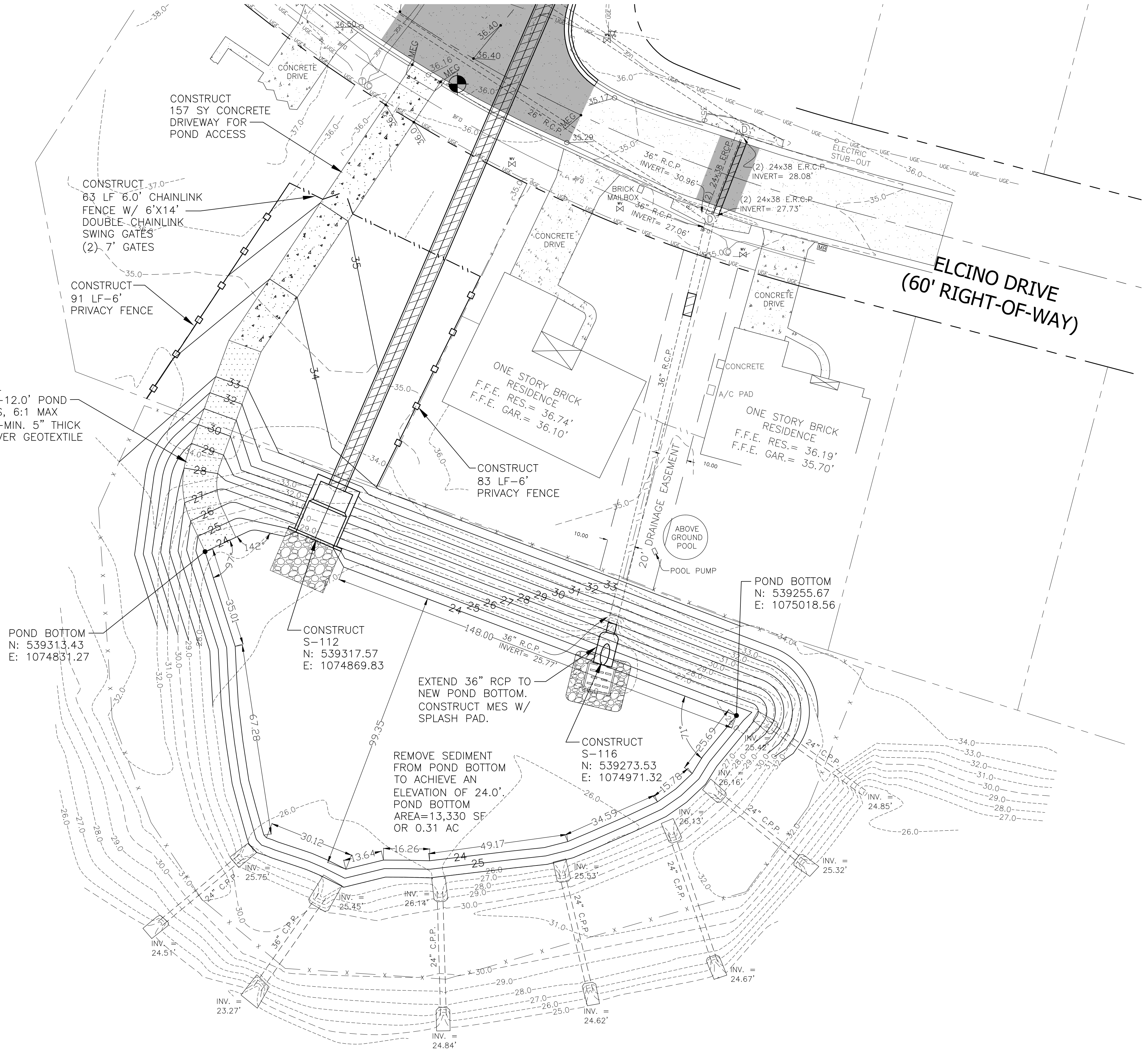
STORMWATER DETENTION POND
 TYPICAL X-SECTION

NOTE: THE ENTIRE BANK SLOPE AND POND BOTTOM SHALL BE STABILIZED IN A MANNER THAT GUARANTEES A HEALTHY GROWTH OF GRASS (FREE FROM NOXIOUS WEEDS) SUCH AS PANGALA, ARGENTINE BAHIA, BERMUDA, CENTIPEDE OR OTHER SUITABLE GRASS.

ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER BY THE CONTRATOR. IF THERE WILL BE TEMPORARY STOCKPILING OF MATERIALS ON THE SITE, THESE AREAS SHOULD CONTAIN EROSION CONTROL BMP'S (e.g. SILT FENCE, HAYBALES, ETC.) AS NECESSARY.

DETENTION BASIN CONSTRUCTION

- INITIALLY INSTALL ALL EROSION AND SEDIMENT CONTROL BMP'S AS ILLUSTRATED ON THE SWPPP PLAN PROVIDED AS PART OF THESE PLANS
- CONSTRUCT THE DETENTION BASIN TO ROUGH GRADE BY UNDER-EXCAVATING THE BASIN BOTTOM AND SIDES BY ABOUT 12 INCHES.
- AFTER THE DRAINAGE AREA CONTRIBUTING TO THE BASIN HAS BEEN FULLY STABILIZED, THE INTERIOR SIDE SLOPES AND BASIN BOTTOM SHALL BE EXCAVATED TO FINAL DESIGN SPECIFICATIONS. THE EXCESS SOIL AND UNDESIRABLE MATERIAL MUST BE CAREFULLY EXCAVATED AND REMOVED FROM THE POND SO THAT ALL ACCUMULATED SILTS, CLAYS, ORGANICS, AND OTHER FINE SEDIMENT MATERIAL HAS BEEN REMOVED FROM THE POND AREA. THE EXCAVATED MATERIAL SHALL BE DISPOSED OF BEYOND THE LIMITS OF THE DRAINAGE AREA OF THE BASIN.
- ONCE THE BASIN HAS BEEN EXCAVATED TO FINAL GRADE, THE ENTIRE BASIN BOTTOM MUST BE DEEP RAKED AND LOOSENED FOR OPTIMAL FILTRATION.
- FINALLY, THE BASIN MUST BE STABILIZED WITH PERMANENT VEGETATIVE COVER.



POND BOTTOM
 N: 539313.43
 E: 1074831.27

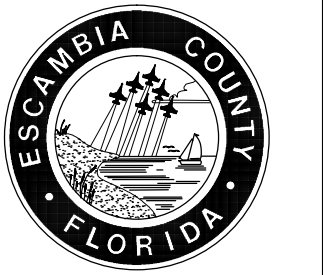
CONSTRUCT
 S-112
 N: 539317.57
 E: 1074869.83

REMOVE SEDIMENT
 FROM POND BOTTOM
 TO ACHIEVE AN
 ELEVATION OF 24.0'.
 POND BOTTOM
 AREA=13,330 SF
 OR 0.31 AC

CONSTRUCT
 S-116
 N: 539273.53
 E: 1074971.32

POND BOTTOM
 N: 539255.67
 E: 1075018.56

**SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS**



HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
 CHECKED BY: T. HAMMOND
 DATE: MARCH 2016

PROJECT MANAGER: N. CHALVIN
 DISTRICT: ONE

REG. P.A. ENG. NO. 54574
 SIGNATURE: N. CHALVIN

APPROVED BY: J. JONES
 DATE: 7/12/16

REVISIONS AS PER ESCAMBIA COUNTY COMMENTS

NUMBER: 1

DRAWING NUMBER: 14-023

PROJECT NUMBER

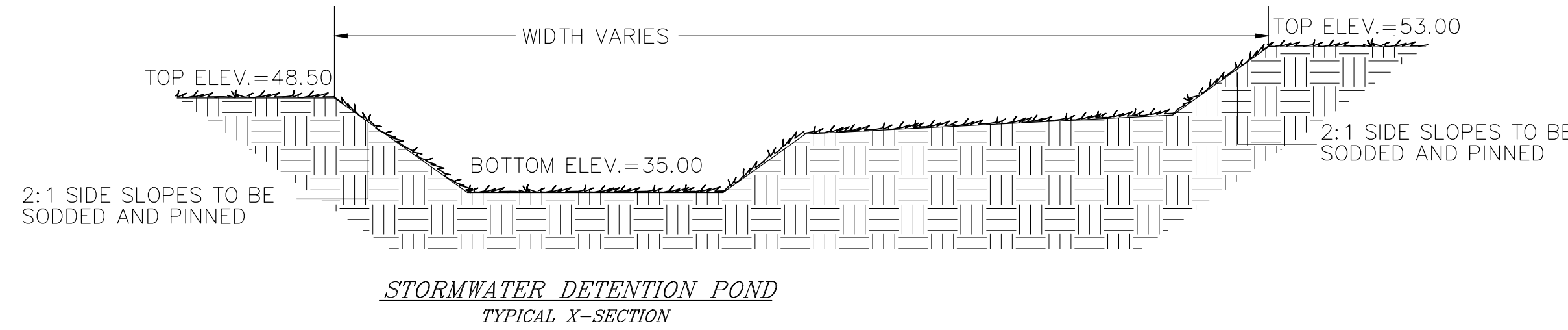
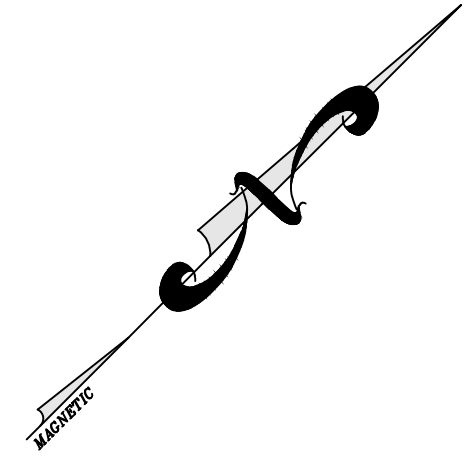
SURVEY NUMBER

SHEET: C14

PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	DATE	ORIGINATOR (GR)	CORRECT (Green Highlighter) Change (Red Pen)	DATE	VERIFICATION, CHECKER (OR)	(Blue Highlighter)
SIGNATURE:			CHECKER (RP)	CHANGE INCORPORATION	DATE	CHECKER (GR)	(Red Pen X-Out to Disagree or Remark)	DATE	REMARK INCORPORATION	(Blue Highlighter)
									ORIGINATOR VERIFICATION	Correct (Pink Highlighter)

ORIGINATOR (RP)	DATE	ORIGINATOR (GR)	DATE	ORIGINATOR (GR)	DATE	ORIGINATOR (GR)	DATE	ORIGINATOR (GR)	DATE
PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)		CHANGE INCORPORATION (RP)		REMARK X-Out to Disagree or Remark (RP)		Correct (Green Highlighter)		Change (Red Pen)	
REVISIONS	DATE	AS PER ESCAMBA COUNTY COMMENTS	DATE	APPROVED BY: J. JONES	DATE	VERIFICATION, CHECKER (GR)	DATE	REMARK INCORPORATION (Blue Highlighter)	DATE
NUMBER 1.						ORIGINATOR VERIFICATION (Correct (Pink Highlighter))			

11"x17" SCALE 1" = 60'
24"x36" SCALE 1" = 30'



NOTE: THE ENTIRE BANK SLOPE AND POND BOTTOM SHALL BE STABILIZED IN A MANNER THAT GUARANTEES A HEALTHY GROWTH OF GRASS (FREE FROM NOXIOUS WEEDS) SUCH AS PANGALA, ARGENTINE BAHIA, BERMUDA, CENTIPEDE OR OTHER SUITABLE GRASS.

ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER BY THE CONTRACTOR. IF THERE WILL BE TEMPORARY STOCKPILING OF MATERIALS ON THE SITE, THESE AREAS SHOULD CONTAIN EROSION CONTROL BMP'S (e.g. SILT FENCE, HAYBALES, ETC.) AS NECESSARY.

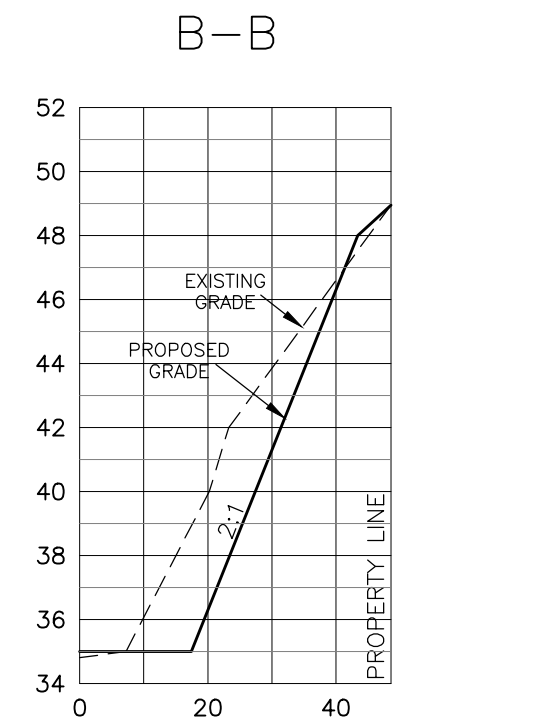
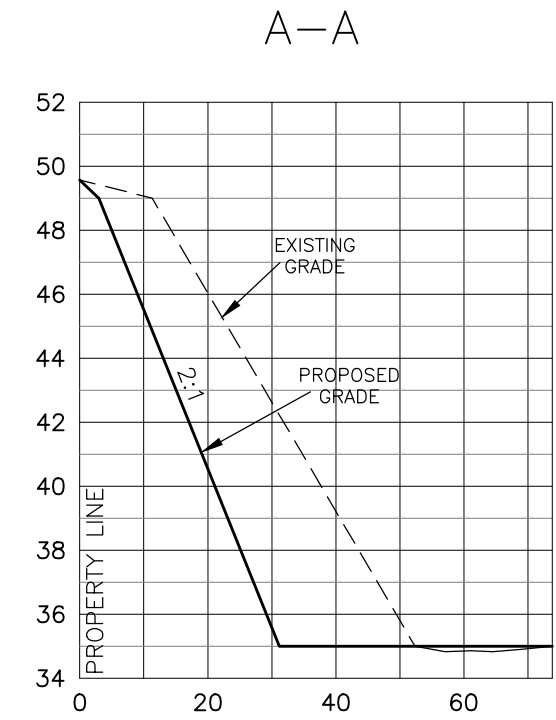
DETENTION BASIN CONSTRUCTION
1. INITIALLY INSTALL ALL EROSION AND SEDIMENT CONTROL BMP'S AS ILLUSTRATED ON THE SWPPP PLAN PROVIDED AS PART OF THESE PLANS (SHEET P10)

2. CONSTRUCT THE DETENTION BASIN TO ROUGH GRADE BY UNDER-EXCAVATING THE BASIN BOTTOM AND SIDES BY ABOUT 12 INCHES.

3. AFTER THE DRAINAGE AREA CONTRIBUTING TO THE BASIN HAS BEEN FULLY STABILIZED, THE INTERIOR SIDE SLOPES AND BASIN BOTTOM SHALL BE EXCAVATED TO FINAL DESIGN SPECIFICATIONS. THE EXCESS SOIL AND UNDESIRABLE MATERIAL MUST BE CAREFULLY EXCAVATED AND REMOVED FROM THE POND SO THAT ALL ACCUMULATED SILTS, CLAYS, ORGANICS, AND OTHER FINE SEDIMENT MATERIAL HAS BEEN REMOVED FROM THE POND AREA. THE EXCAVATED MATERIAL SHALL BE DISPOSED OF BEYOND THE LIMITS OF THE DRAINAGE AREA OF THE BASIN.

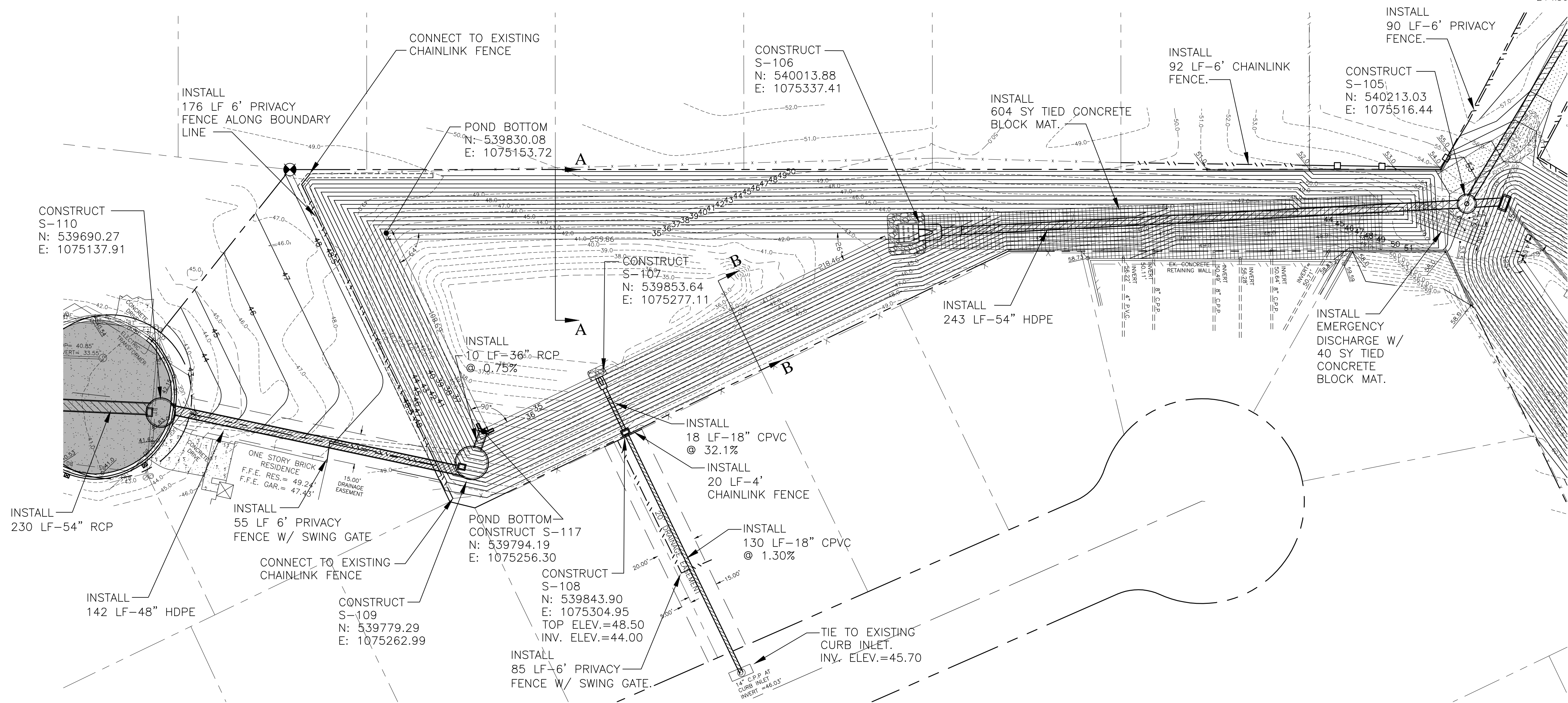
4. ONCE THE BASIN HAS BEEN EXCAVATED TO FINAL GRADE, THE ENTIRE BASIN BOTTOM MUST BE DEEP RAKED AND LOOSENED FOR OPTIMAL FILTRATION.

5. FINALLY, THE BASIN MUST BE STABILIZED WITH PERMANENT VEGETATIVE COVER.



HORIZONTAL SCALE:
11"x17" SCALE 1" = 60'
24"x36" SCALE 1" = 30'

VERTICAL SCALE:
11"x17" SCALE 1" = 12'
24"x36" SCALE 1" = 6'



**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**



HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
CHECKED BY: T. HAMMOND
DATE: MARCH 2016
PROJECT MANAGER: N. CHALVIN
DISTRICT: ONE
SIGNATURE: N. CHALVIN

DATE	APPROVED BY:
7/12/16	J. JONES
DATE	DRAWING NUMBER
	14-023
DATE	PROJECT NUMBER
DATE	SURVEY NUMBER

RELEASED FOR CONSTRUCTION
DECEMBER 2016

PHASE REVIEW SIGNATURE: _____ DATE _____

ORIGINATOR (RP) PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP) CHECKER (RP) CHANGE INCORPORATION (Yellow Highlighter)

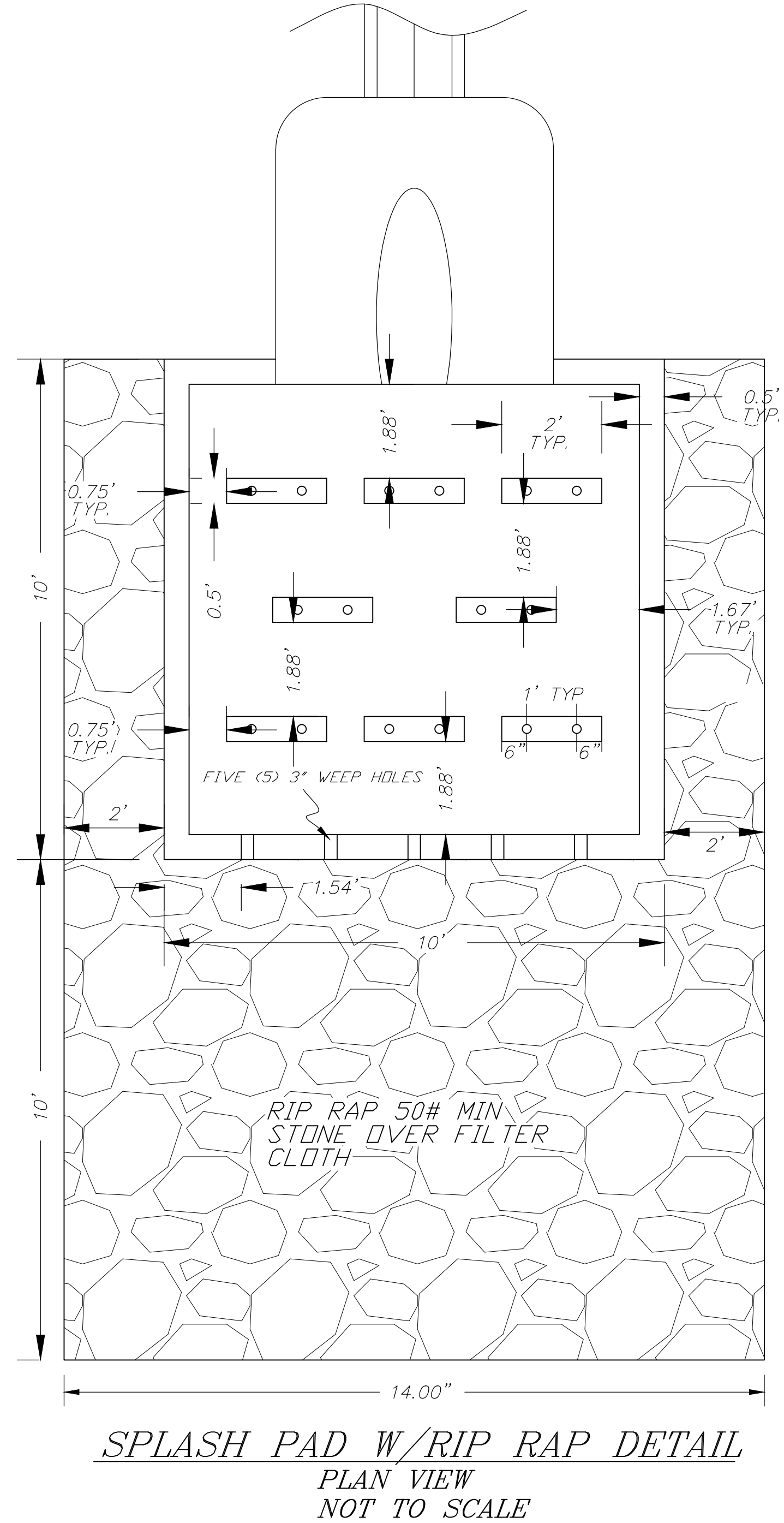
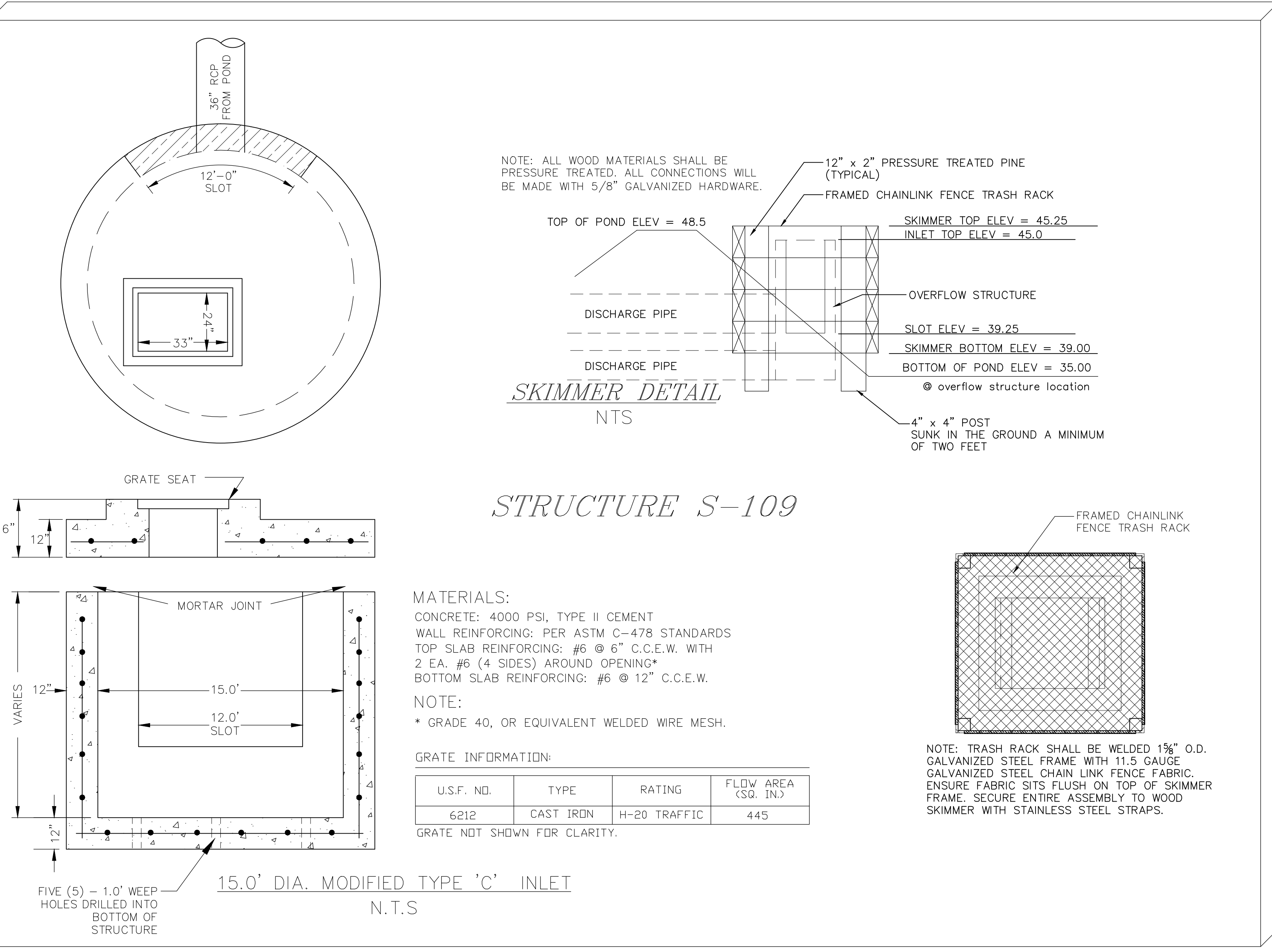
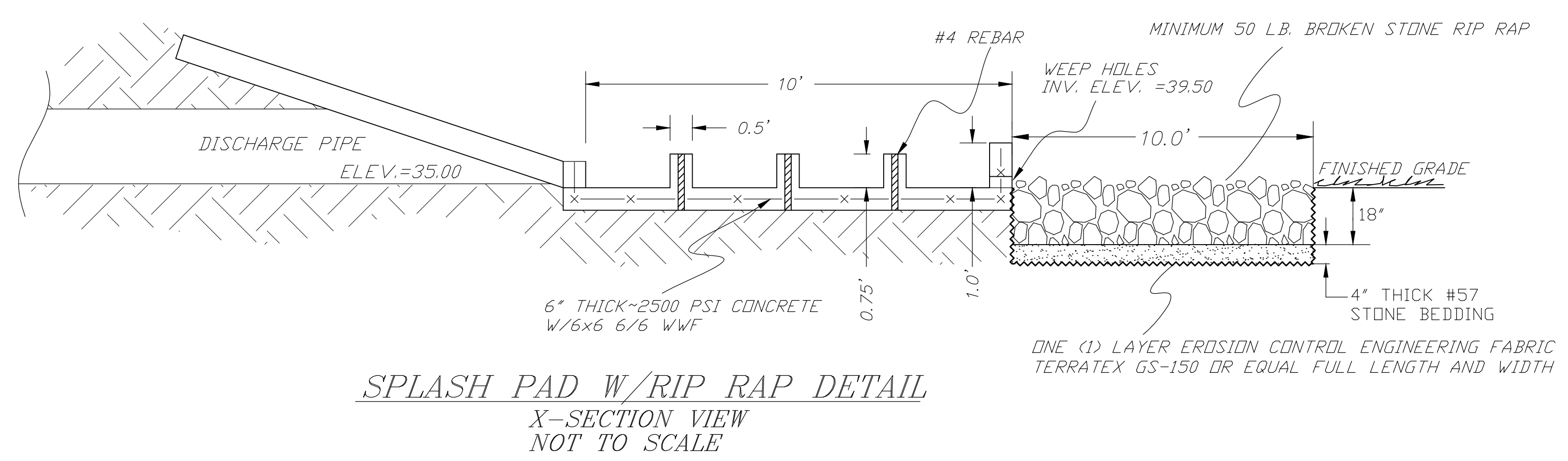
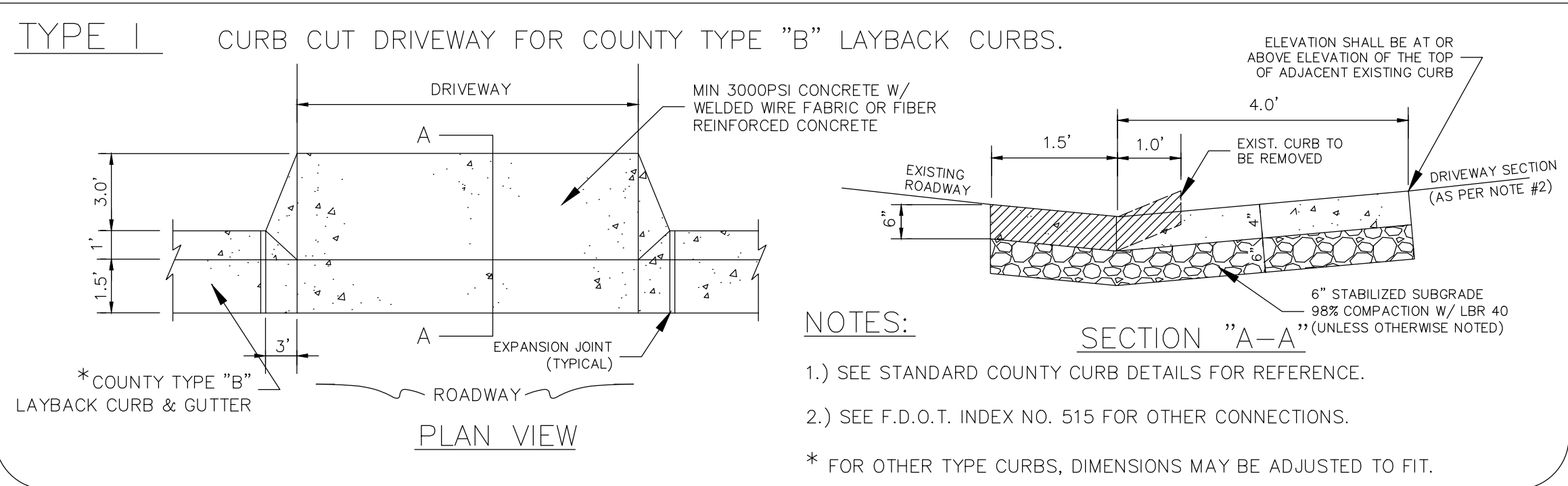
ORIGINATOR (GR) Correct (Green Highlighter) Change (Red Pen) CHECKER (RP) (Red Pen X-Out to Disagree or Remark) DATE _____

VERIFICATION, CHECKER (GR) (Blue Highlighter) REMARK INCORPORATION (Blue Highlighter) ORIGINATOR VERIFICATION (Correct (Pink Highlighter)) DATE _____

TYPICAL DRIVEWAY CONNECTION STANDARDS FOR EXISTING ROADWAY CONDITIONS

NOTES:

- 1) ALL MATERIALS AND LABOR FOR INSTALLATION WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER/CONTRACTOR.
- 2) RESIDENTIAL DRIVEWAYS ABUTTING PAVED ROADS SHALL BE 1 - 1/2" ASPHALT WITH 6" STABILIZED SUB GRADE OR 4" CONCRETE WITH 6" STABILIZED SUB GRADE - 98% COMPACTION (MODIFIED PROCTOR) WITH LBR 40 BETWEEN EDGE OF ROADWAY AND R/W LINE. COMPACTION AND TESTING IF NECESSARY, THIS WILL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR.
- 3) DRIVEWAYS ABUTTING A DIRT ROAD SHALL BE MILLED ASPHALT, GRADED AGGREGATE BASE, OR WASHED CONCRETE (4" IN DEPTH) ON THE COUNTY MAINTAINED PORTION OF DRIVEWAY.
- 4) IF NECESSARY, REFER TO FDOT INDEX DETAILS AS REFERENCED BELOW.
- 5) RADIUS OR FLARE IS REQUIRED FOR TYPE II OR TYPE III CONNECTIONS. SEE DETAIL.
- 6) PARKING SPACES WITHIN COUNTY RIGHT-OF-WAY SHALL PROVIDE A MINIMUM OF 2 PARKING SPACES.
- 7) TYPICAL DRIVEWAY SECTIONS ARE TO BE 12' WIDE MINIMUM. (4" MIN. RESIDENTIAL DEPTH - 6" MIN. COMMERCIAL DEPTH)
- 8) DRIVEWAY SLOPE SHALL NOT CREATE OR EXACERBATE VEHICULAR SCRAPING. ATTEMPTS SHALL BE MADE TO CORRECT THIS TYPE OF PROBLEM.



SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS

MIDDLE POND DETAILS

HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH 'S' STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG
 CHECKED BY: N. CHALVIN
 DATE: MARCH 2016

REG. P.A. ENG. NO. 54574
 DISTRICT: ONE

APPROVED BY: J. JONES
 DATE: 7/12/16

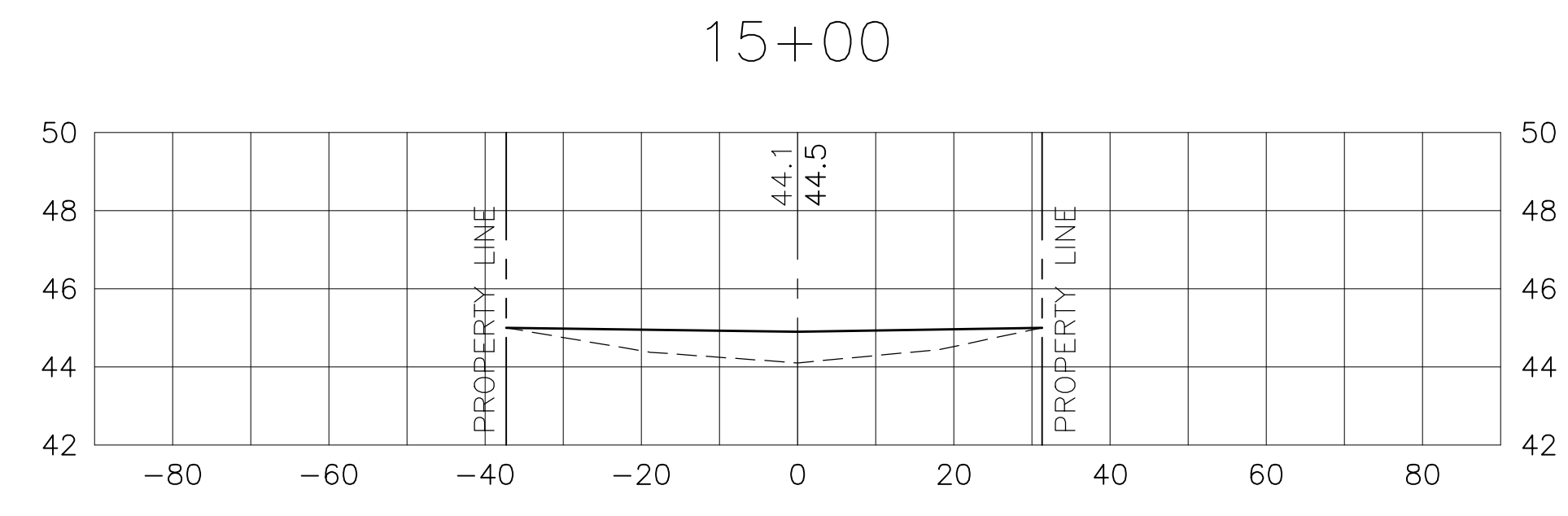
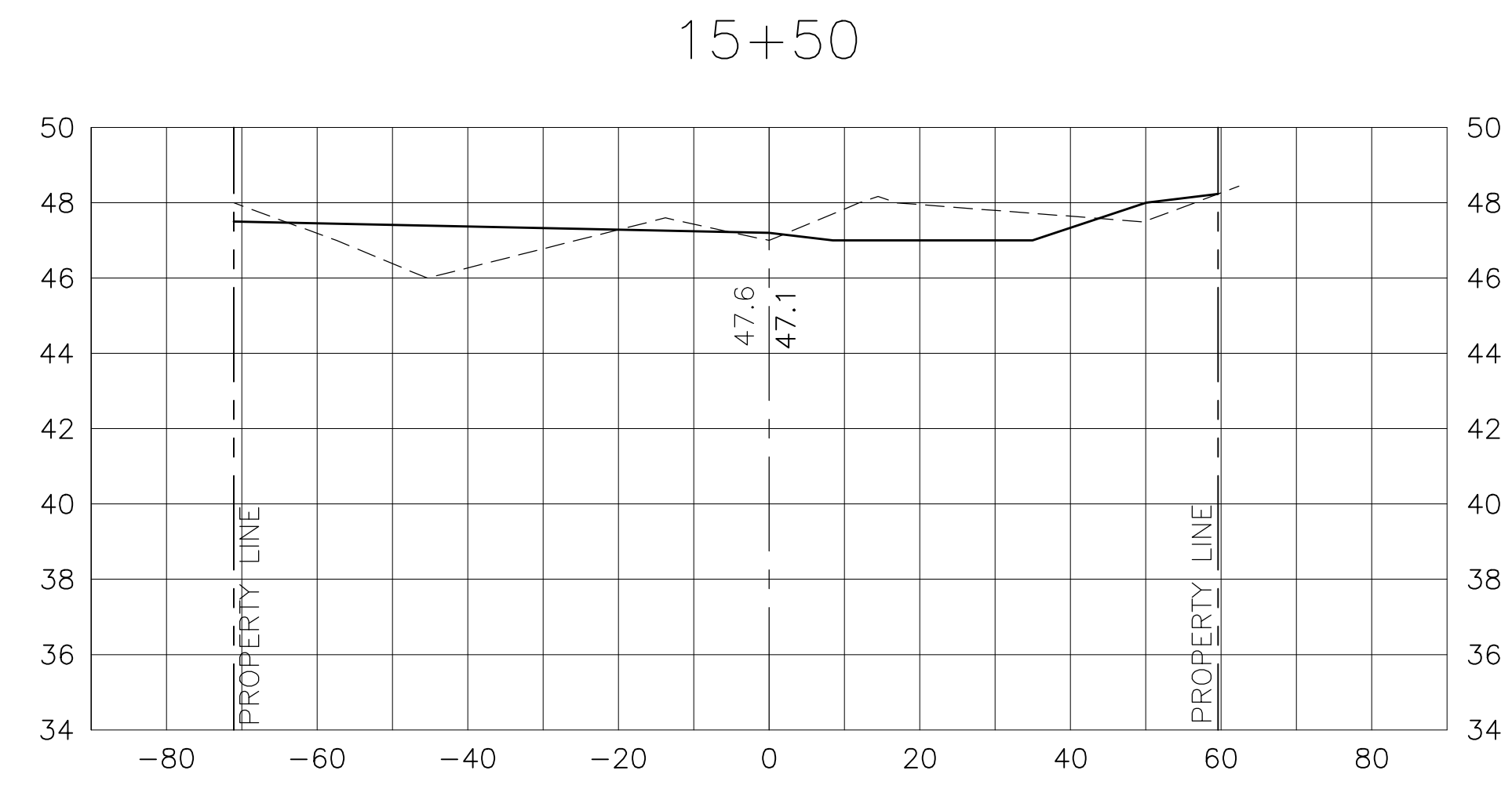
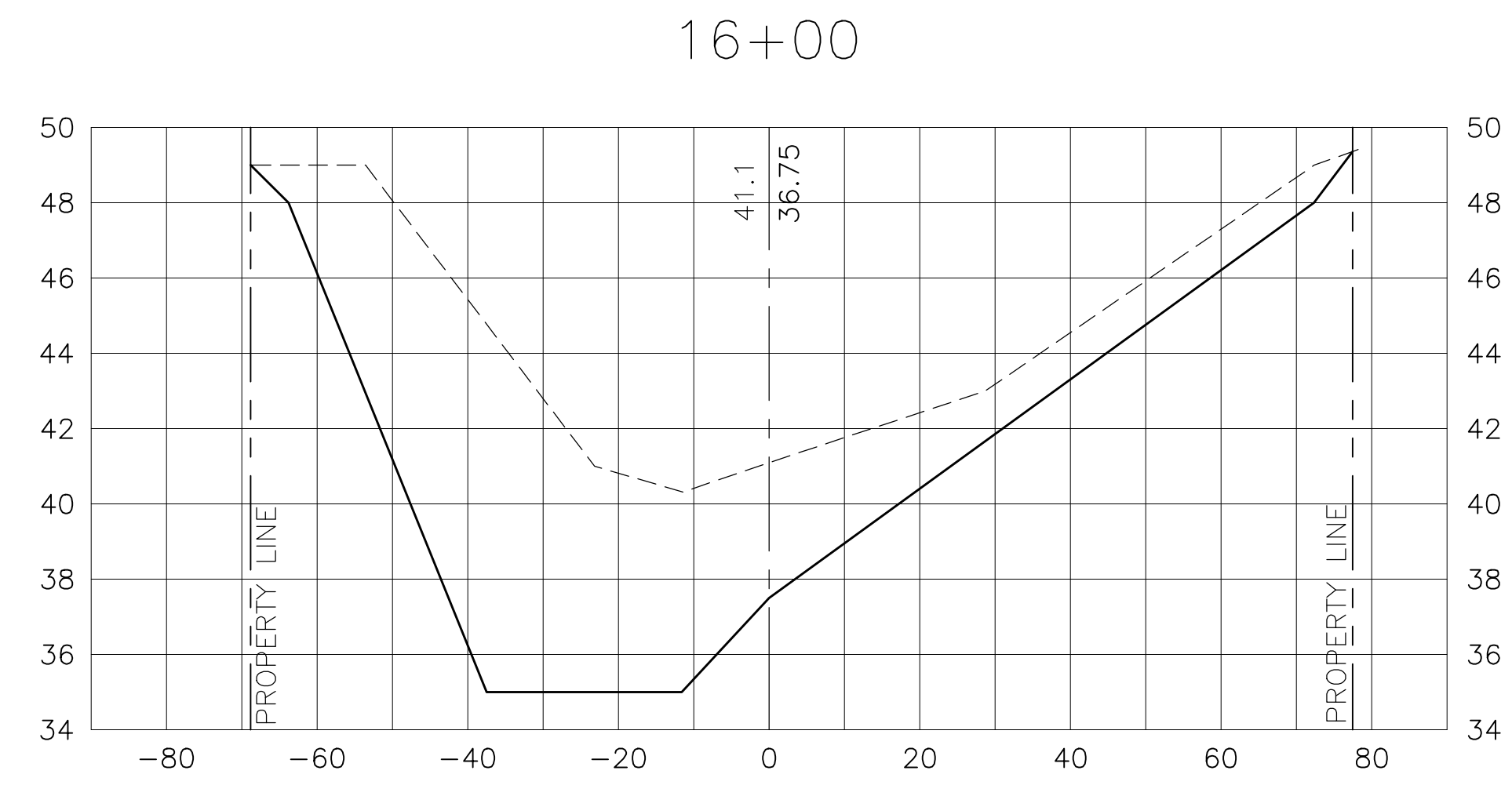
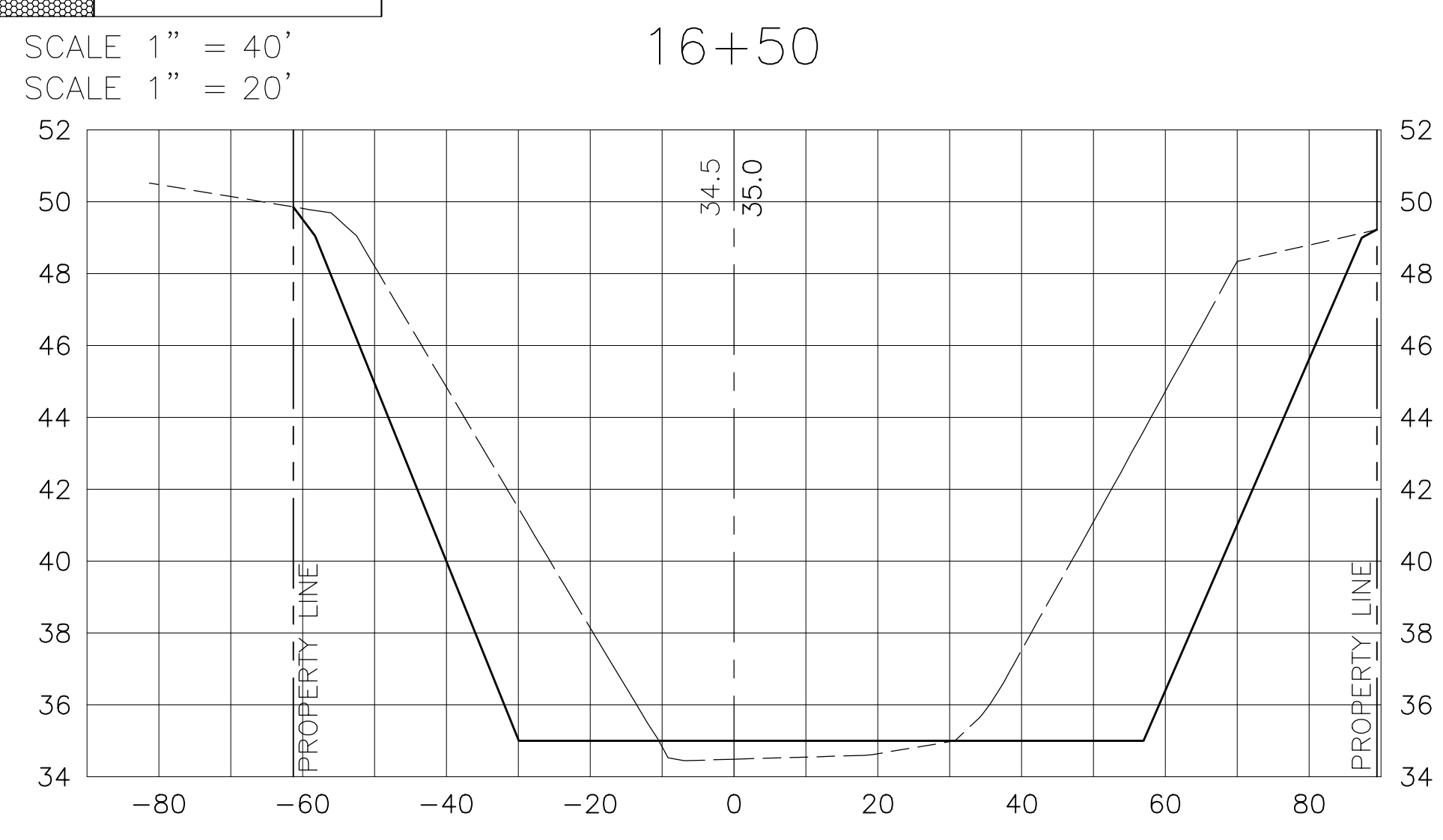
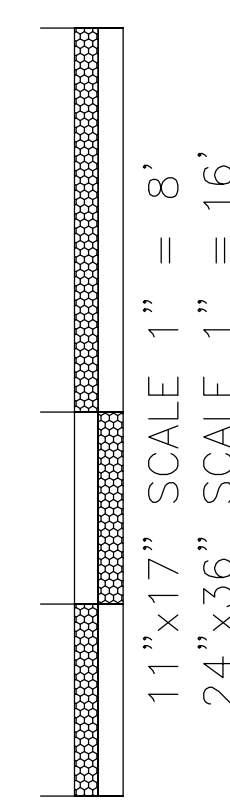
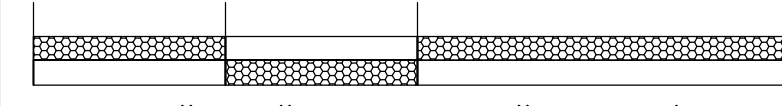
REVISIONS AS PER ESCAMBIA COUNTY COMMENTS

NUMBER 1
 DRAWING NUMBER 14-023
 PROJECT NUMBER
 SURVEY NUMBER

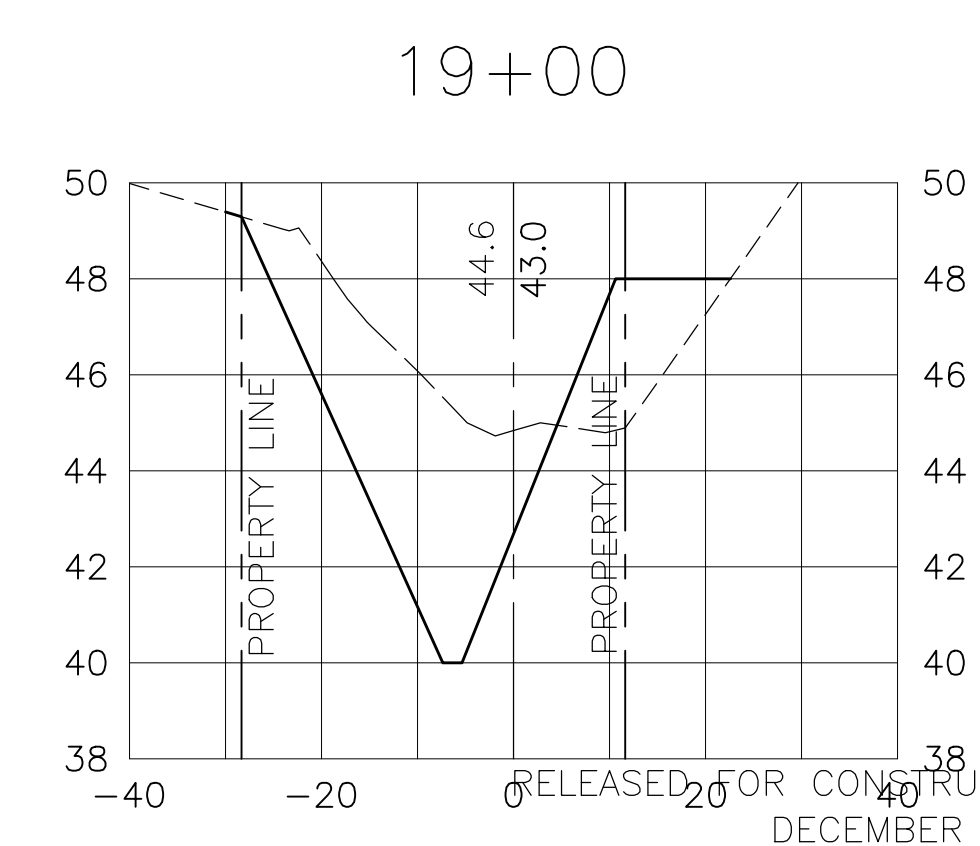
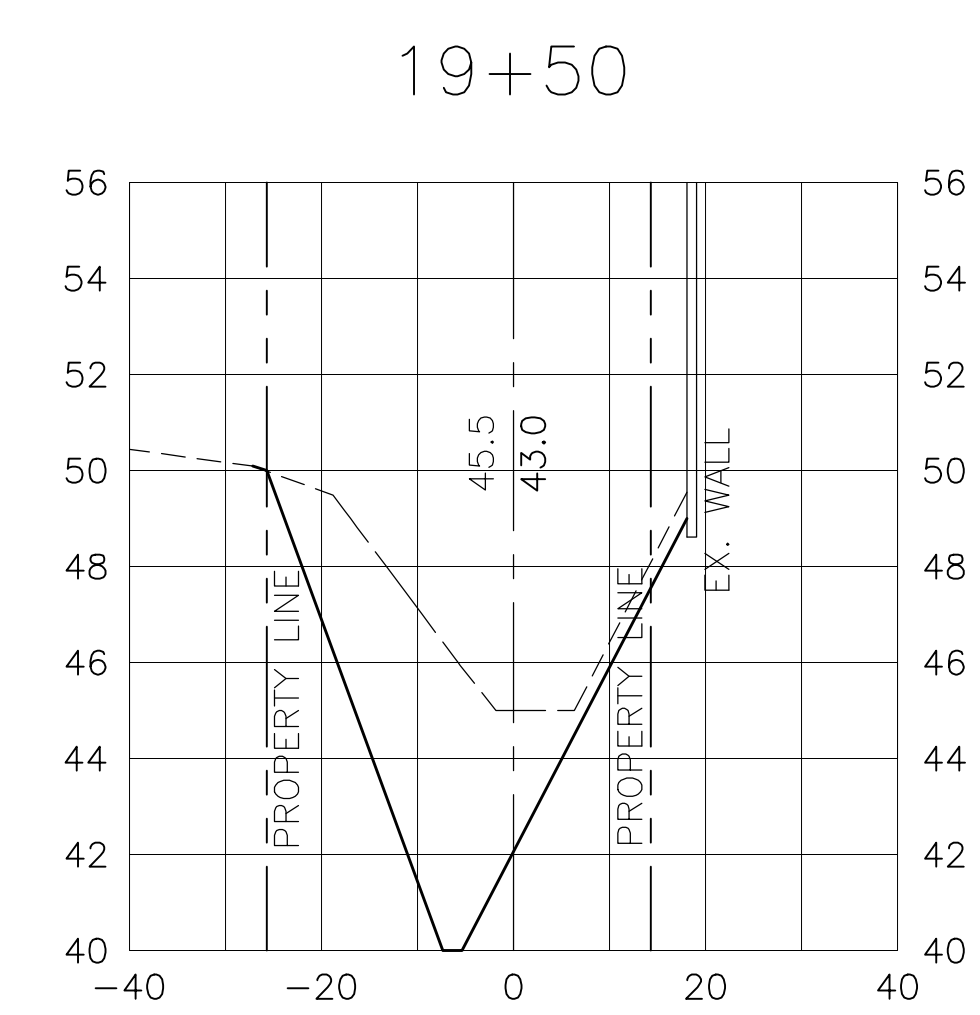
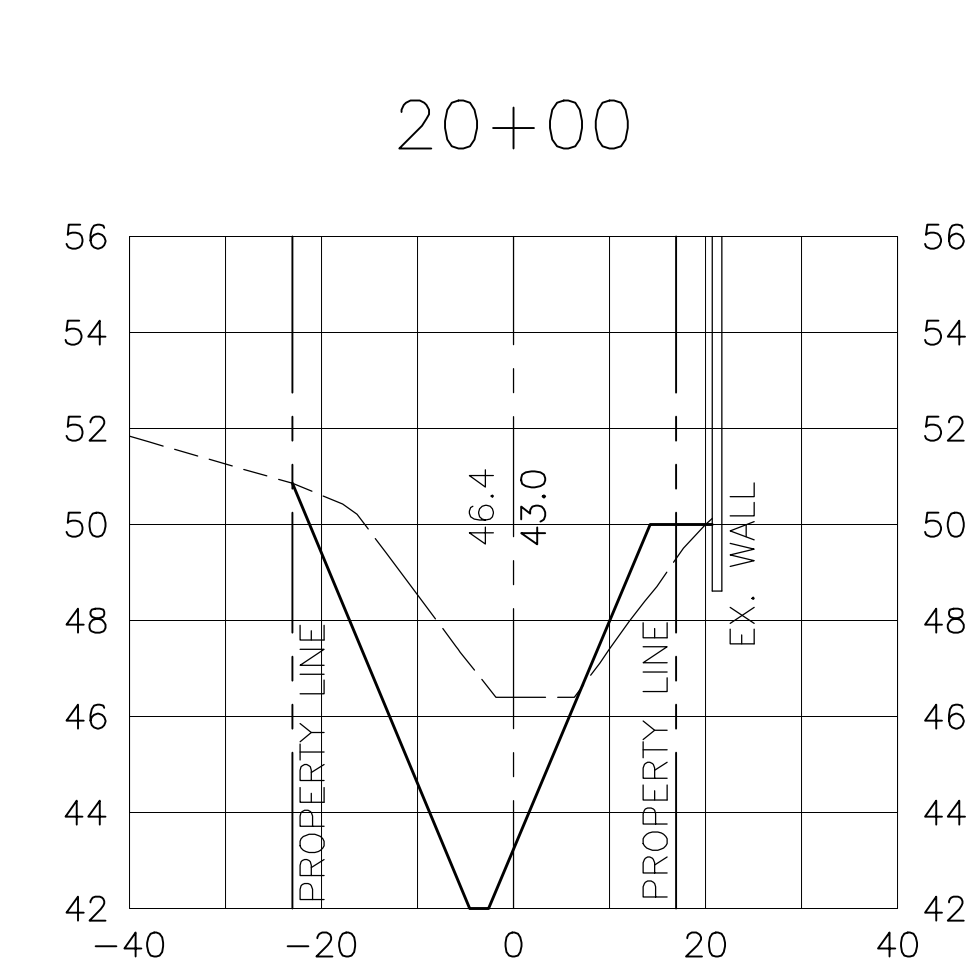
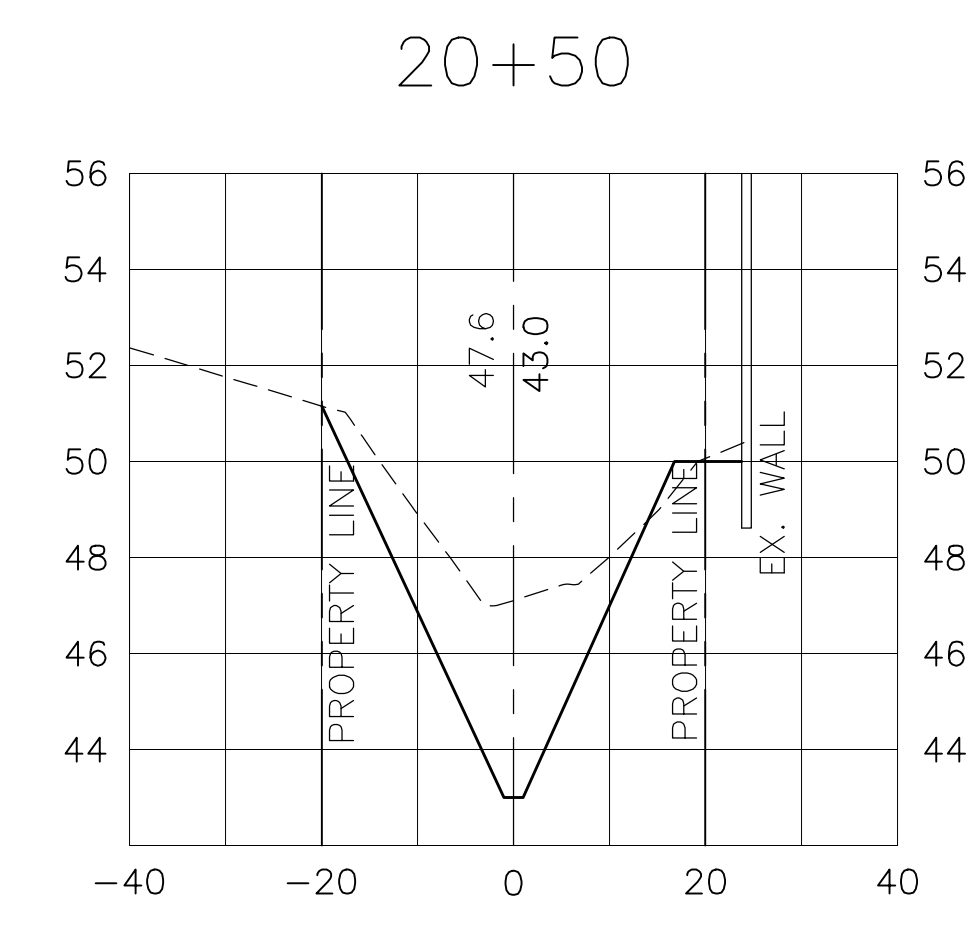
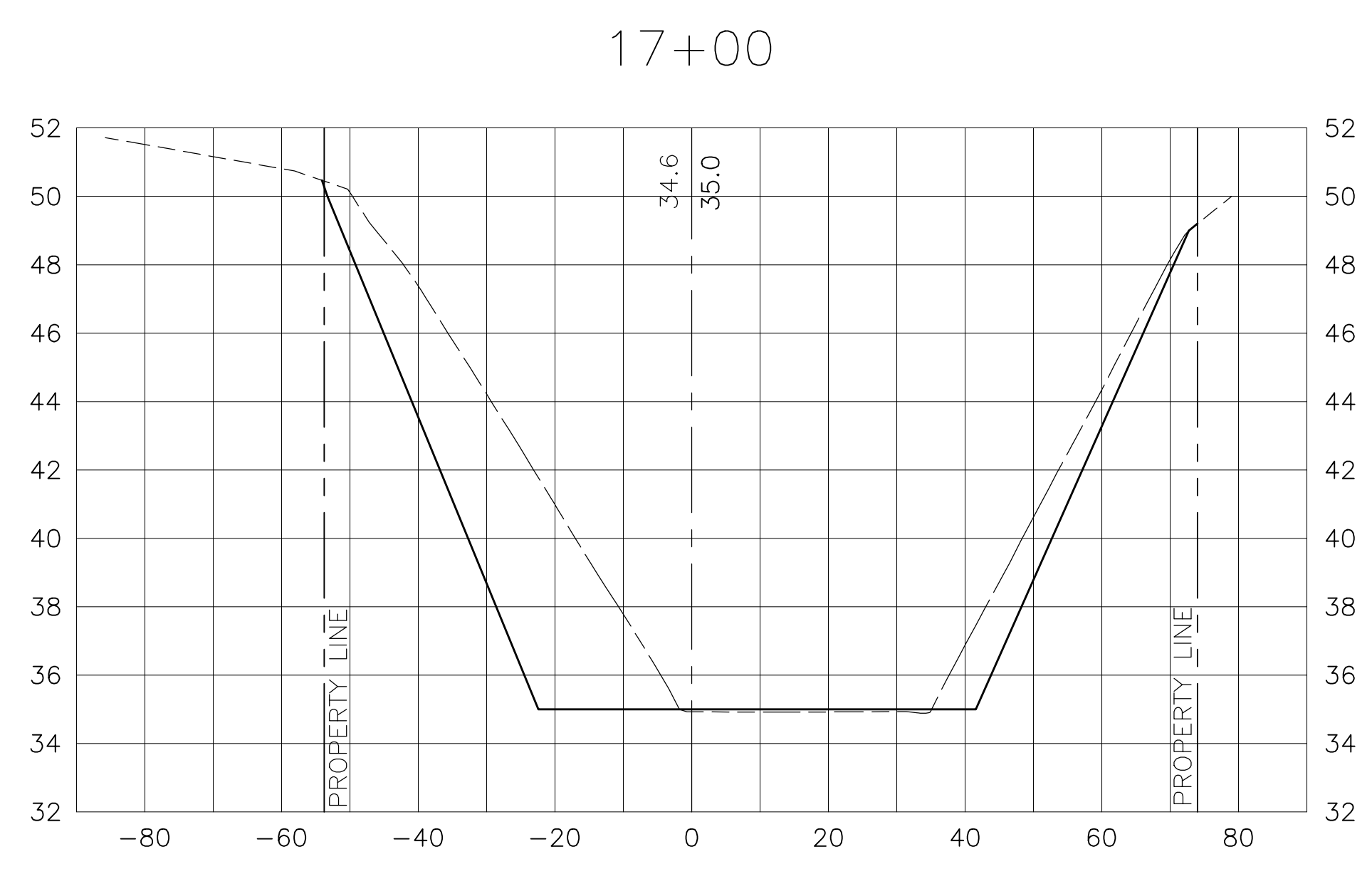
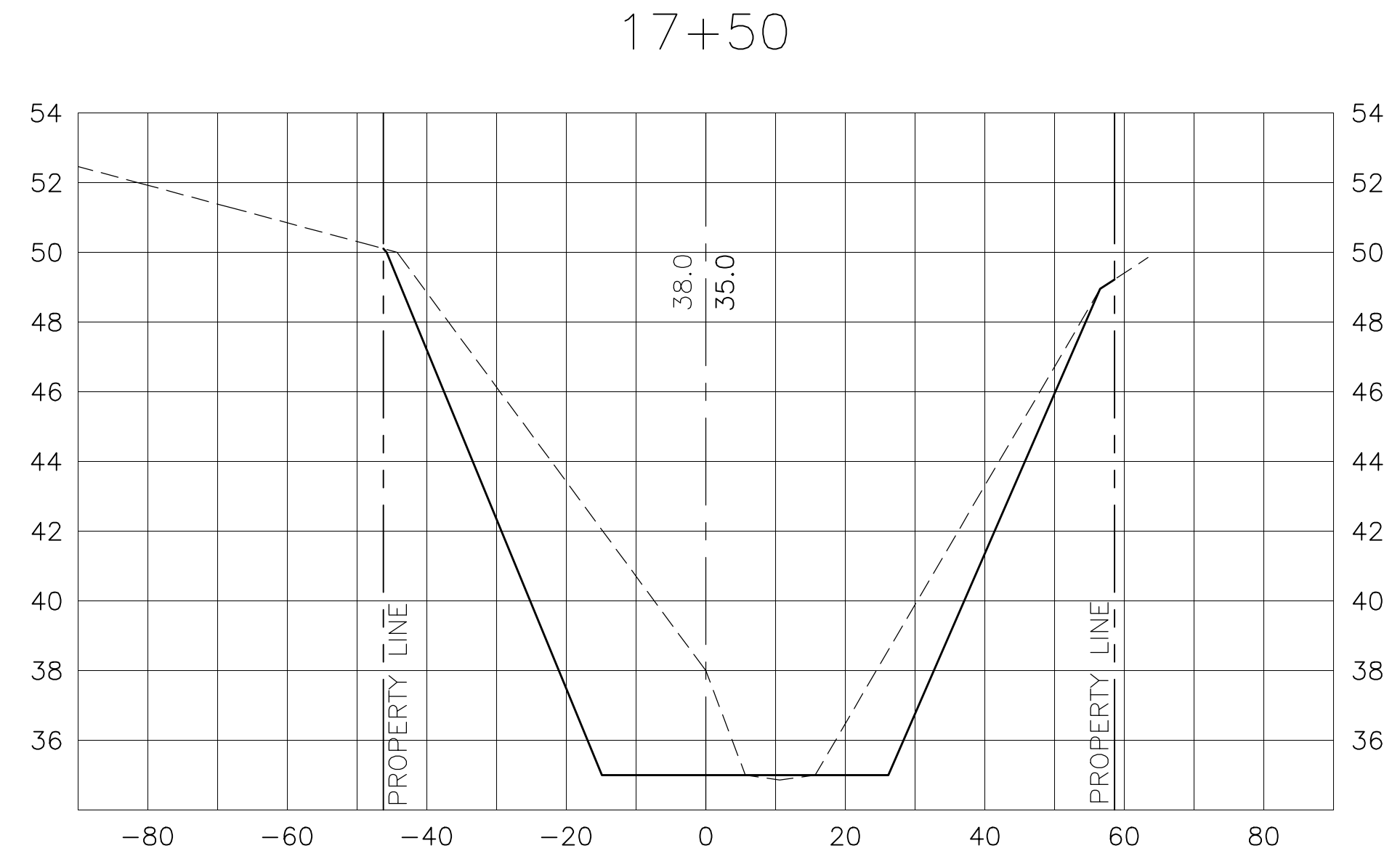
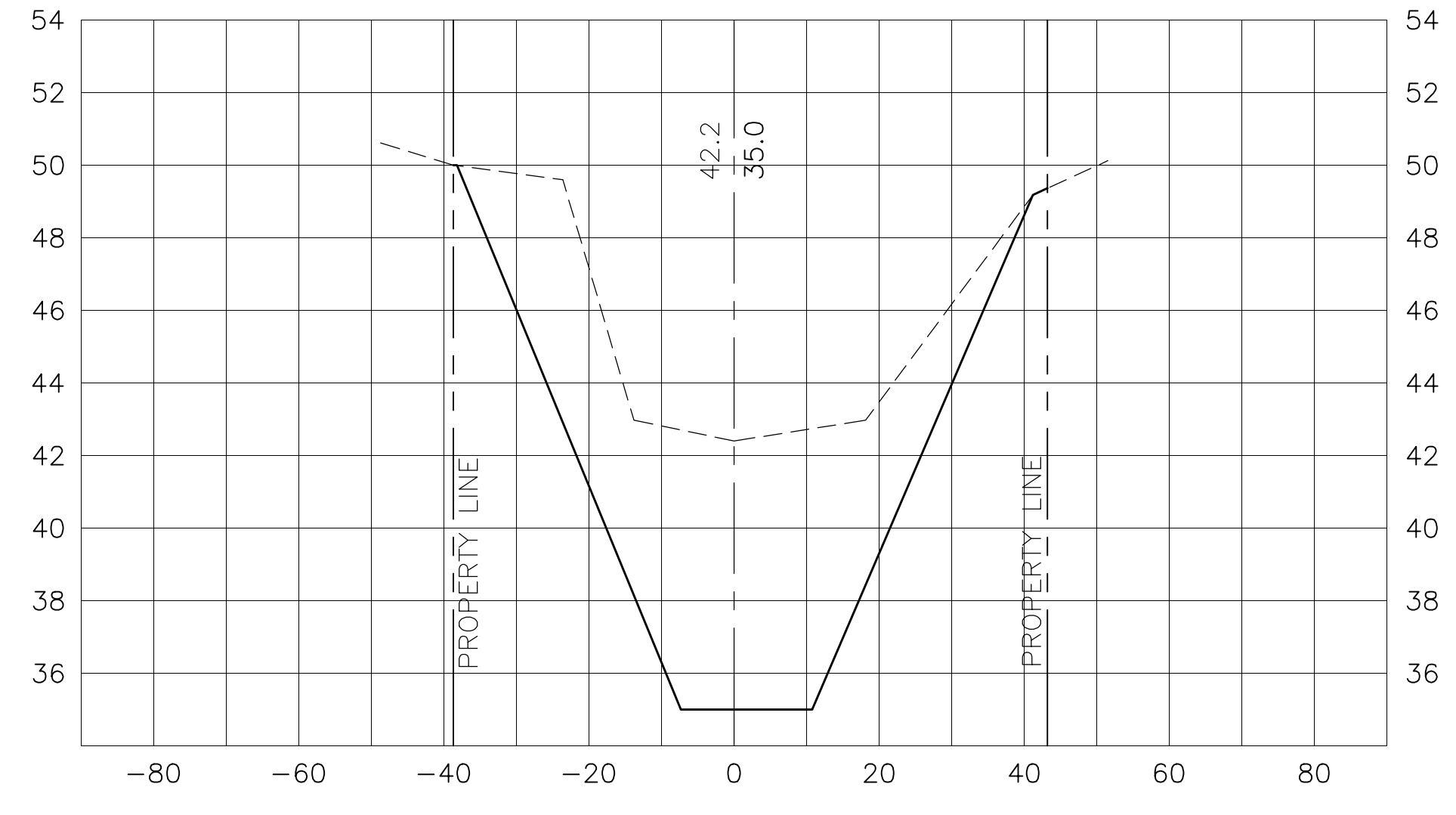
RELEASED FOR CONSTRUCTION
 DECEMBER 2016

SHEET **C16**

PHASE	REVIEW	DATE	ORIGINATOR (RP)	ORIGINATOR (GR)	ORIGINATOR (OR)	VERIFICATION, CHECKER (OR)	DATE
SIGNATURE:			PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)	CHECKER (RP)	CORRECT (GREEN HIGHLIGHTER) CHANGE (RED PEN)	(Blue Highlighter)	DATE
			CHANGE INCORPORATION (YELLOW HIGHLIGHTER)	(RED PEN X-OUT TO DISAPPEAR OR REMARK)	(CORRECT)	(PINK HIGHLIGHTER)	DATE
							DATE



----- DENOTES EXISTING GRADE
 _____ DENOTES PROPOSED GRADE



**SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS**

MIDDLE POND CROSS SECTIONS

HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND/R. SIEG	CHECKED BY: T. HAMMOND	REG. P.A. ENG. NO.: 54574	DATE:
DRAWN BY: ARS	PROJECT MANAGER: N. CHALVIN	DISTRICT: ONE	SIGNATURE:
DATE: MARCH 2016			

APPROVED BY: J. JONES
DATE: 7/12/16

REVISIONS: AS PER ESCAMBIA COUNTY COMMENTS

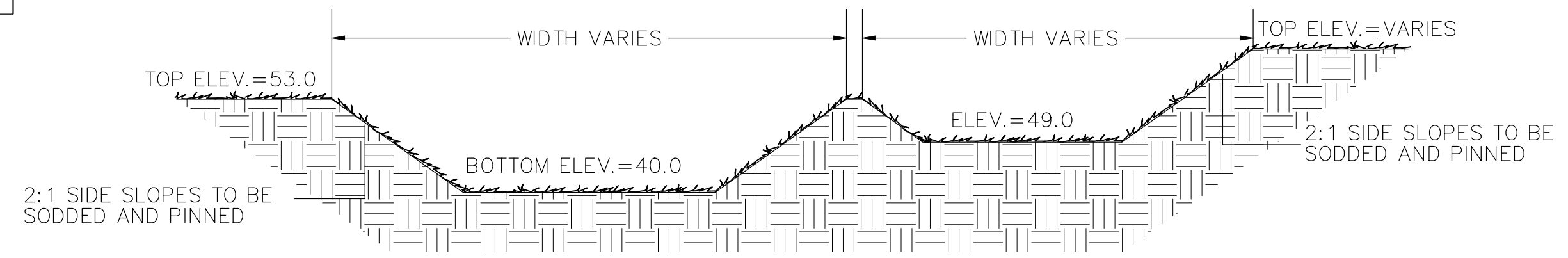
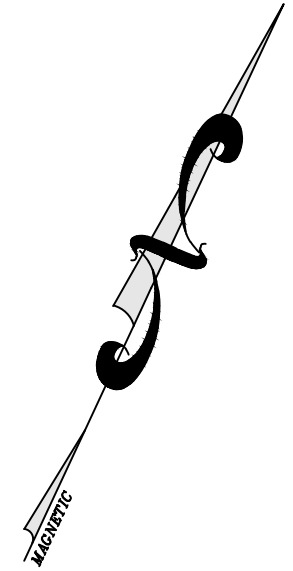
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DRAWING NUMBER: 14-023
PROJECT NUMBER:
SURVEY NUMBER:

RELEASED FOR CONSTRUCTION
DECEMBER 2016

SHEET **C17**

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SIGNATURE:											

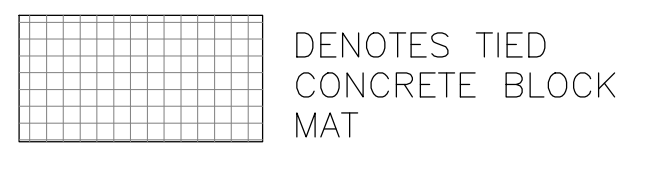
11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'



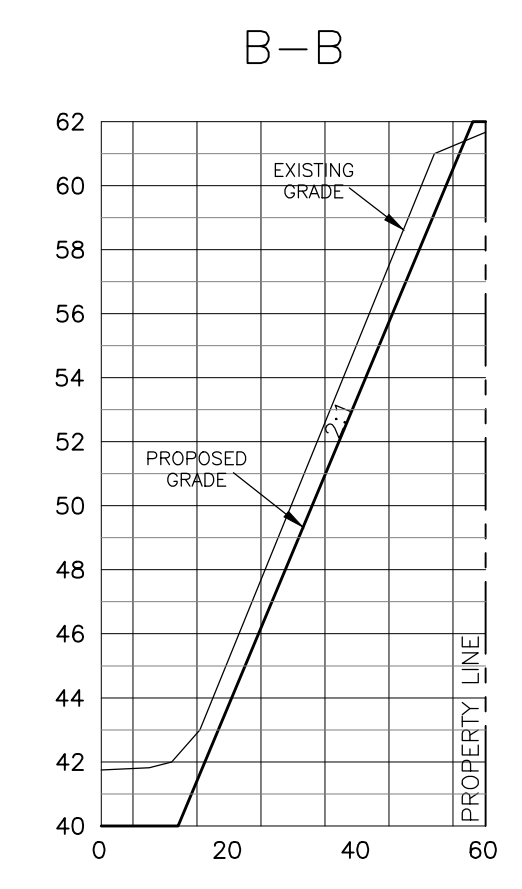
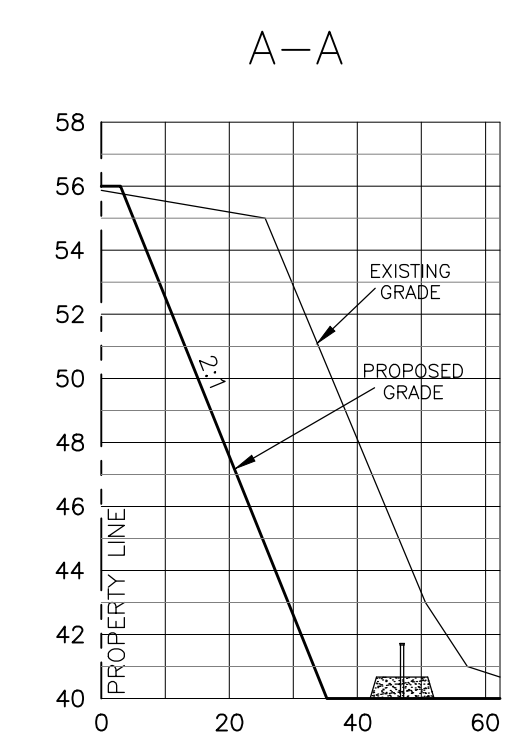
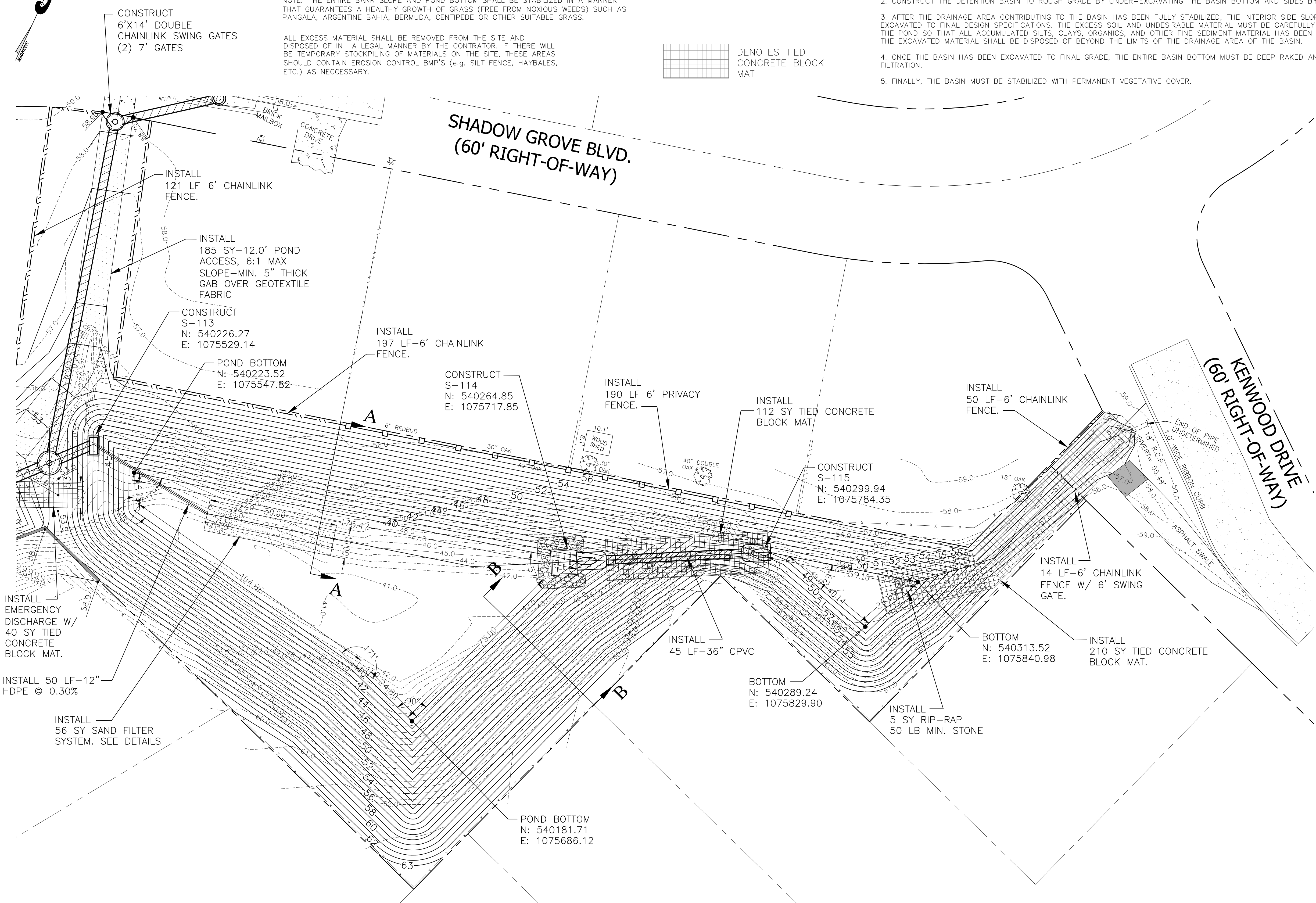
STORMWATER DETENTION POND
TYPICAL X-SECTION

NOTE: THE ENTIRE BANK SLOPE AND POND BOTTOM SHALL BE STABILIZED IN A MANNER THAT GUARANTEES A HEALTHY GROWTH OF GRASS (FREE FROM NOXIOUS WEEDS) SUCH AS PANGALA, ARGENTINE BAHIA, BERMUDA, CENTIPEDE OR OTHER SUITABLE GRASS.

ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER BY THE CONTRATOR. IF THERE WILL BE TEMPORARY STOCKPILING OF MATERIALS ON THE SITE, THESE AREAS SHOULD CONTAIN EROSION CONTROL BMP'S (e.g. SILT FENCE, HAYBALES, ETC.) AS NECESSARY.



- STORMWATER BASIN MAINTENANCE REQUIREMENTS**
THE DETENTION AREA SHALL BE FERTILIZED AND MOWED WHEN OTHER LANDSCAPED AREAS ARE MAINTAINED AND NOT LESS THAN THREE (3) TIMES PER YEAR.
- ANY BARE SPOTS GREATER THAT THREE (3) SQUARE FEET SHALL BE RESODDED.
- PERCOLATION PERFORMANCE SHALL BE EVALUATED WITHIN THE POND AT LEAST EVERY THIRD YEAR. IN THE EVENT OF INADEQUATE PERCOLATION, DETENTION AREA BOTTOM MAINTENANCE SHOULD BE PERFORMED AS FOLLOWS:
- REMOVE 2 TO 3 INCHES OF THE DETENTION AREA BOTTOM MATERIAL AND SCARIFY EXCAVATED BOTTOM.
 - REPLACE EXCAVATED BOTTOM MATERIAL WITH CLEAN SAND MATERIAL TO DESIGN GRADE.
- THE STORMWATER SYSTEM SHALL BE INSPECTED PERIODICALLY FOR DEBRIS AND TRASH. TRASH AND DEBRIS SHALL BE REMOVED UPON DISCOVERY.
- THE STORMWATER SYSTEM BOTTOM SHALL BE INSPECTED PERIODICALLY FOR SILT ACCUMULATION. ANY IDENTIFIED SILT SHALL BE REMOVED IN ACCORDANCE WITH THE APPROPRIATE REGULATION.
- DETENTION BASIN CONSTRUCTION**
- INITIALLY INSTALL ALL EROSION AND SEDIMENT CONTROL BMP'S AS ILLUSTRATED ON THE SWPPP PLAN PROVIDED AS PART OF THESE PLANS
 - CONSTRUCT THE DETENTION BASIN TO ROUGH GRADE BY UNDER-EXCAVATING THE BASIN BOTTOM AND SIDES BY ABOUT 12 INCHES.
 - AFTER THE DRAINAGE AREA CONTRIBUTING TO THE BASIN HAS BEEN FULLY STABILIZED, THE INTERIOR SIDE SLOPES AND BASIN BOTTOM SHALL BE EXCAVATED TO FINAL DESIGN SPECIFICATIONS. THE EXCESS SOIL AND UNDESIRABLE MATERIAL MUST BE CAREFULLY EXCAVATED AND REMOVED FROM THE POND SO THAT ALL ACCUMULATED SILTS, CLAYS, ORGANICS, AND OTHER FINE SEDIMENT MATERIAL HAS BEEN REMOVED FROM THE POND AREA. THE EXCAVATED MATERIAL SHALL BE DISPOSED OF BEYOND THE LIMITS OF THE DRAINAGE AREA OF THE BASIN.
 - ONCE THE BASIN HAS BEEN EXCAVATED TO FINAL GRADE, THE ENTIRE BASIN BOTTOM MUST BE DEEP RAKED AND LOOSENED FOR OPTIMAL FILTRATION.
 - FINALLY, THE BASIN MUST BE STABILIZED WITH PERMANENT VEGETATIVE COVER.



HORIZONTAL SCALE:
11"x17" SCALE 1" = 60'
24"x36" SCALE 1" = 30'

VERTICAL SCALE:
11"x17" SCALE 1" = 12'
24"x36" SCALE 1" = 6'

SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS

UPPER POND SPECIAL PROFILE

HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

DESIGNED BY: T. HAMMOND
CHECKED BY: T. HAMMOND
PROJECT MANAGER: N. CHALVIN
DATE: MARCH 2016
DISTRICT: ONE
SIGNATURE:

REVISIONS	DATE	APPROVED BY
AS PER ESCAMBIA COUNTY COMMENTS	7/12/16	J. JONES
NUMBER		
1.		

DRAWING NUMBER
14-023

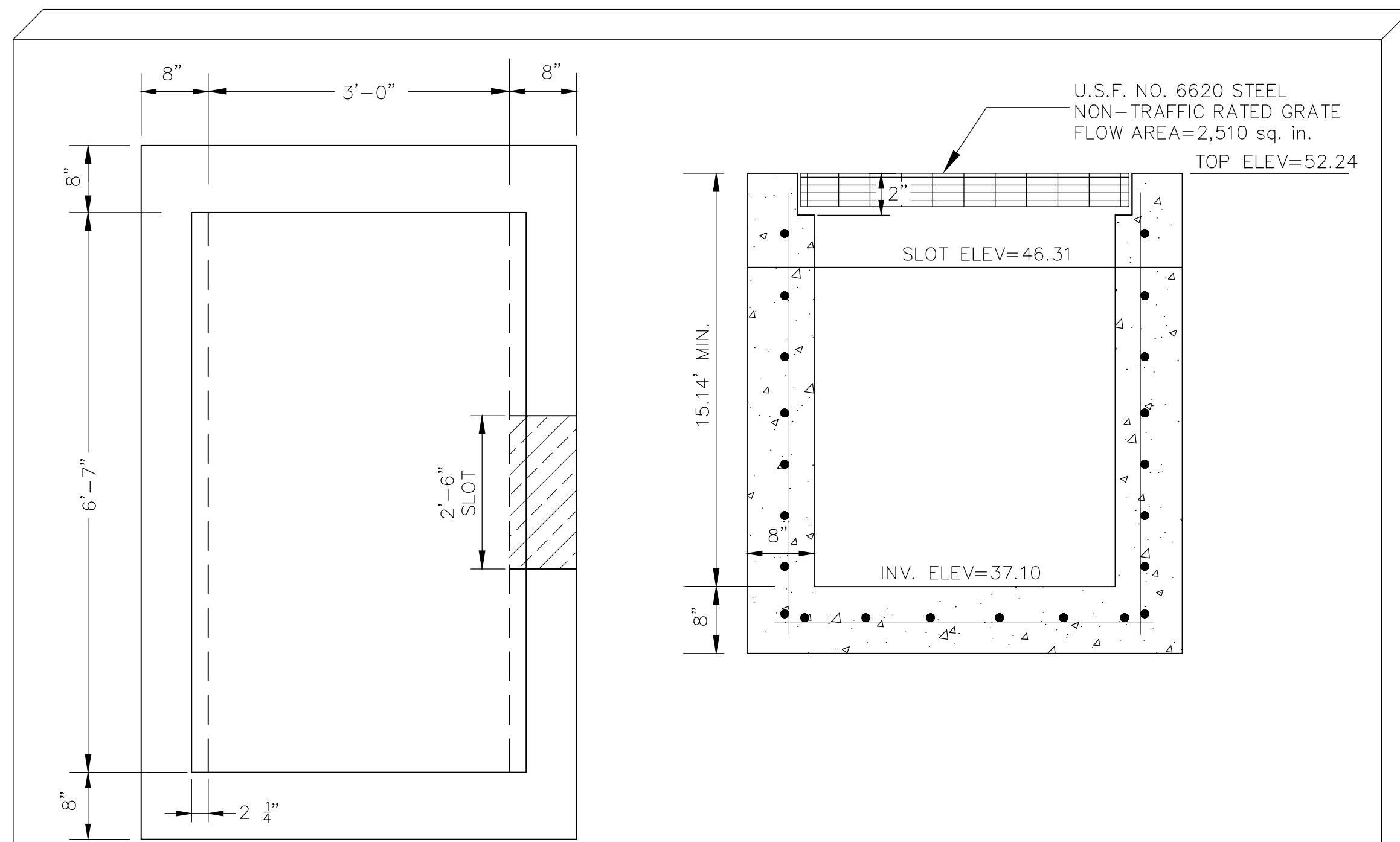
PROJECT NUMBER

SURVEY NUMBER

RELEASED FOR CONSTRUCTION
DECEMBER 2016

SHEET **C18**

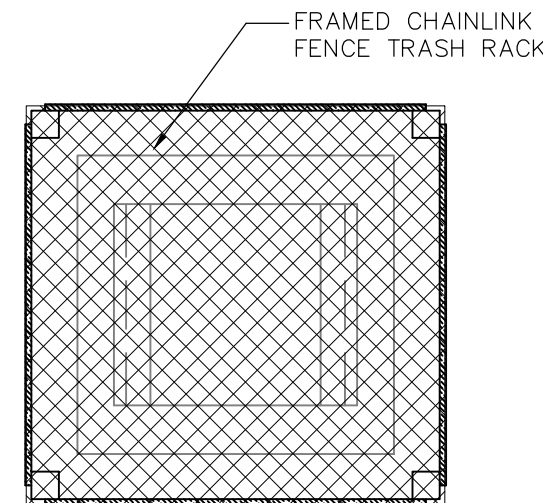
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 ORIGINATOR (GR) Correct (Green Highlighter) Change (Red Pen)
 CHECKER (RF) (Red Pen X-Out to Disagree or Remark)
 VERIFICATION, CHECKER (OR) (Blue Highlighter)
 REMARK INCORPORATION (Blue Highlighter)
 ORIGINATOR VERIFICATION Correct (Pink Highlighter)
 DATE DATE DATE
 DATE DATE DATE



FDOT TYPE 'H' OVERFLOW STRUCTURE
 NTS

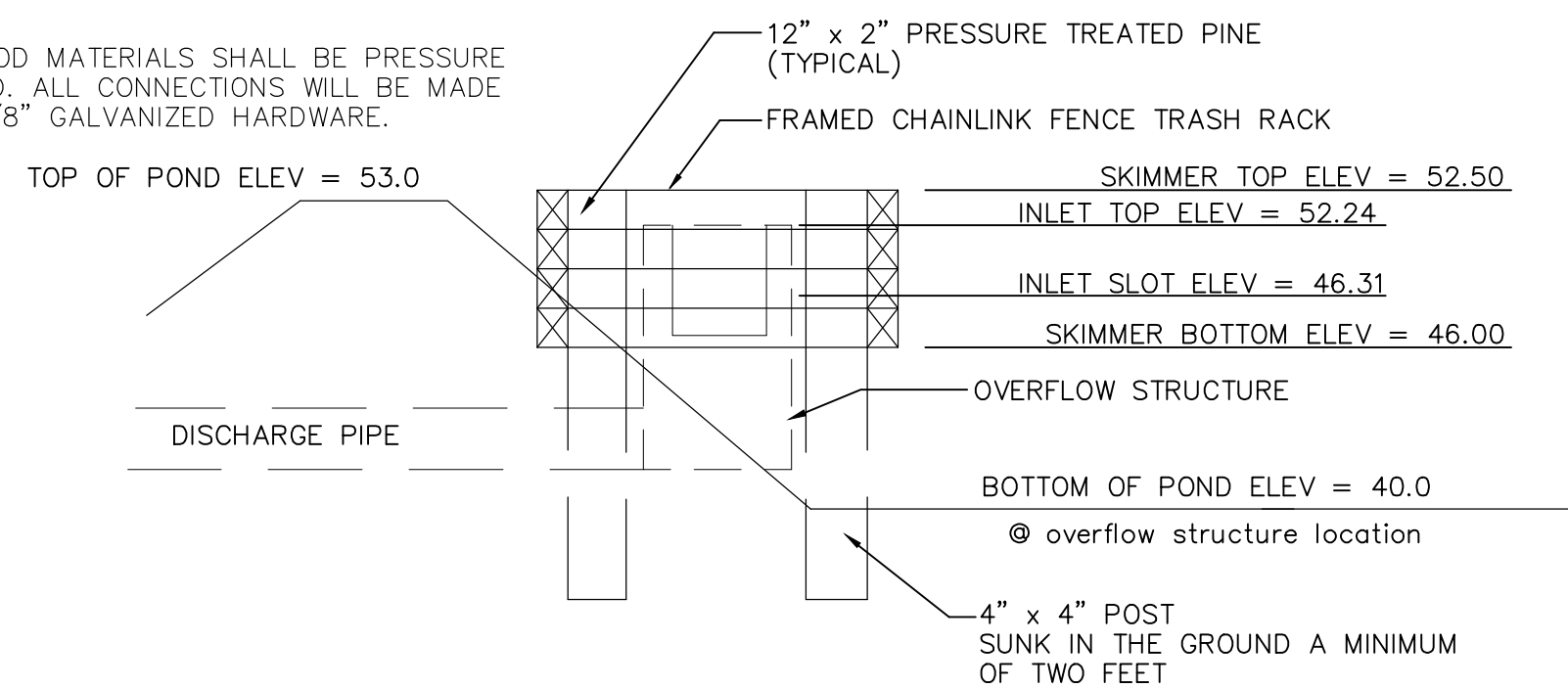
MATERIALS:
 CONCRETE: 4000 PSI, TYPE II CEMENT
 WALL REINFORCING: #4 @ 6" O.C. HOR.; #4 @ 12" O.C. VERT.
 BOTTOM SLAB REINFORCING: #4 @ 10" O.C.E.W. *

NOTE:
 ALL EXPOSED EDGES TO HAVE 3/4" CHAMFER
 * GRADE 40, OR EQUIVALENT WELDED WIRE MESH.



NOTE: TRASH RACK SHALL BE WELDED 1 3/8" O.D. GALVANIZED STEEL FRAME WITH 11.5 GAUGE GALVANIZED STEEL CHAIN LINK FENCE FABRIC. ENSURE FABRIC SITS FLUSH ON TOP OF SKIMMER FRAME. SECURE ENTIRE ASSEMBLY TO WOOD SKIMMER WITH STAINLESS STEEL STRAPS.

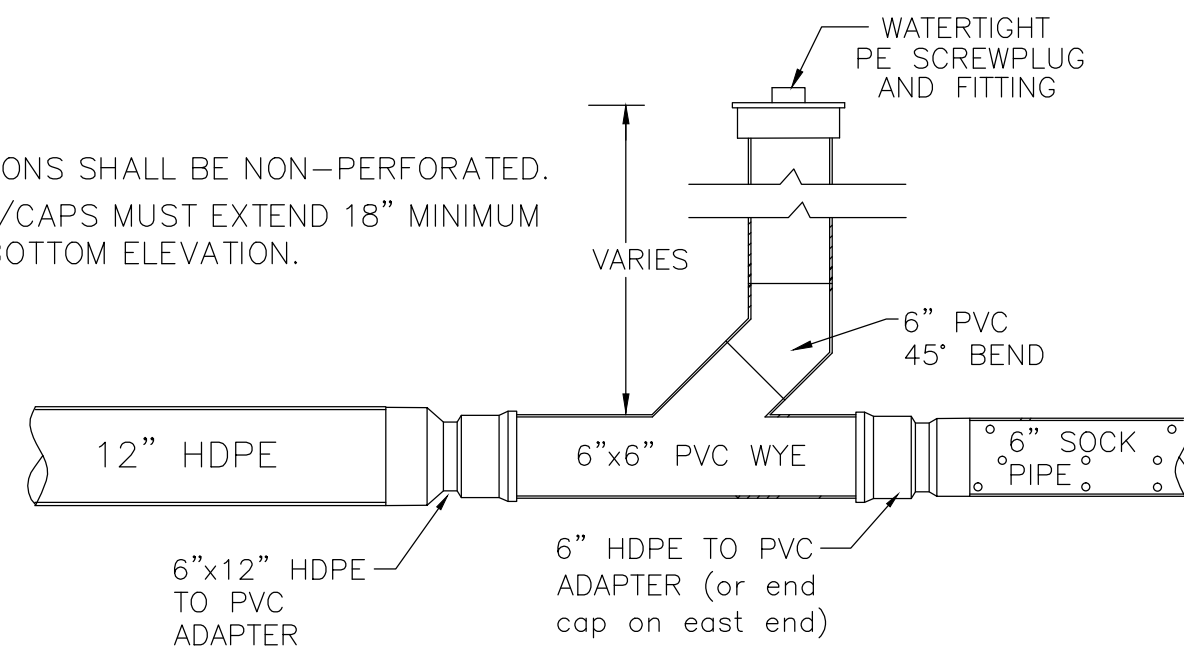
NOTE: ALL WOOD MATERIALS SHALL BE PRESSURE TREATED. ALL CONNECTIONS WILL BE MADE WITH 5/8" GALVANIZED HARDWARE.



STRUCTURE S-113

SKIMMER DETAIL
 NTS

NOTE 1: VERTICAL PORTIONS SHALL BE NON-PERFORATED.
 NOTE 2: CLEANOUT TOP/CAPS MUST EXTEND 18" MINIMUM ABOVE POND BOTTOM ELEVATION.



6" SAND FILTER CLEAN OUT DETAIL
 N.T.S.

SAND FILTER SYSTEM MAINTENANCE

PERIODIC CLEANING OF FILTER SYSTEM BY MEANS OF PRESSURE BACK-WASHING SHALL BE EXPECTED. ROUTINE INSPECTIONS DETAILING THE CONDITIONS OF THE SYSTEM AND INTERIOR OF THE FILTER PIPES SHALL DETERMINE WHEN BACK-WASHING BECOMES NECESSARY.

REPLACEMENT OF THE SAND FILTER SYSTEM SHALL BE EXPECTED TO ASSURE OF THE SYSTEM'S FUNCTIONALITY. AGAIN, ROUTINE INSPECTIONS DETAILING THE CONDITIONS AND FUNCTIONALITY OF THE SYSTEM SHALL DETERMINE IF AND WHEN A FULL REPLACEMENT BECOMES NECESSARY.

BENDS INSTALLED AS PART OF THE OUTLET PIPING IN SYSTEM ARE TO BE INSPECTED PERIODICALLY TO ASSURE OF ADEQUATE FUNCTIONING.

PERCOLATION PERFORMANCE SHALL BE EVALUATED WITHIN THE POND AT LEAST EVERY THIRD YEAR. IN THE EVENT OF INADEQUATE PERCOLATION, MAINTENANCE SHALL BE PERFORMED ON THE SAND FILTER SYSTEM BY EXERCISING THE FOLLOWING PROCEDURES:

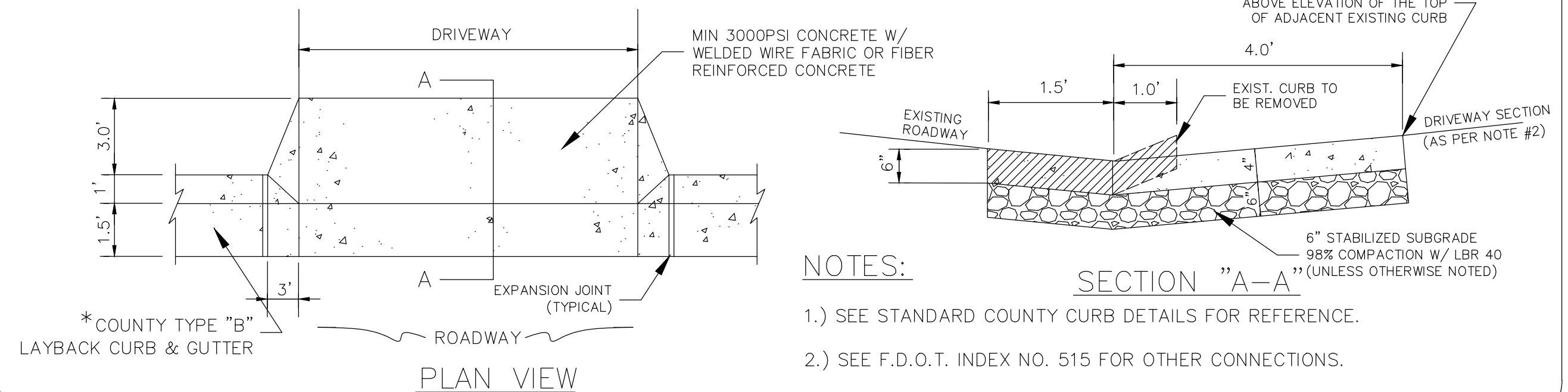
- INSPECT FILTER SYSTEM TOP FOR 'BLINDING' SEDIMENTS SUCH AS CLAY AND REMOVE ACCORDINGLY. REPLACE REMOVED MATERIAL WITH CLEAN FILTER MEDIA THAT ADHERES TO THE ORIGINALLY APPROVED PLANS/DESIGN.
- PRESSURE BACKWASH THE INSTALLED PIPING TO ASSURE OF FULL FUNCTIONALITY.

TYPICAL DRIVEWAY CONNECTION STANDARDS
 FOR EXISTING ROADWAY CONDITIONS

NOTES:

- ALL MATERIALS AND LABOR FOR INSTALLATION WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER/CONTRACTOR.
- RESIDENTIAL DRIVEWAYS ABUTTING PAVED ROADS SHALL BE 1 - 1/2" ASPHALT WITH 6" STABILIZED SUB GRADE OR 4" CONCRETE WITH 6" STABILIZED SUB GRADE - 98% COMPACTION (MODIFIED PROCTOR) WITH LBR 40 BETWEEN EDGE OF ROADWAY AND R/W LINE. COMPACTION AND TESTING IF NECESSARY, THIS WILL BE THE RESPONSIBILITY OF THE OWNER/CONTRACTOR.
- DRIVEWAYS ABUTTING A DIRT ROAD SHALL BE MILLED ASPHALT, GRADED AGGREGATE BASE, OR WASHED CONCRETE (4" IN DEPTH) ON THE COUNTY MAINTAINED PORTION OF DRIVEWAY.
- IF NECESSARY, REFER TO FDOT INDEX DETAILS AS REFERENCED BELOW.
- RADIUS OR FLARE IS REQUIRED FOR TYPE II OR TYPE III CONNECTIONS. SEE DETAIL.
- PARKING SPACES WITHIN COUNTY RIGHT-OF-WAY SHALL PROVIDE A MINIMUM OF 2 PARKING SPACES.
- TYPICAL DRIVEWAY SECTIONS ARE TO BE 12' WIDE MINIMUM. (4" MIN. RESIDENTIAL DEPTH - 6" MIN. COMMERCIAL DEPTH)
- DRIVEWAY SLOPE SHALL NOT CREATE OR EXACERBATE VEHICULAR SCRAPING. ATTEMPTS SHALL BE MADE TO CORRECT THIS TYPE OF PROBLEM.

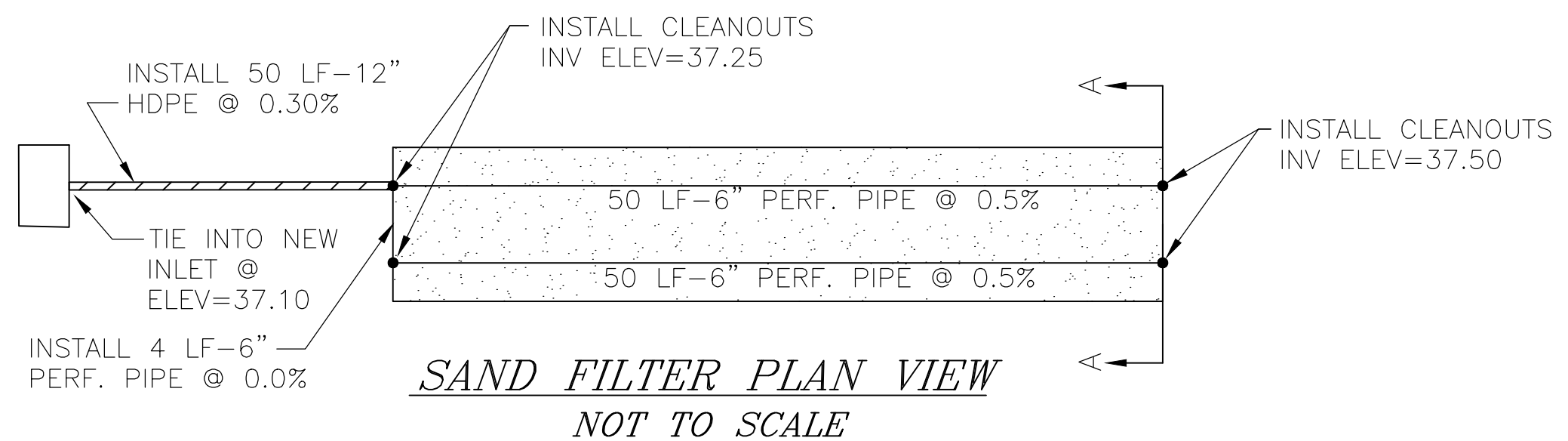
TYPE I CURB CUT DRIVEWAY FOR COUNTY TYPE "B" LAYBACK CURBS.



NOTES:

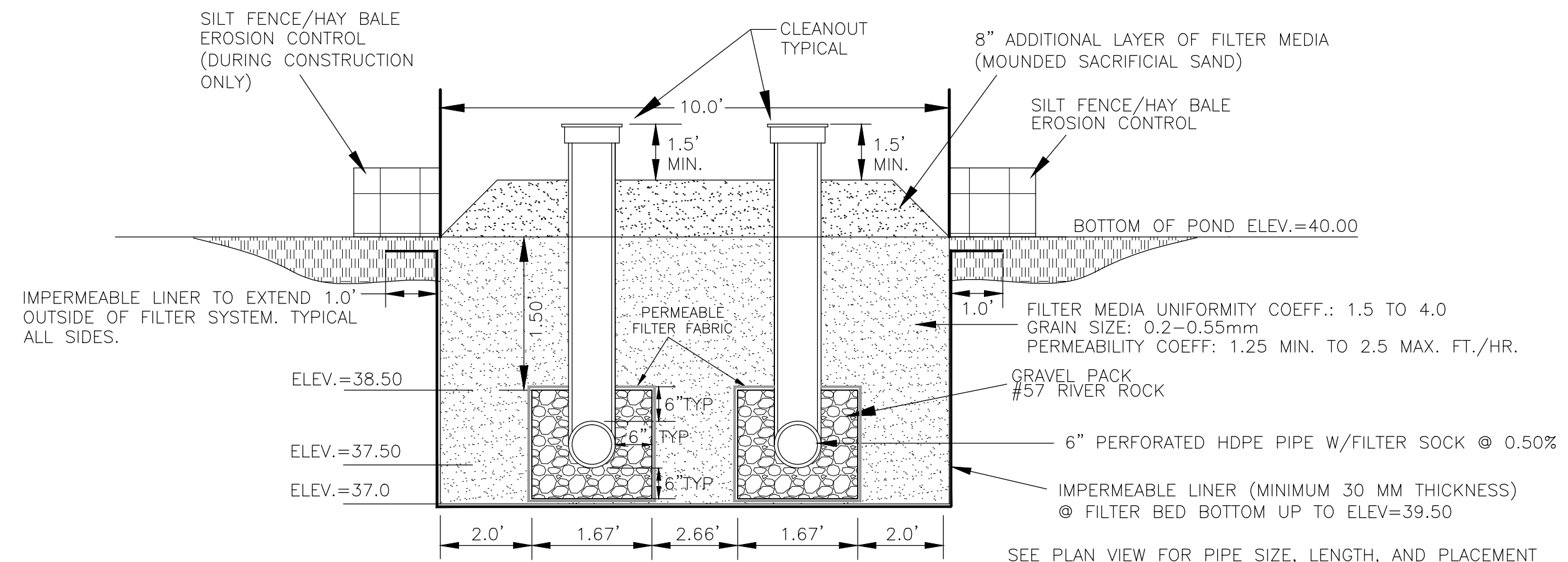
- SEE STANDARD COUNTY CURB DETAILS FOR REFERENCE.
- SEE F.D.O.T. INDEX NO. 515 FOR OTHER CONNECTIONS.

* FOR OTHER TYPE CURBS, DIMENSIONS MAY BE ADJUSTED TO FIT.



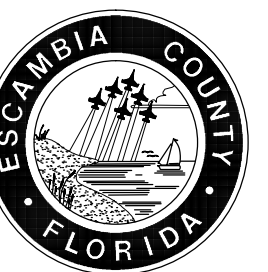
SAND FILTER PLAN VIEW
 NOT TO SCALE

NOTE: CONTRACTOR SHALL PROVIDE CERTIFICATION TO ENGINEER THAT FILTER MEDIA MEETS SPECIFICATIONS



SAND FILTER X-SECTION (A-A)
 NOT TO SCALE

SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS



HAMMOND ENGINEERING, INC.
 FLORIDA AUTHORIZATION NO. 9130
 ALABAMA AUTHORIZATION NO. 3277
 3802 NORTH S STREET
 PENSACOLA, FL 32505
 PHONE: (850) 434-2603 FAX: (850) 434-2650

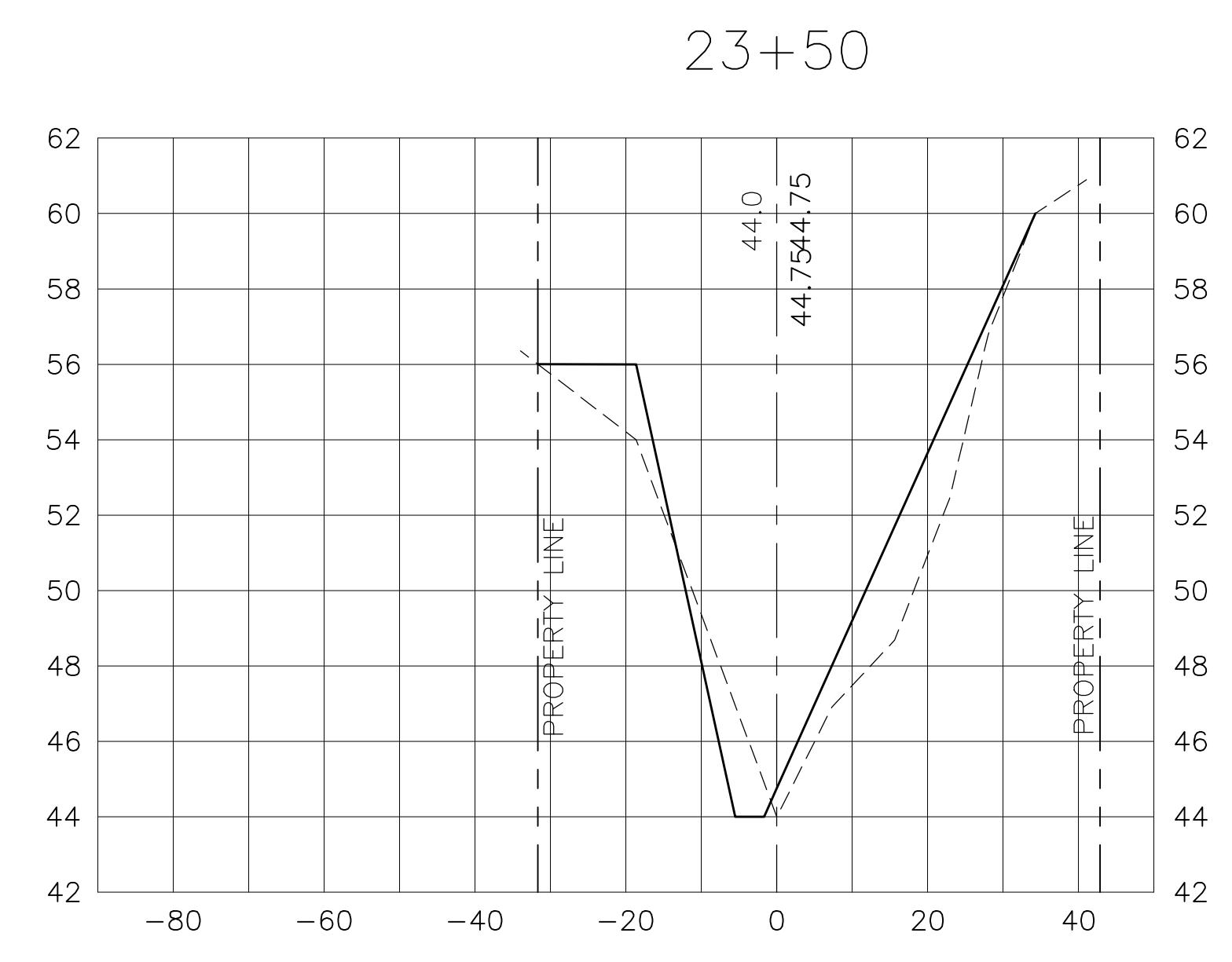
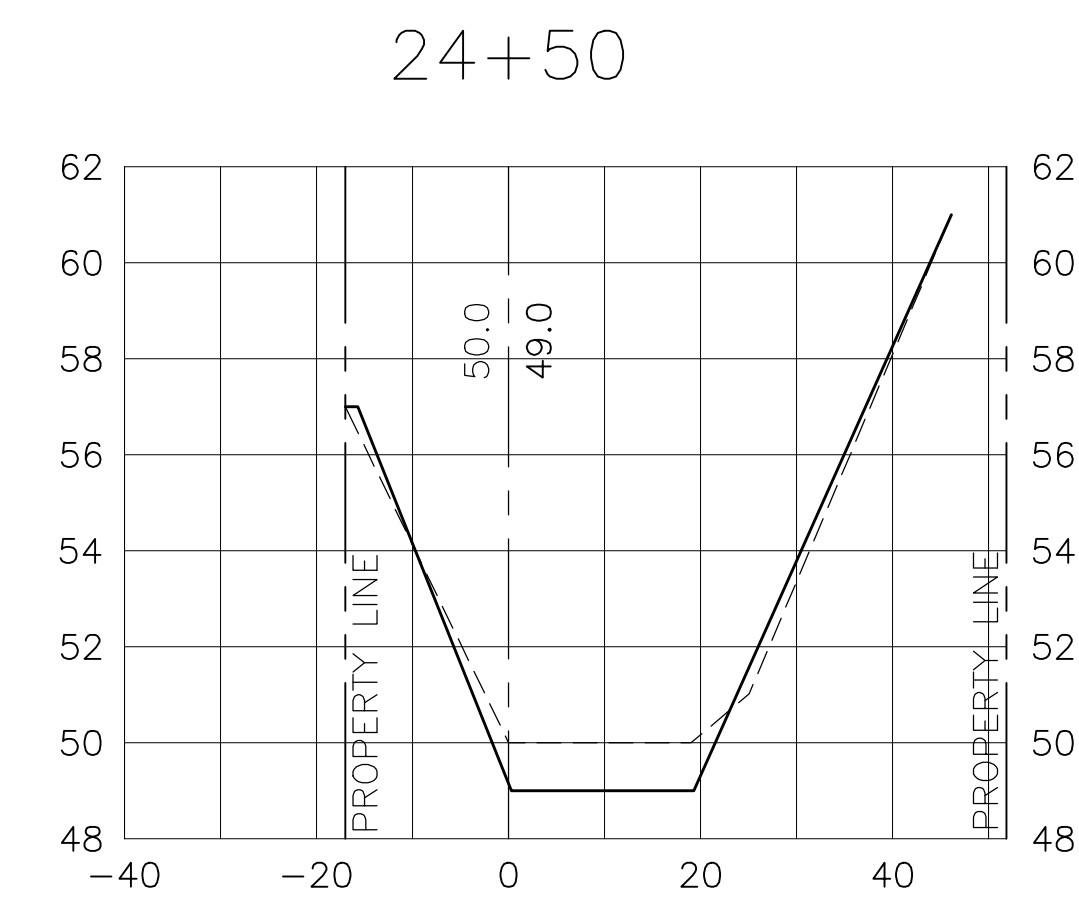
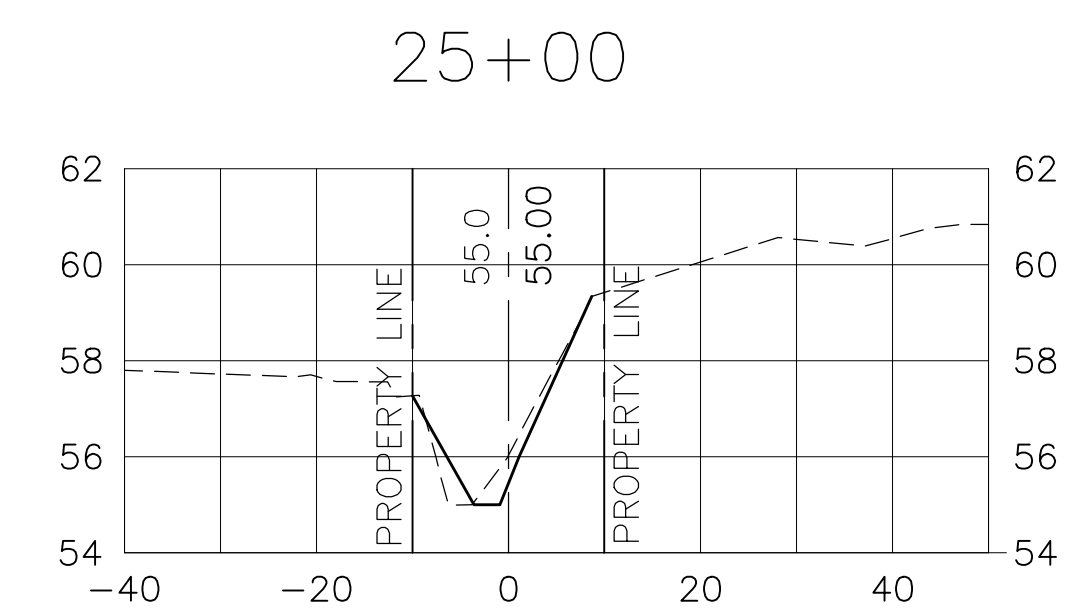
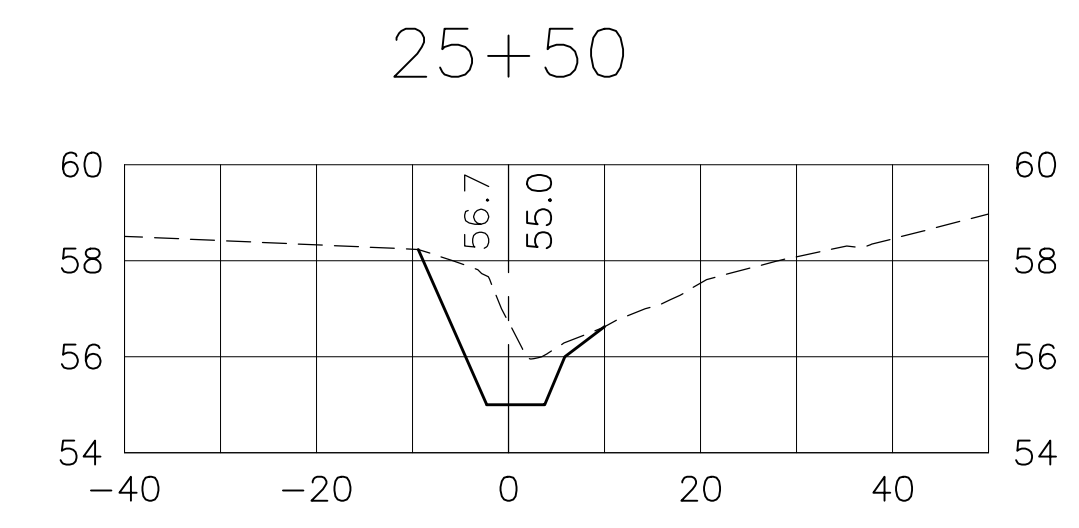
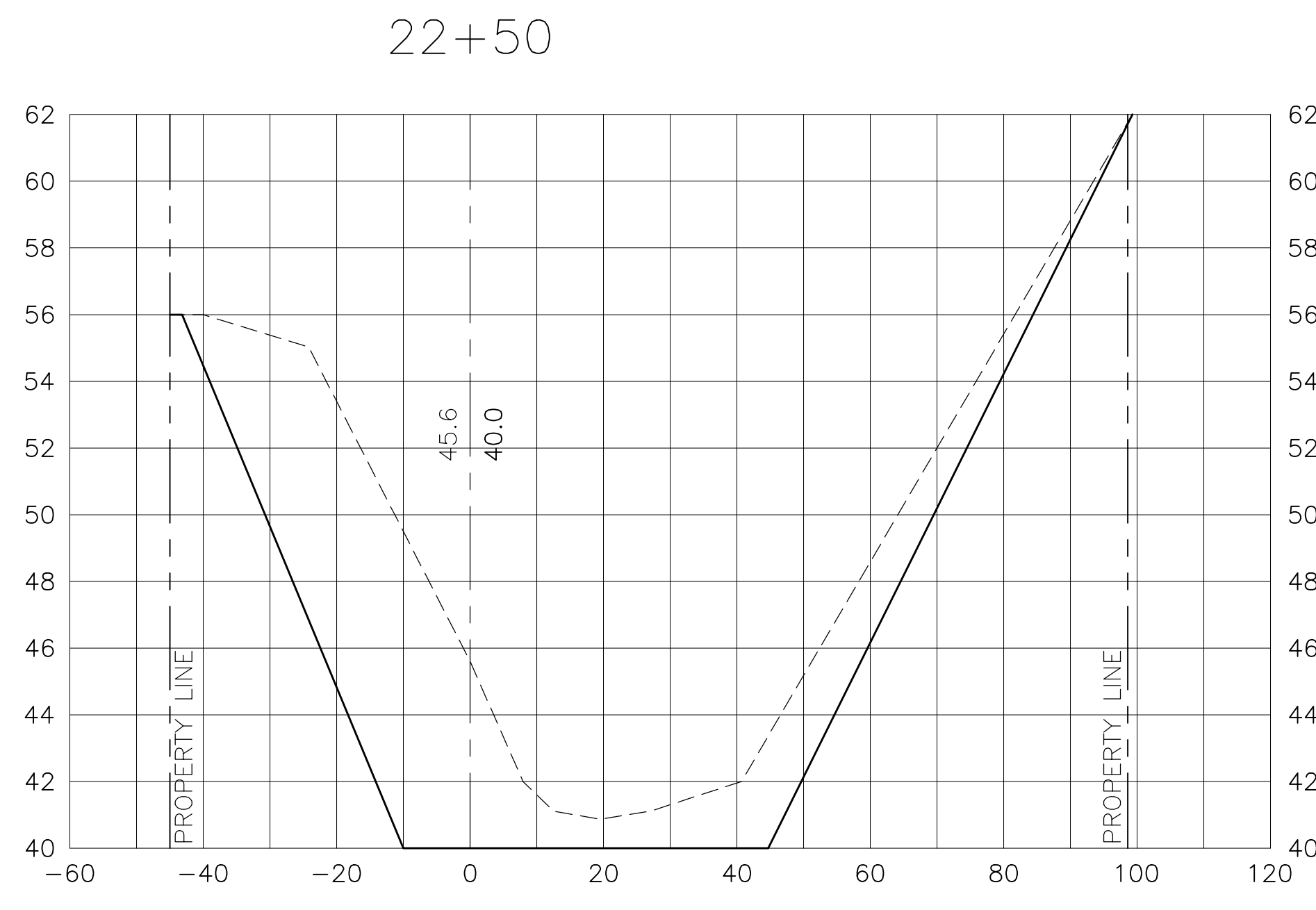
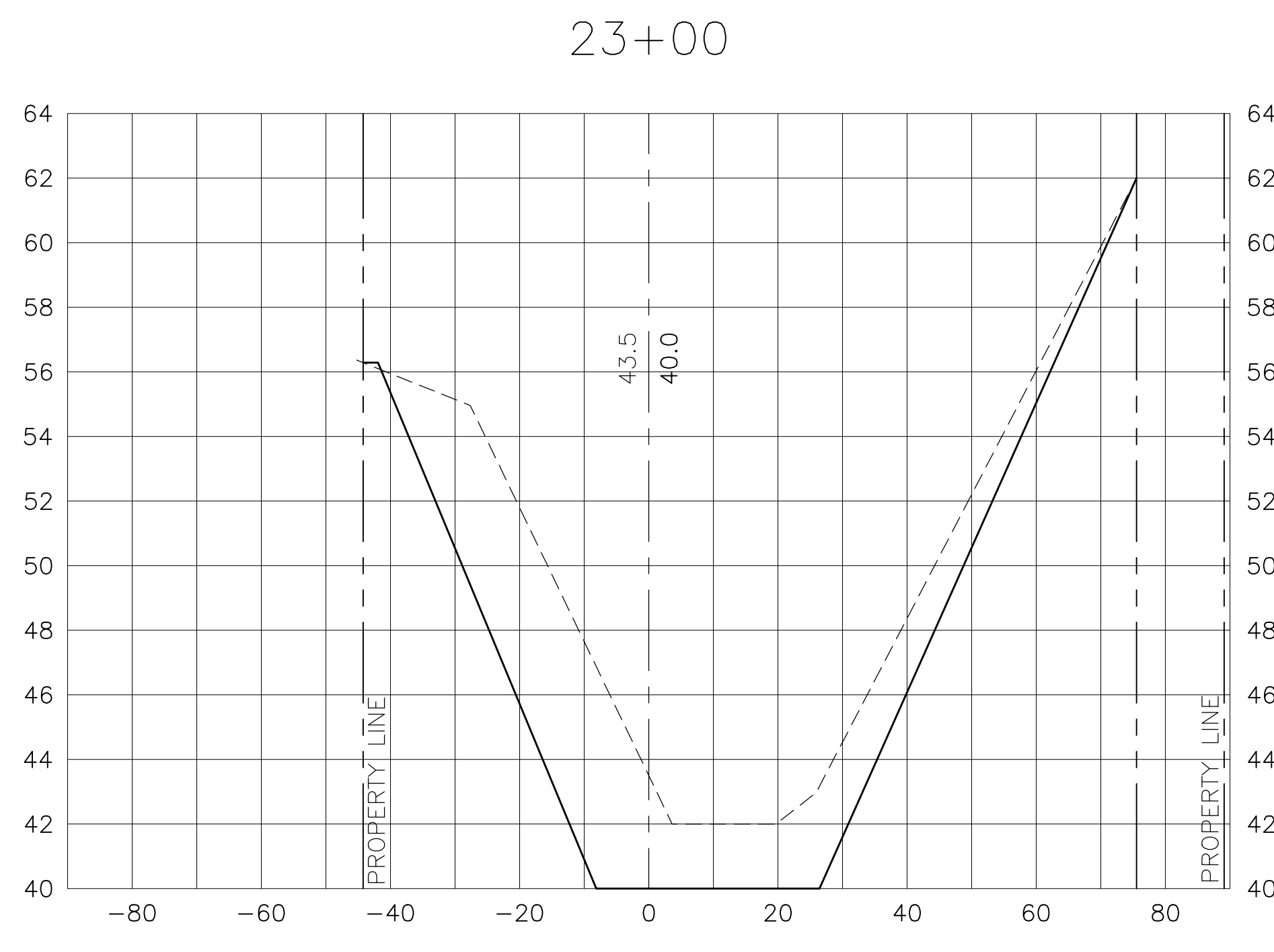
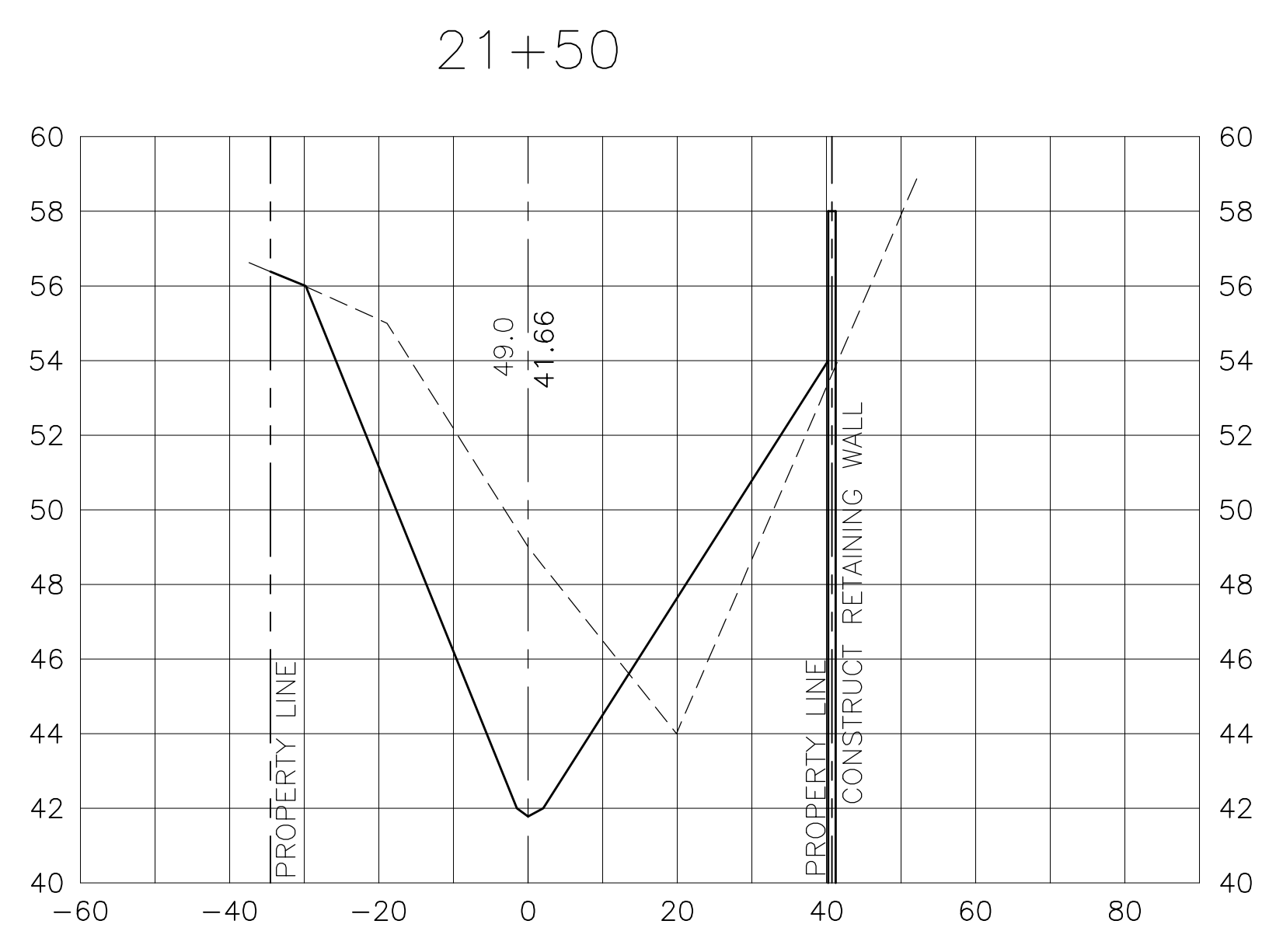
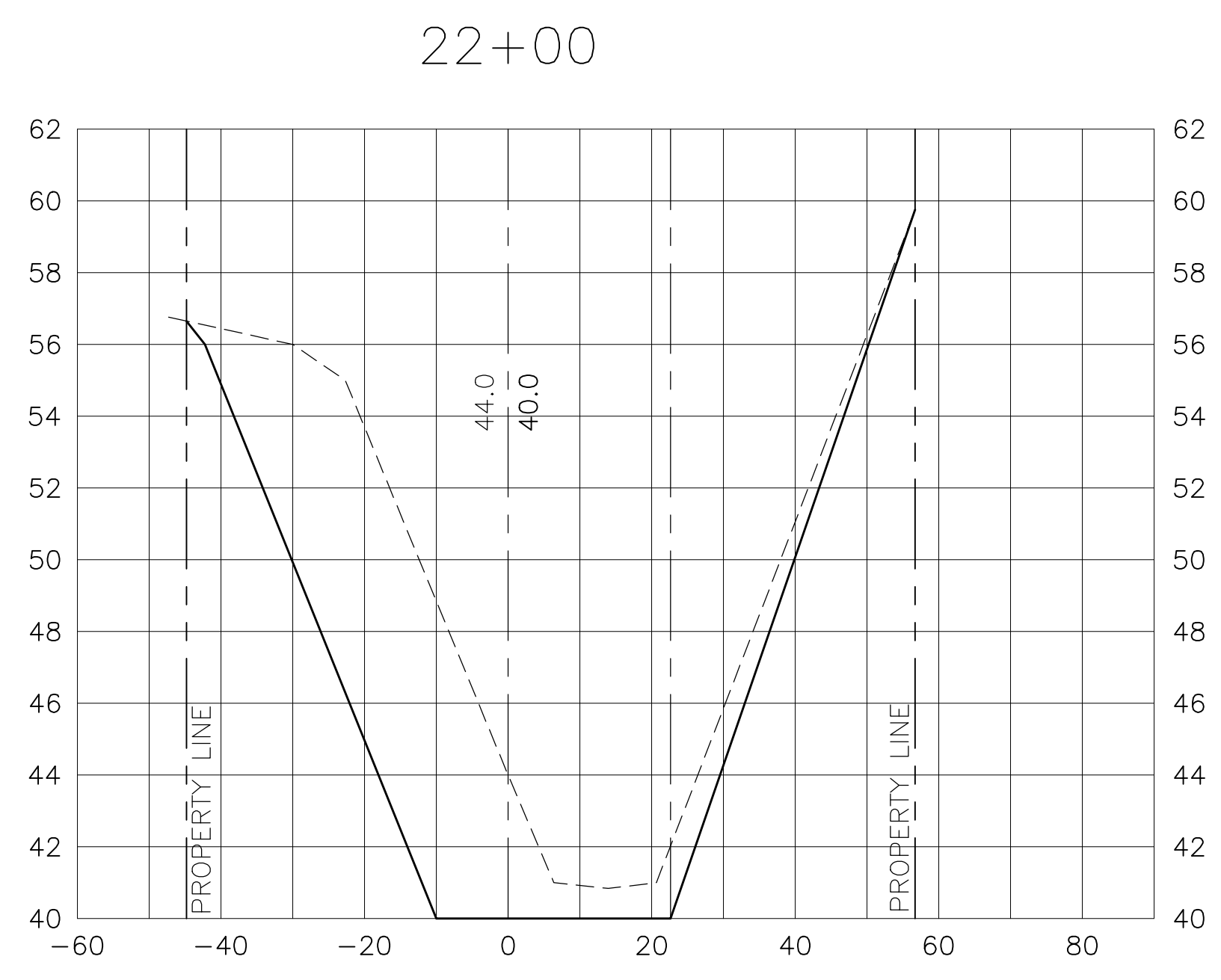
DESIGNED BY: T. HAMMOND/R. SIEG	CHECKED BY: T. HAMMOND	REG. P.A. ENG. NO.:	DATE:
DRAWN BY: N. CHALVIN	PROJECT MANAGER: N. CHALVIN	DISTRICT:	ONE
DATE:	MARCH 2016	SIGNATURE:	
APPROVED BY: J. JONES	DATE: 7/12/16	REVISIONS:	AS PER ESCAMBIA COUNTY COMMENTS
NUMBER:	1.	DRAWING NUMBER:	14-023
PROJECT NUMBER:		SURVEY NUMBER:	
SHEET			C19

PHASE	REVIEW	DATE	ORIGINATOR (RP)	ORIGINATOR (GR)	ORIGINATOR (CR)	ORIGINATOR (OR)	ORIGINATOR (VR)	DATE
SIGNATURE:	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)	DATE	CHECKER (RP)	CHECKER (GR)	CHECKER (OR)	CHECKER (OR)	CHECKER (OR)	DATE
	CHANGE INCORPORATION (Yellow Highlighter)	DATE	(Red Pen X-Out to Disagree or Remark)	Correct (Green Highlighter) Change (Red Pen)	Correct (Green Highlighter) Change (Red Pen)	Correct (Green Highlighter) Change (Red Pen)	Correct (Green Highlighter) Change (Red Pen)	DATE
		DATE						DATE
		DATE						DATE

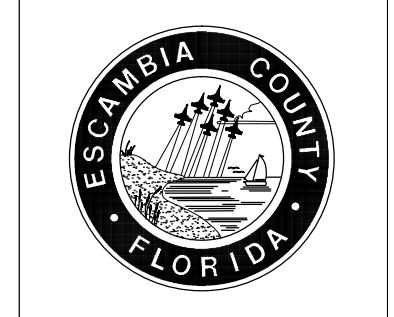
11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'

11"x17" SCALE 1" = 8'
24"x36" SCALE 1" = 16'

----- DENOTES EXISTING GRADE
————— DENOTES PROPOSED GRADE



SHADOW GROVE SUBDIVISION
DRAINAGE IMPROVEMENTS
UPPER POND CROSS SECTIONS



HAMMOND ENGINEERING, INC.
FLORIDA AUTHORIZATION NO. 9130
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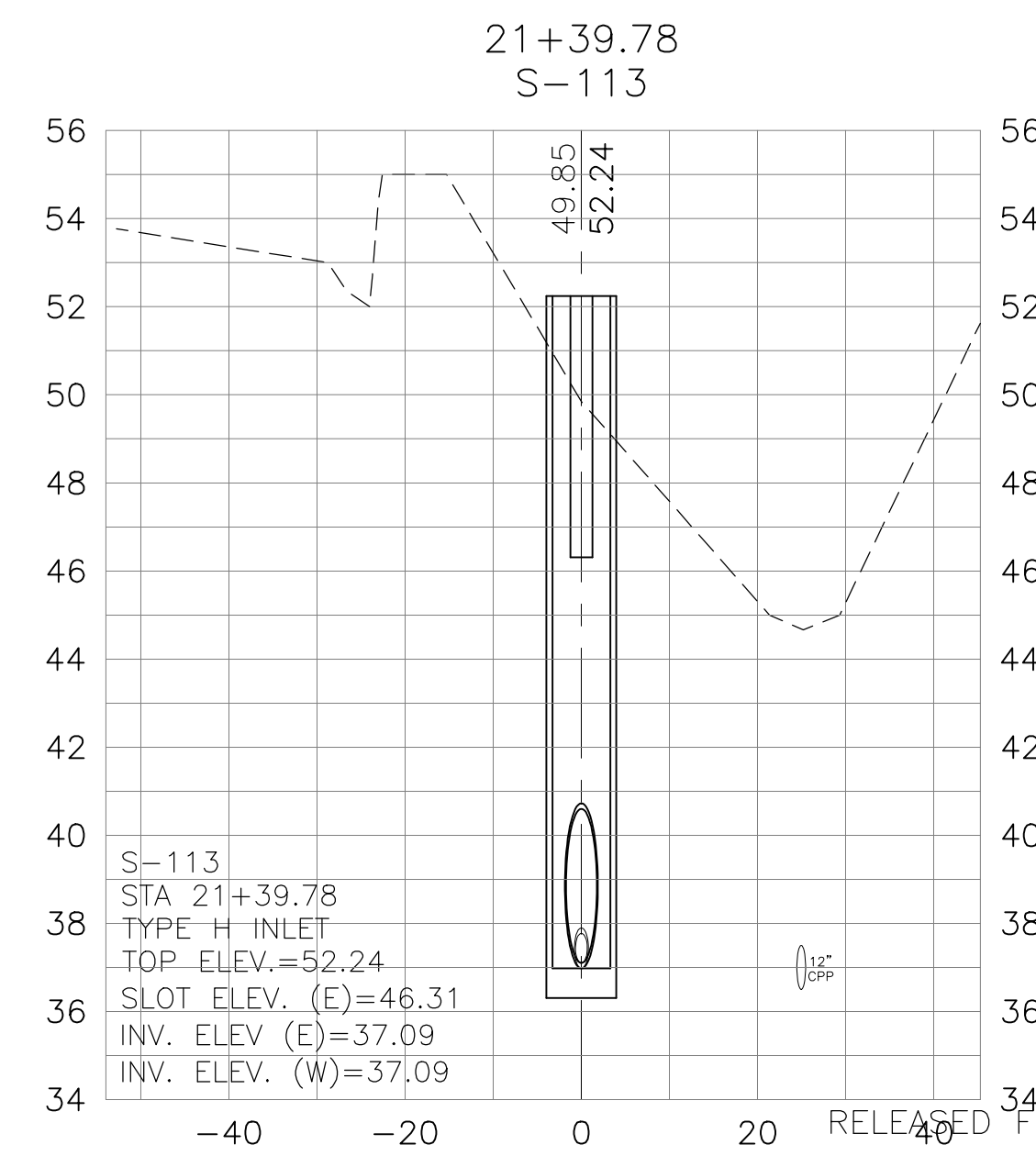
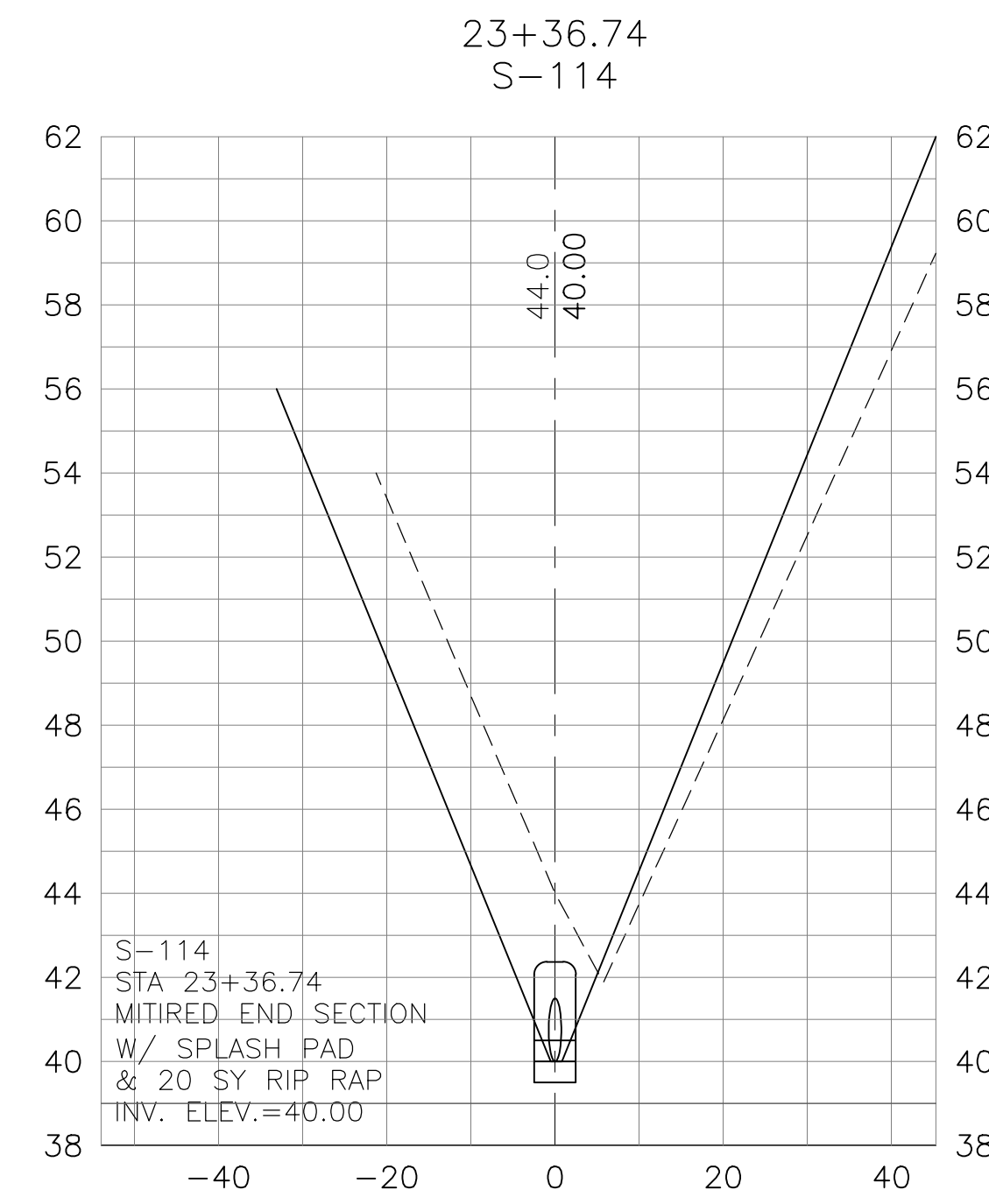
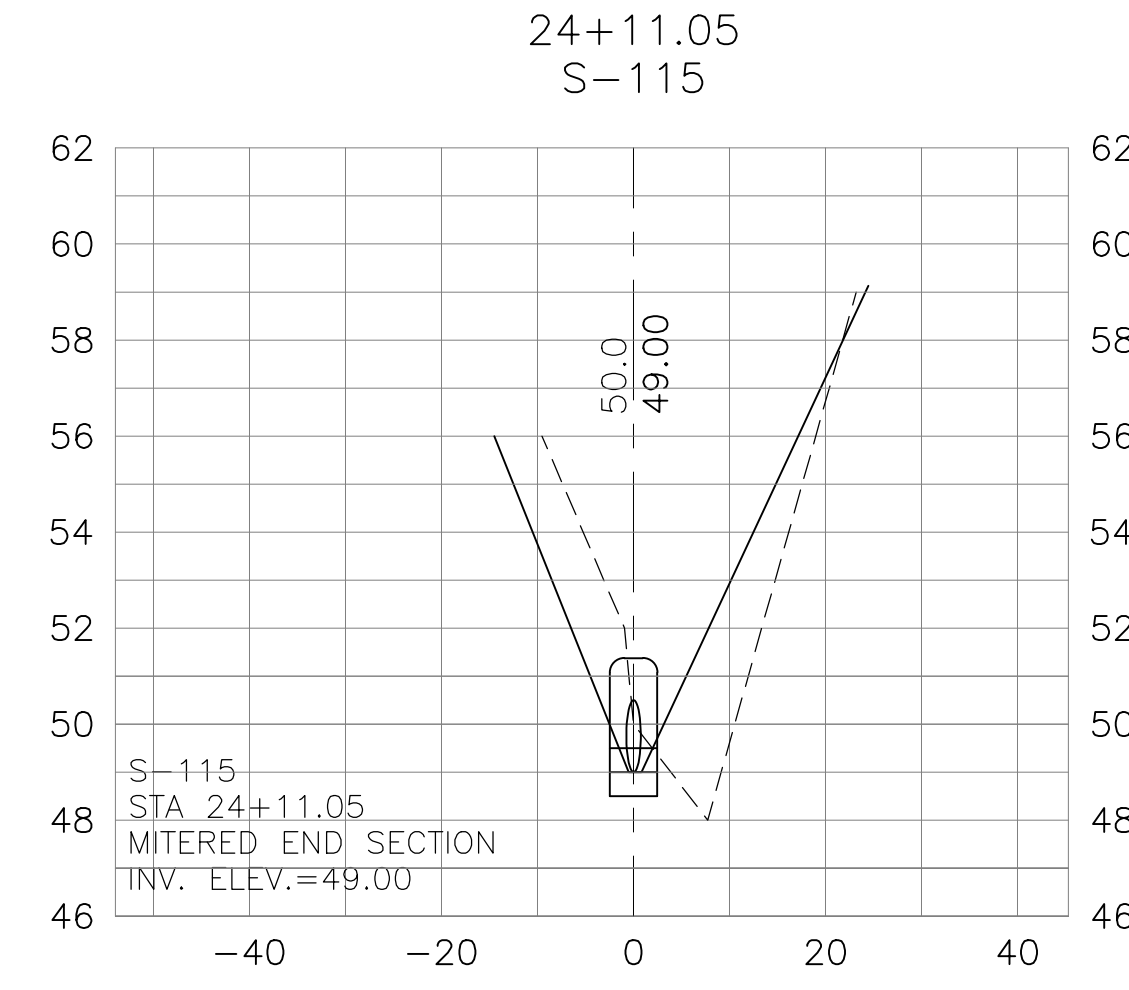
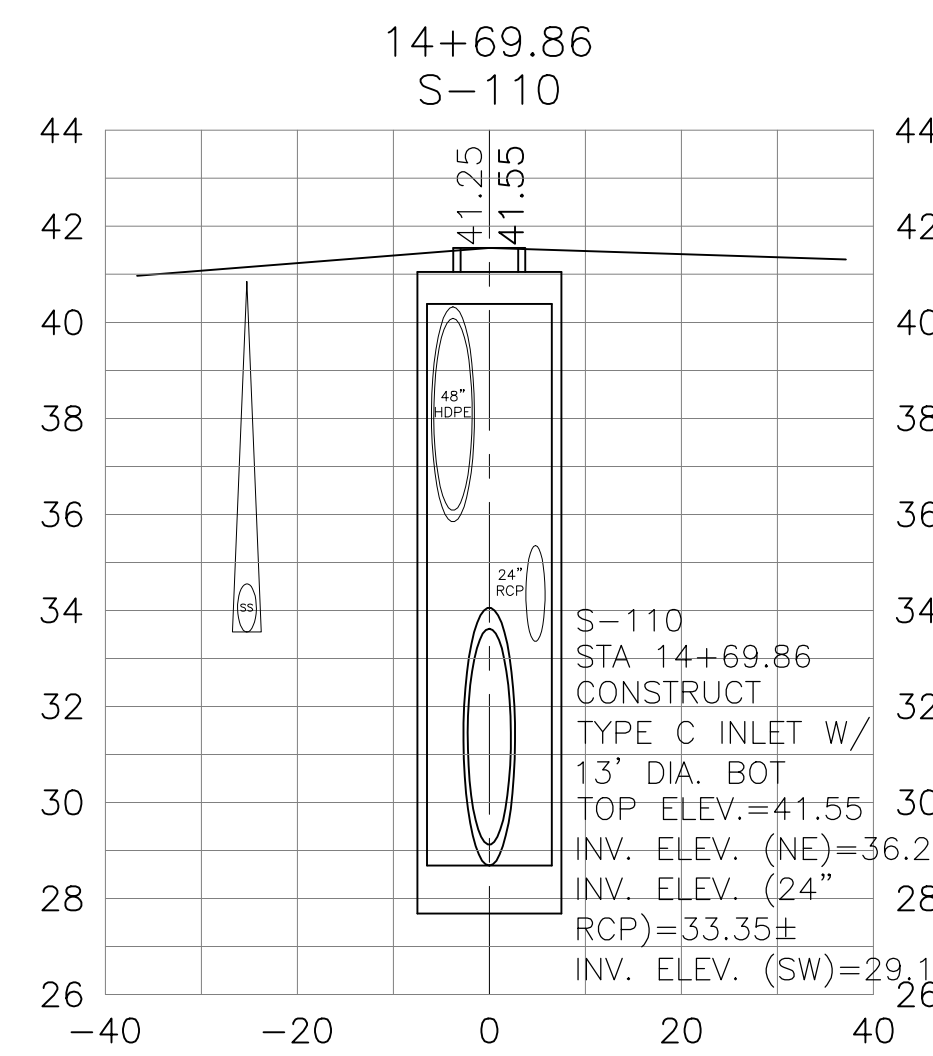
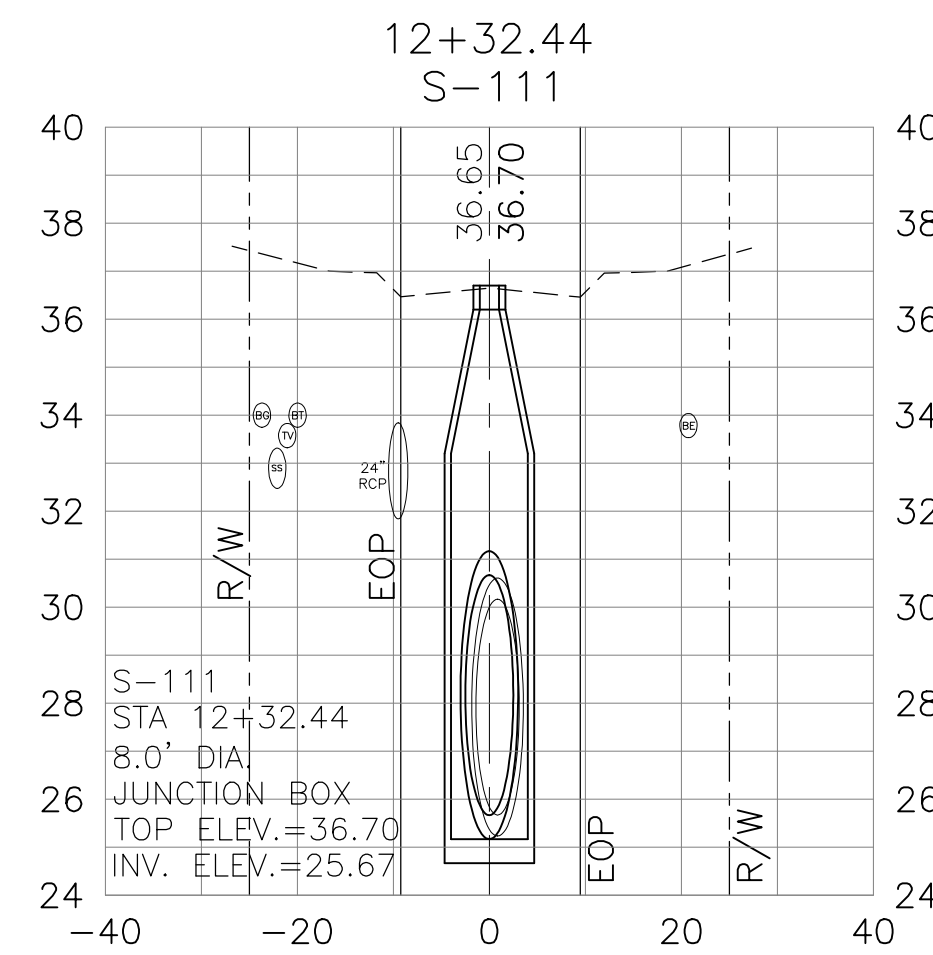
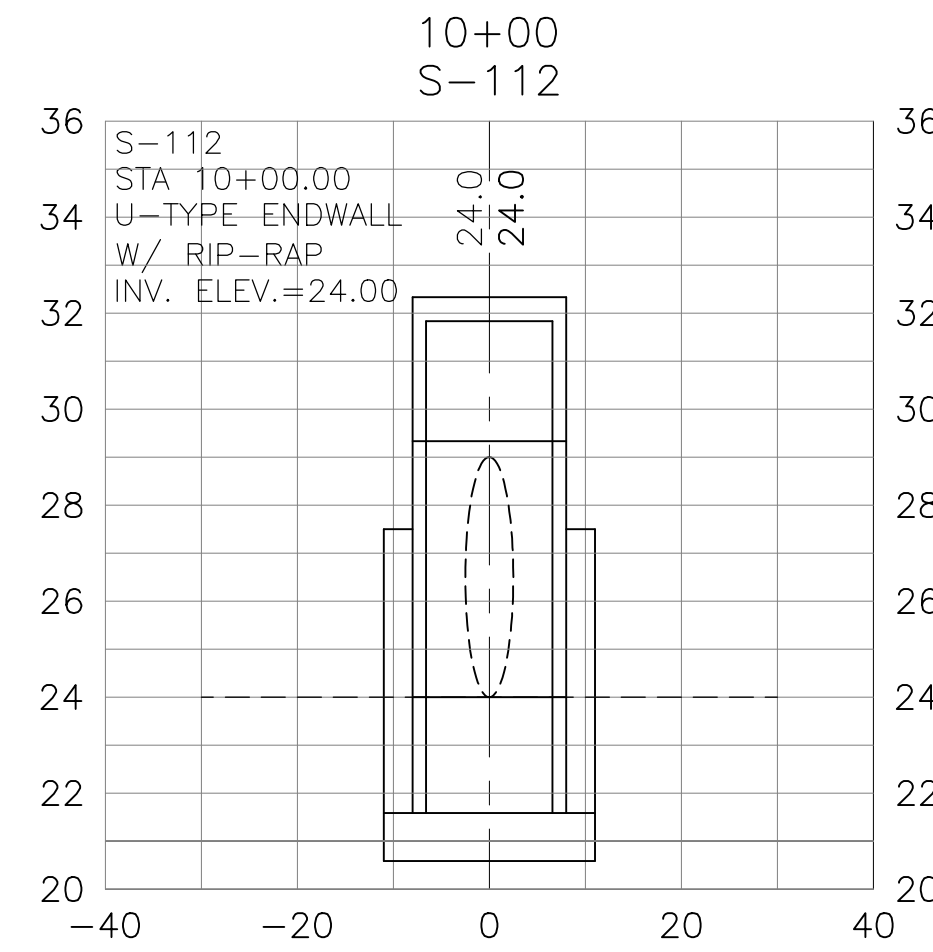
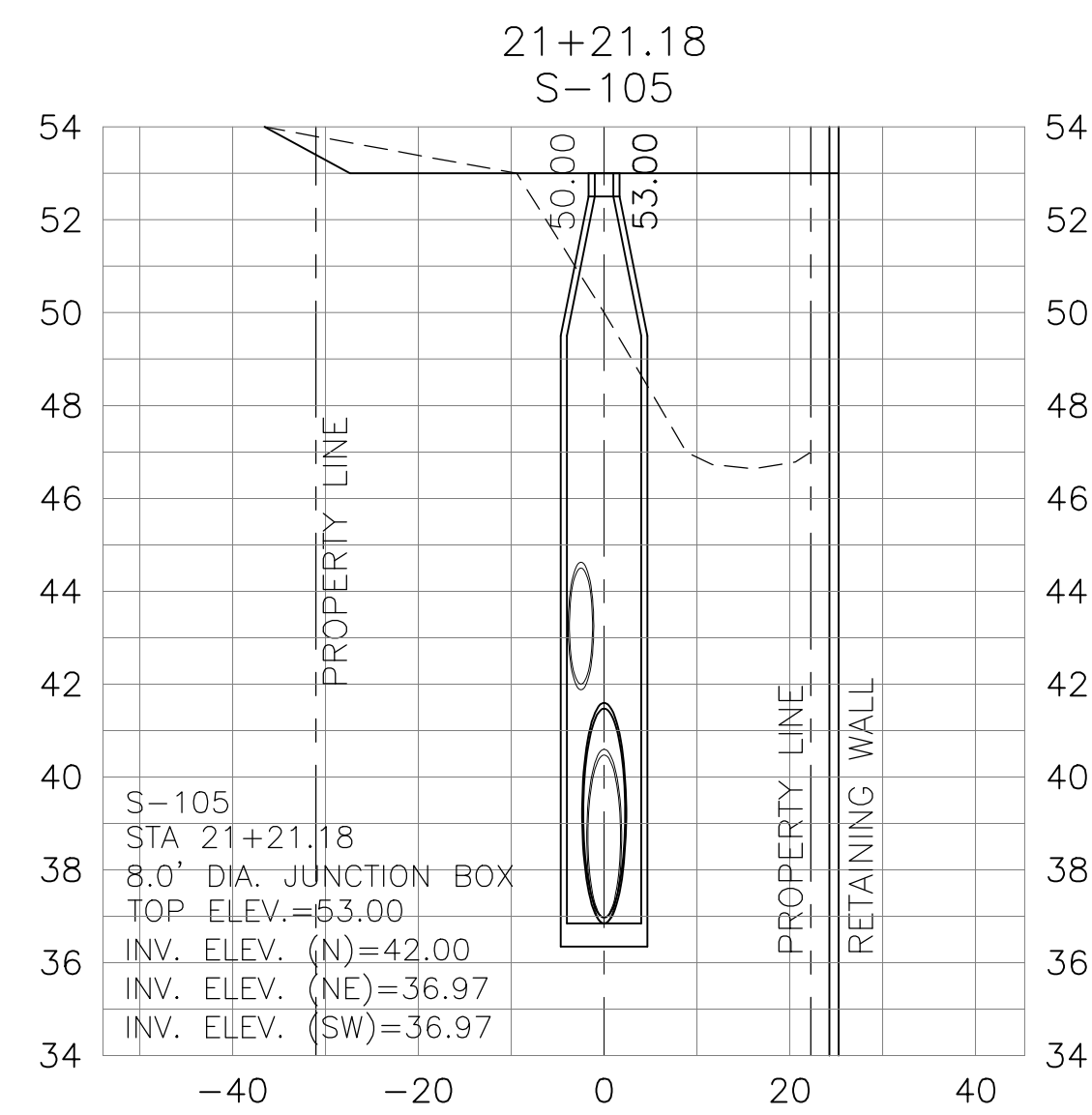
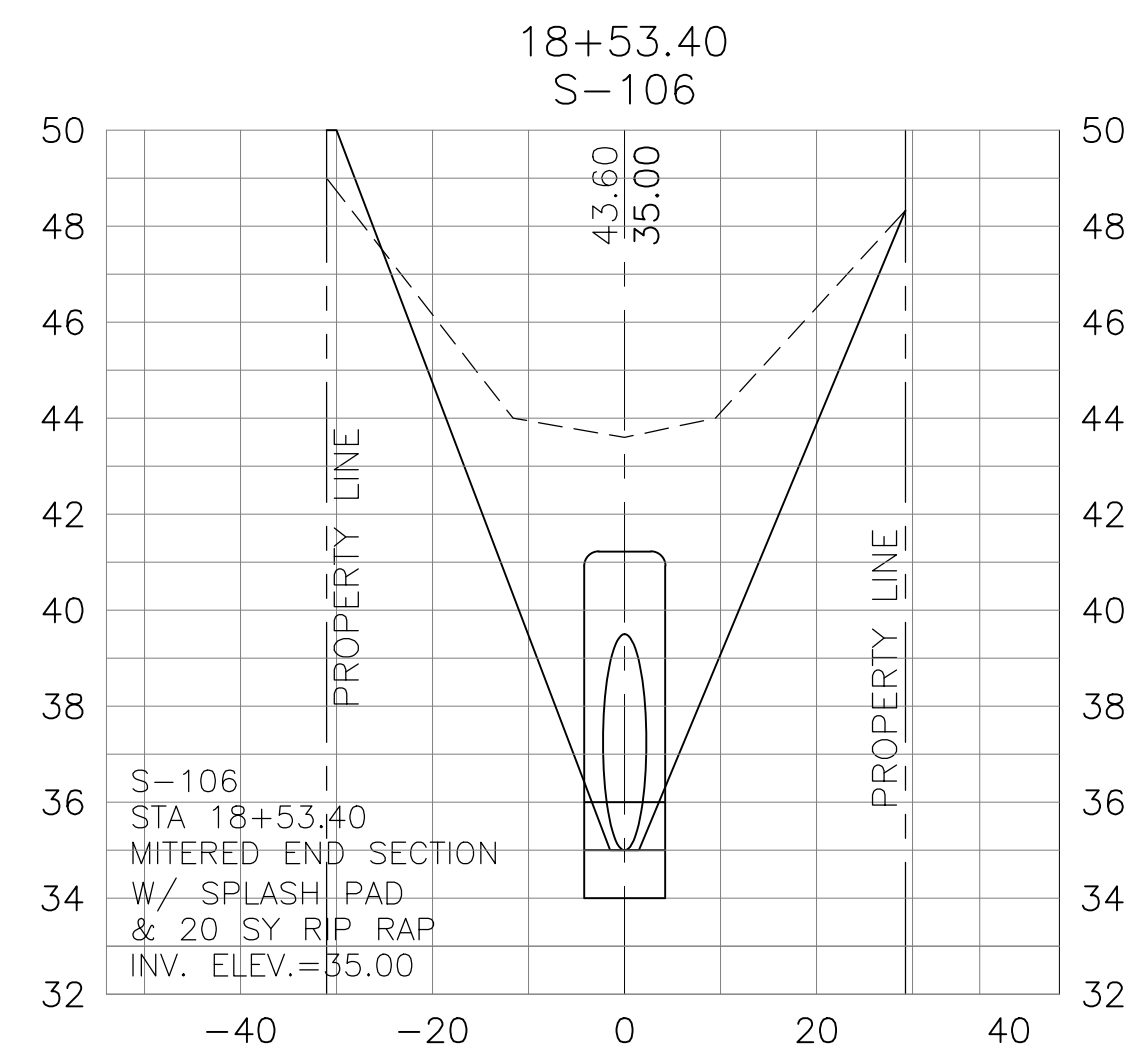
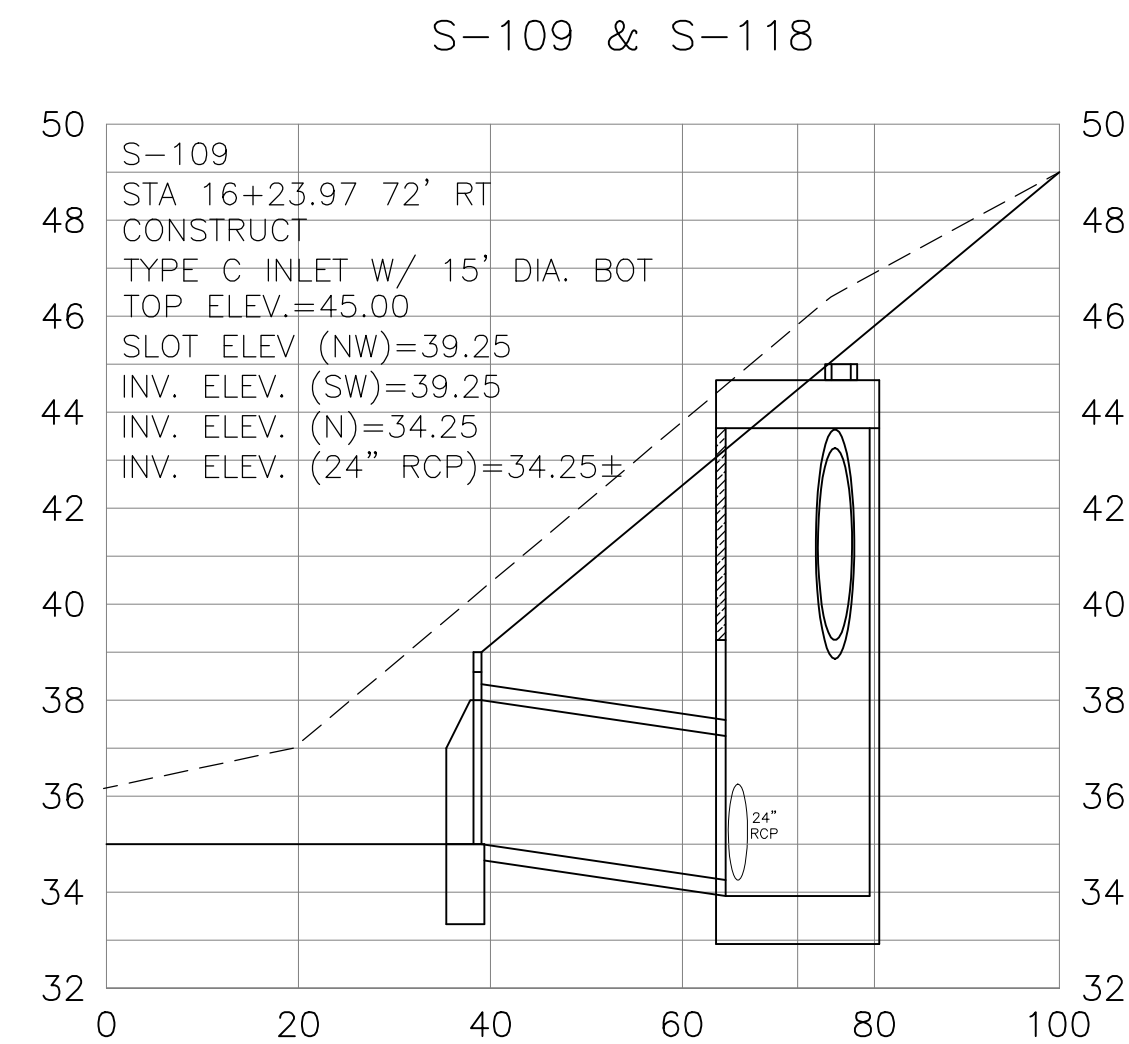
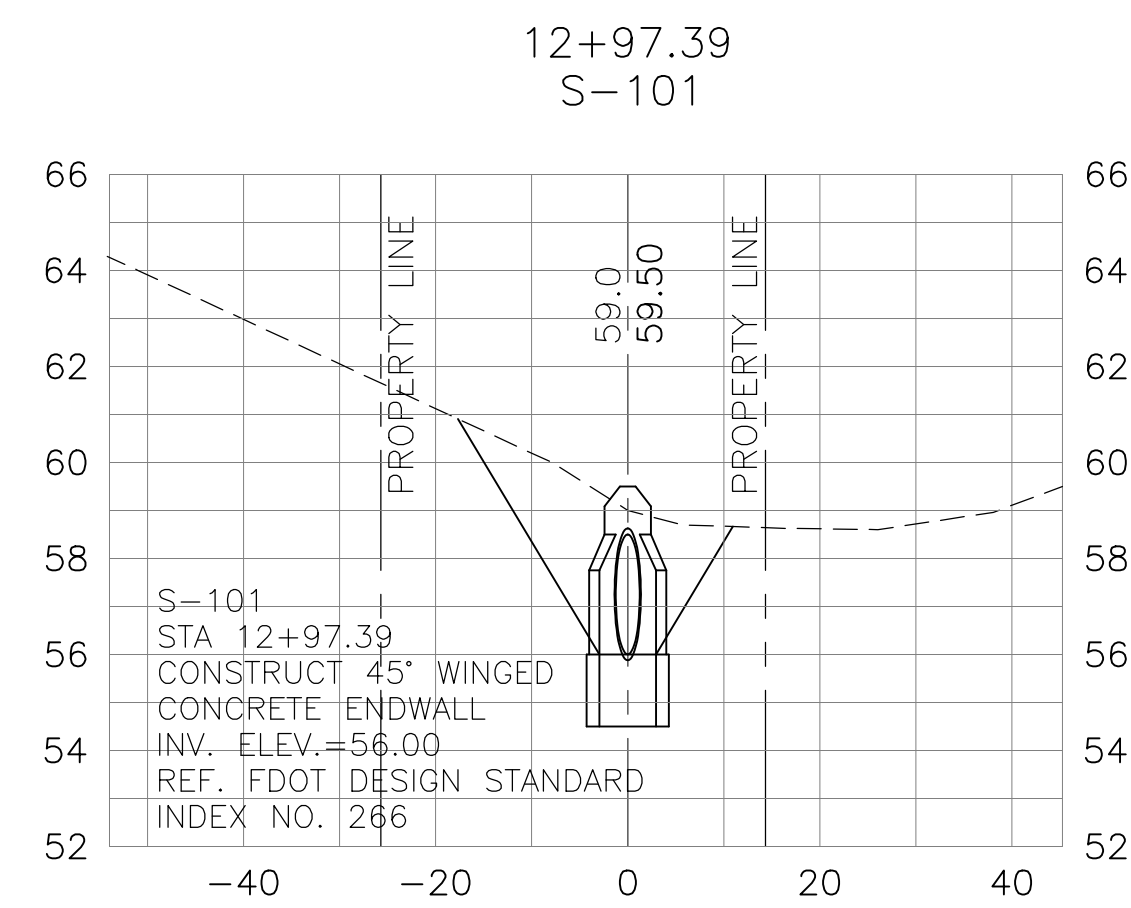
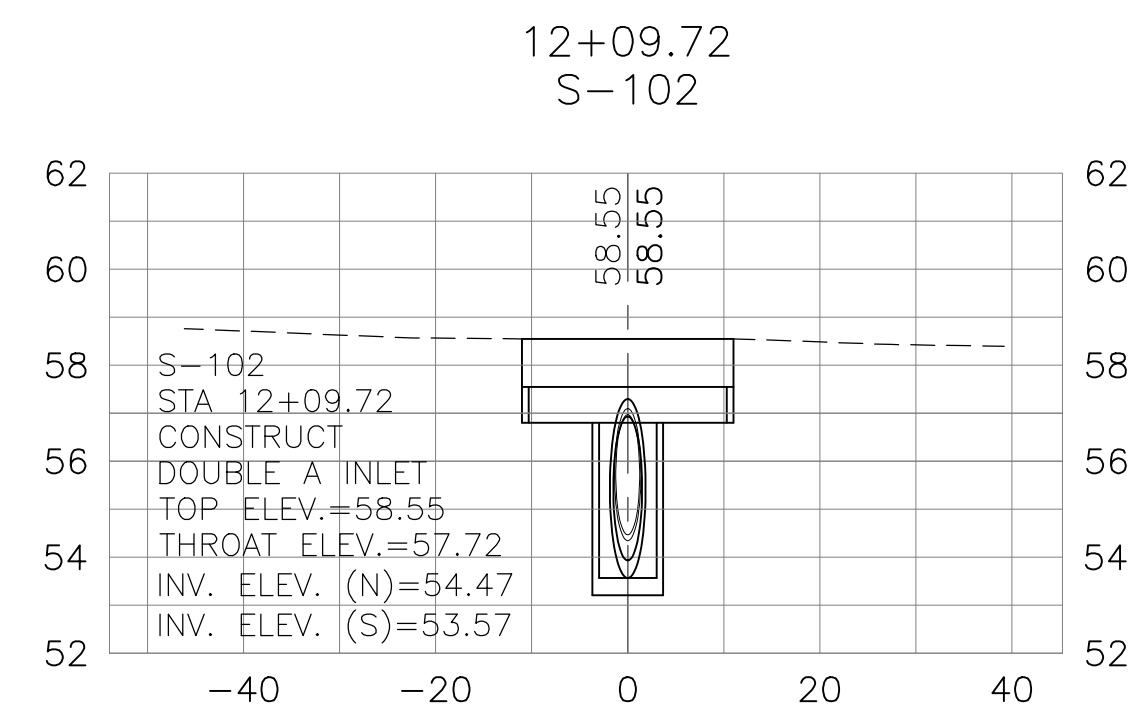
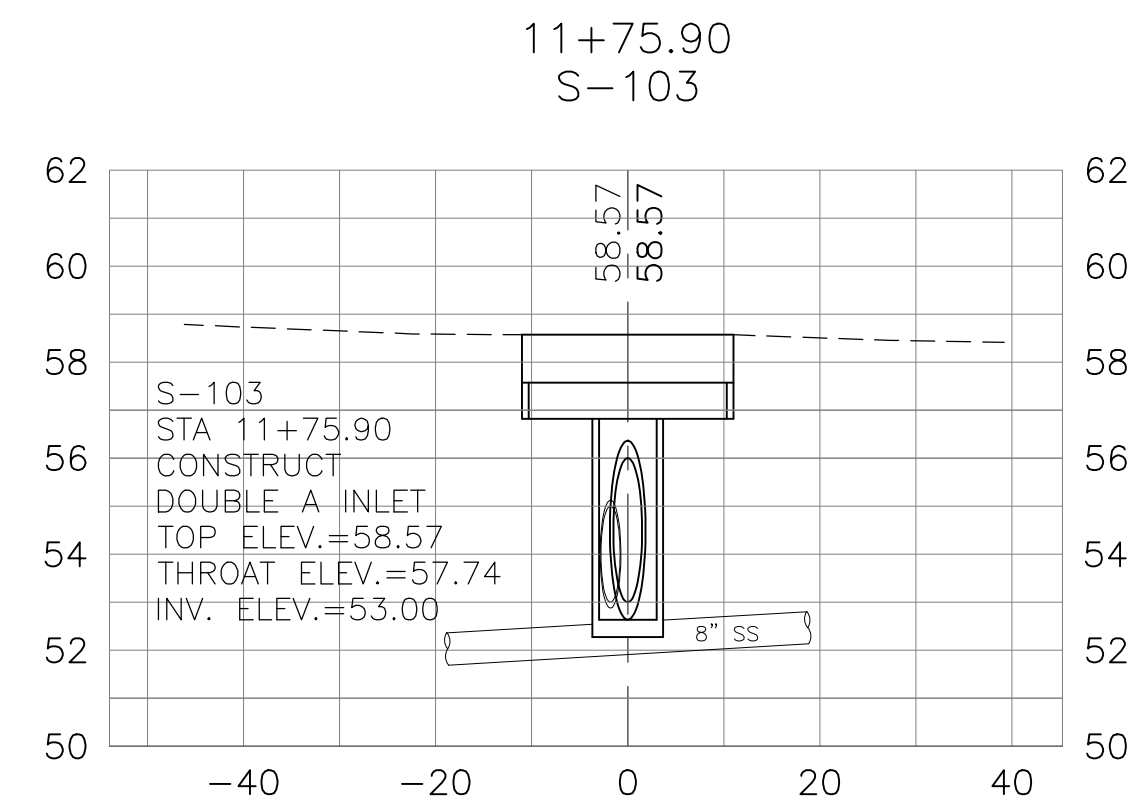
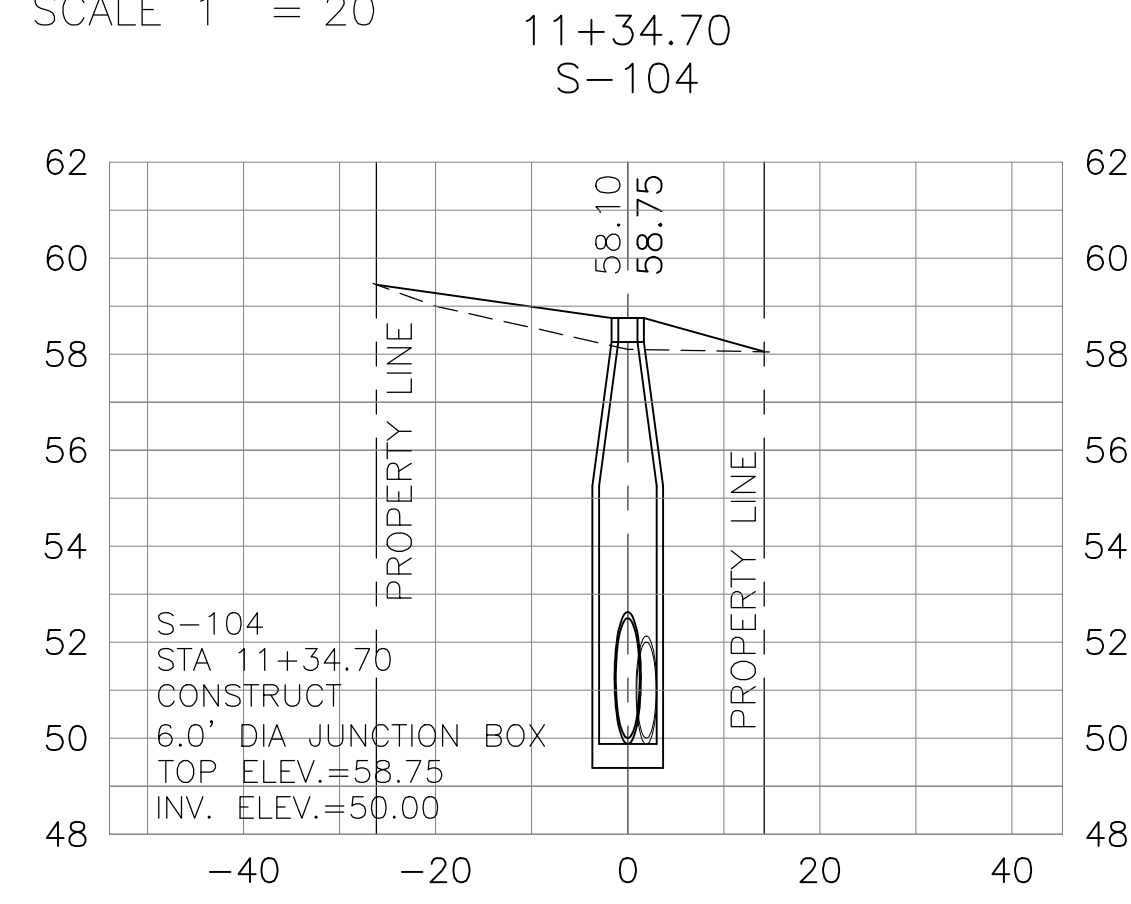
DESIGNED BY:	T. HAMMOND/R. SIEG	CHECKED BY:	T. HAMMOND	REG. P.A. ENG. NO.:	54574
DRAWN BY:	ARS	PROJECT MANAGER:	N. CHALVIN	DISTRICT:	ONE
DATE:	MARCH 2016	SIGNATURE:			

AS PER ESCAMBIA COUNTY COMMENTS
APPROVED BY: J. JONES
DATE: 7/12/16
DRAWING NUMBER: 14-023
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PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL	DATE	ORIGINATOR (GR)	Correct (Green Highlighter)	Change (Red Pen)	DATE	VERIFICATION, CHECKER (OR)	(Blue Highlighter)
SIGNATURE:			CHECKER (RP)	(Red Pen X-Out to Disagree or Remark)	DATE	CHECKER (GR)	Correct (Pink Highlighter)	ORIGINATOR VERIFICATION	DATE	REMARK INCORPORATION	(Blue Highlighter)
			CHANGE INCORPORATION	(Yellow Highlighter)	DATE						

11"x17" SCALE 1" = 40'
24"x36" SCALE 1" = 20'

11"x17" SCALE 1" = 8'
24"x36" SCALE 1" = 16'

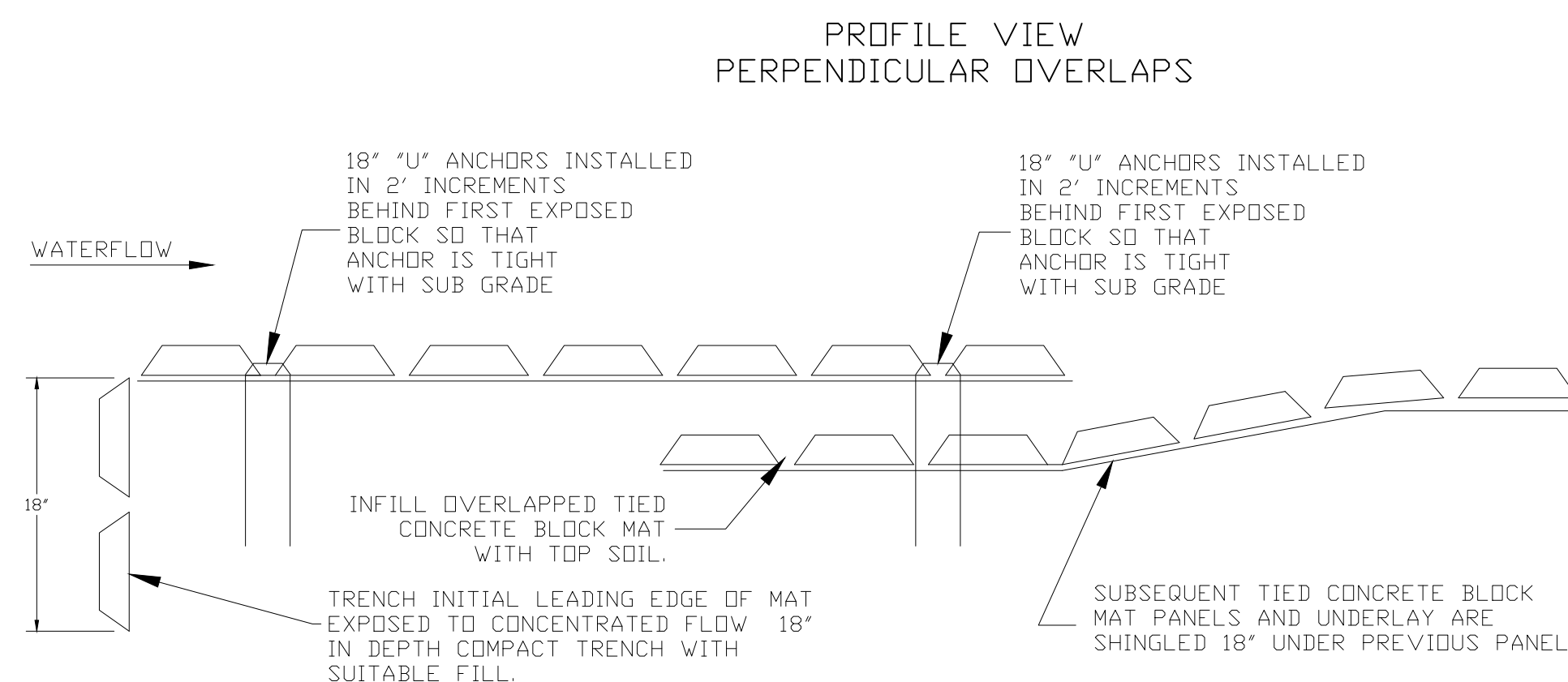
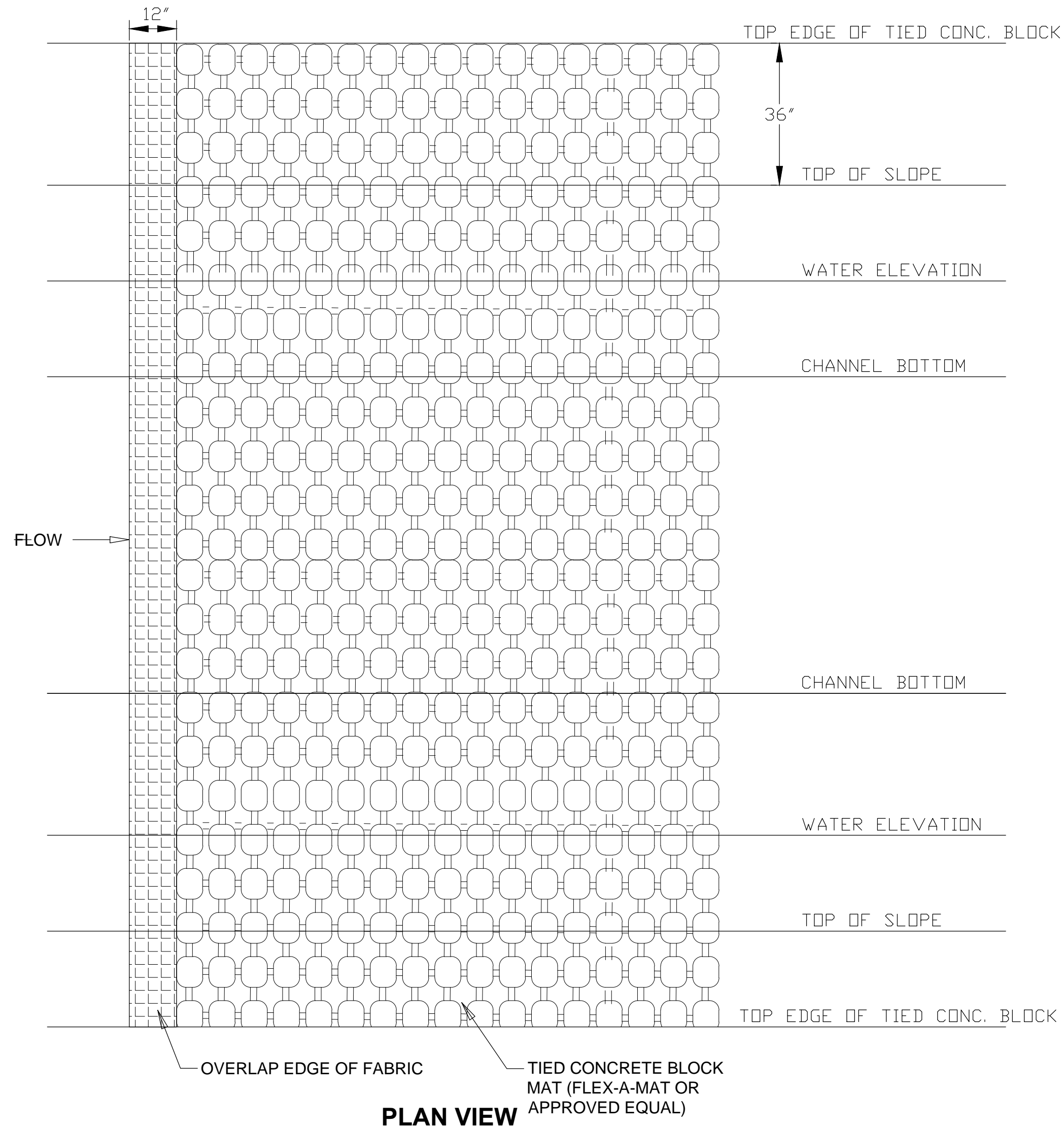
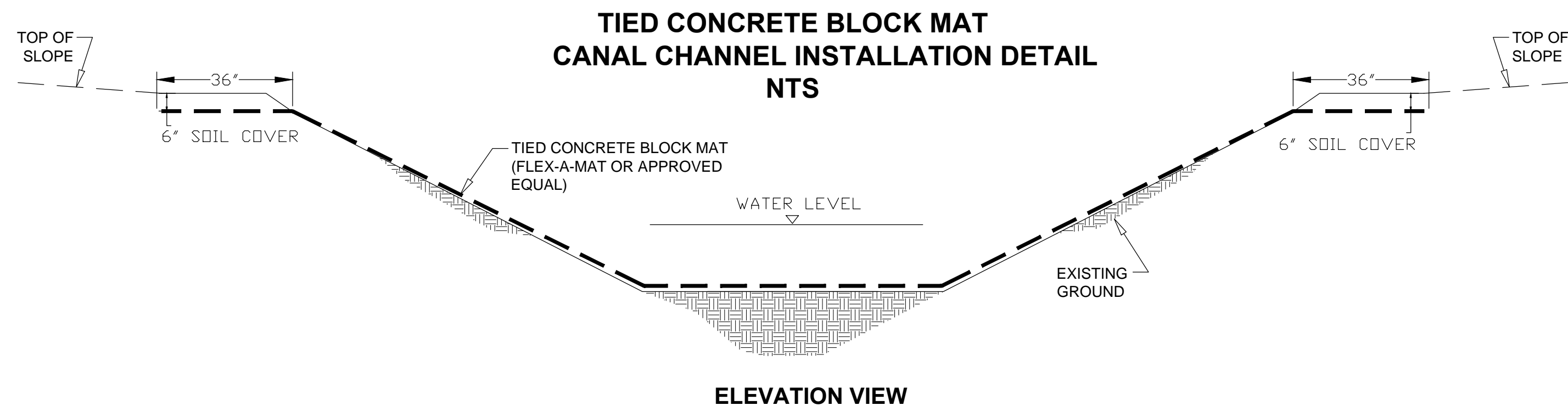


HAMMOND ENGINEERING, INC.
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ALABAMA AUTHORIZATION NO. 3277
3802 NORTH S STREET
PENSACOLA, FL 32505
PHONE: (850) 434-2603 FAX: (850) 434-2650

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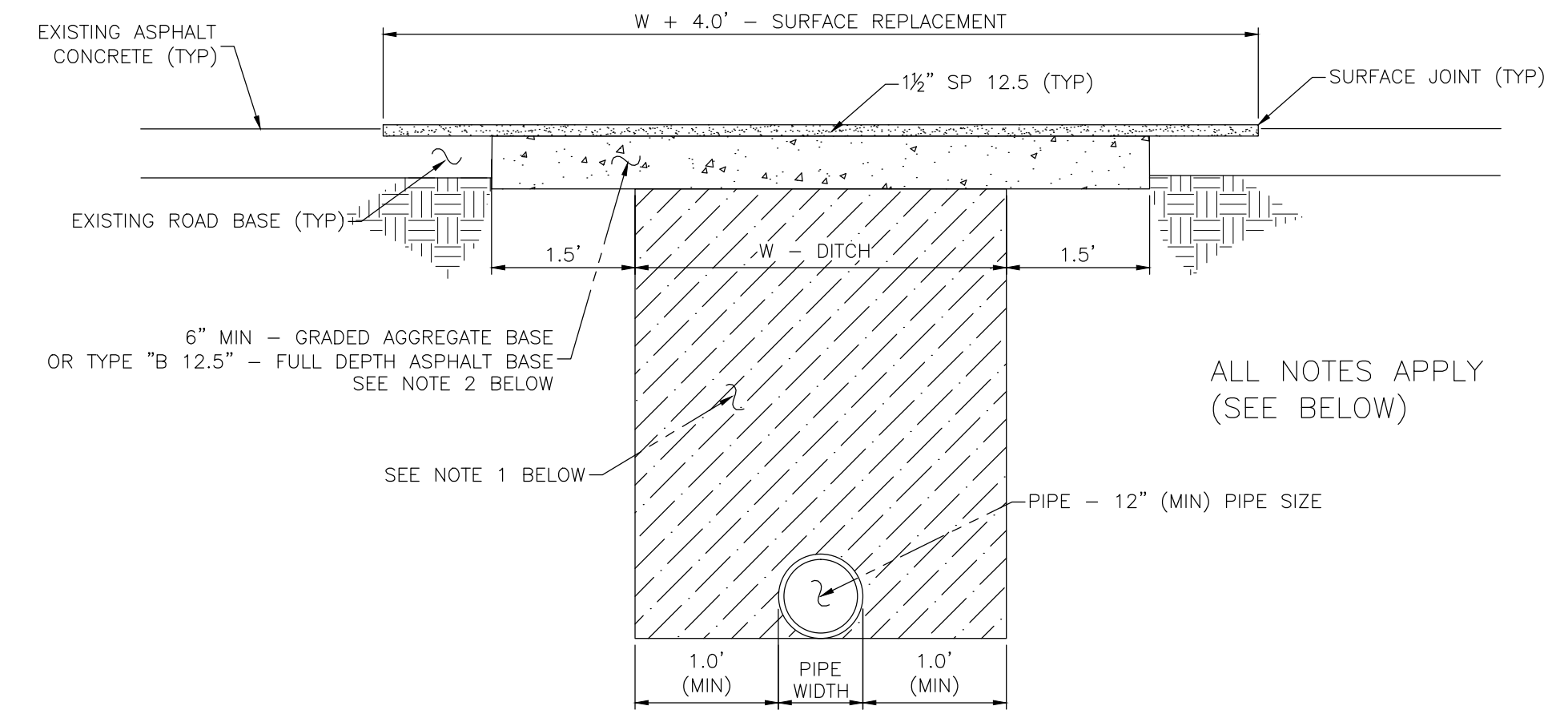


OVERVIEW OF CANAL CHANNEL TIED CONCRETE BLOCK MAT INSTALLATION:

1. ALONG THE CREST OF EACH SIDE SLOPE, EDGE THE TOPSOIL AN AREA 36" IN WIDTH X 6" IN DEPTH AS SHOWN IN FIGURE 1.
2. GRADE AND COMPACT THE AREA OF THE TIED BLOCK MAT PROTECTION AS DIRECTED AND APPROVED BY THE ENGINEER. THE AREA MUST BE CLEARED OF ALL ROCKS, CLODS, OR OTHER OBJECT THAT WOULD NOT ALLOW TIED BLOCK MAT TO HAVE DIRECT CONTACT WITH THE SUBGRADE.
3. PREPARE THE AREA FOR SEEDING BY LOOSENING THE TOP 2 - 3" OF THE SOIL.
4. APPLY SEED DIRECTLY TO THE PREPARED SOIL. USE SEED/FERTILIZER PER PROJECT SPECIFICATIONS.
5. USING AN EXCAVATOR, SET THE TIED BLOCK MAT ROLL IN PROPER POSITION TO BE UNROLLED INTO PLACE. MAKE SURE THE 12" TAIL OF GEOGRID EXTENDS FROM THE UPSTREAM SIDE OF THE TIED BLOCK MAT.
6. START INSTALLATION ON THE DOWNSTREAM END OF THE PROJECT. BEGINNING 36" FROM THE SLOPE OF THE CANAL BANK, TIED BLOCK MAT WILL BE UNROLLED ACROSS THE CANAL AND 36" PAST THE TOP OF THE SIDE SLOPE OF THE OPPOSITE CANAL BANK.
7. PLACE THE NEXT ROLL OF TIED BLOCK MAT SO THAT THE MAT WILL OVERLAP THE PREVIOUS SECTION'S 12" TAIL OF GEOGRID, CREATING AN OVERLAP.
8. AS THE INSTALLATION PROGRESSES, USE EXCAVATOR TO SPREAD THE REMOVED TOPSOIL ONTO THE TIED BLOCK MAT INSTALLED IN THE 36" WIDE X 6" DEEP AREA AT THE TOP OF EITHER CANAL BANK. GRADE IT SO THAT IT IS A SMOOTH TRANSITION TO THE LANDSCAPE.
9. ONCE THE PROJECT HAS REACHED THE UPSTREAM END, EXCAVATE A TRENCH 12" DEEP ACROSS THE AREA WHERE THE INITIAL LEADING EDGE OF TIED BLOCK MAT WILL BE INSTALLED. AFTER THE TIED BLOCK MAT IS INSTALLED, BACKFILL THE TRENCH WITH THE REMOVED SOIL.

SPECIAL TRANSITIONS:
 CONSULT MANUFACTURER FOR APPLICATIONS THAT REQUIRE SPECIAL TRANSITIONS TO EXISTING ROCK RIP RAP, CONCRETE OR OTHER RETENTION SYSTEMS.

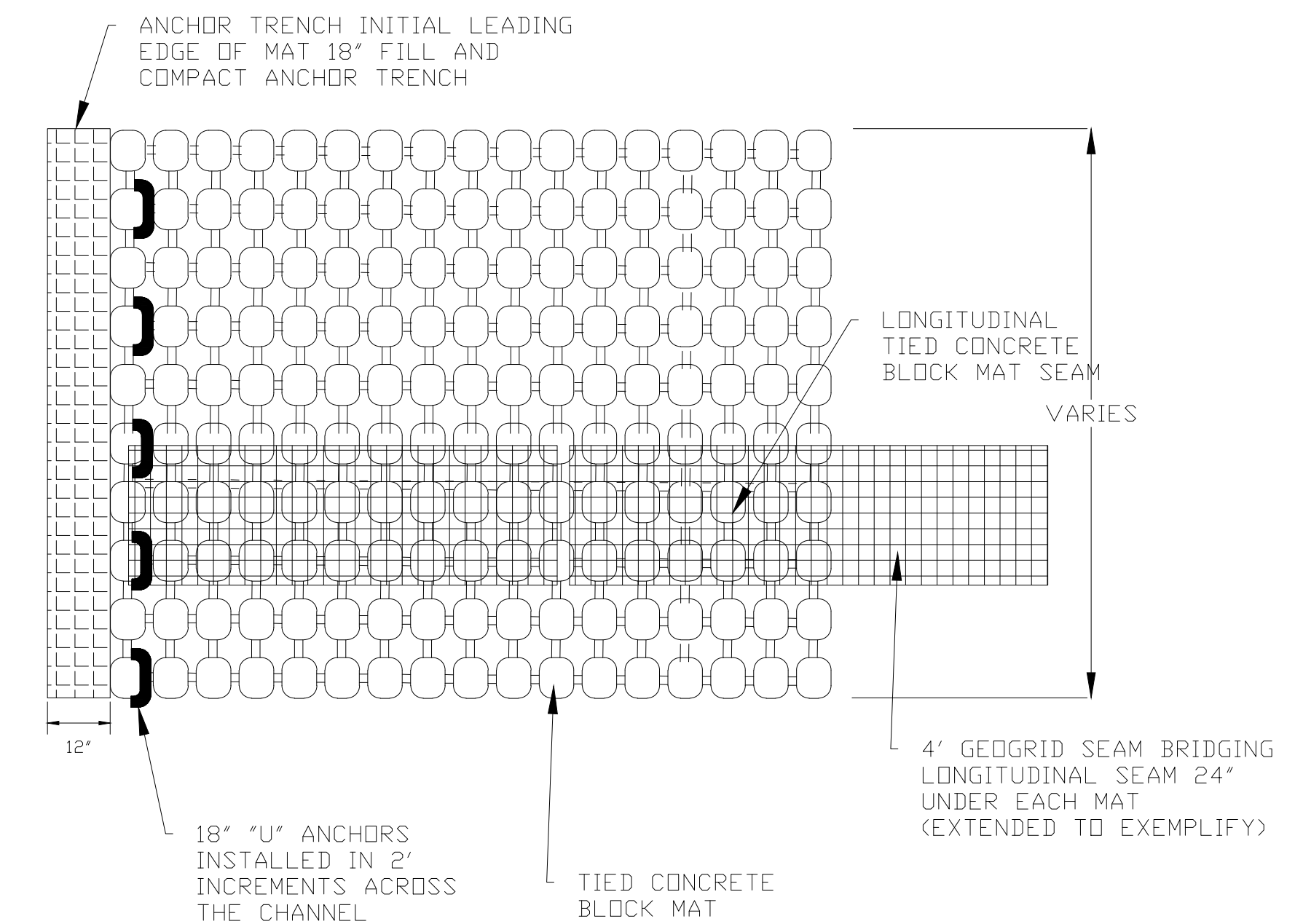
NOTE: PENSACOLA BAHIA (OR APPROVED EQUAL) SEED TO BE UTILIZED.



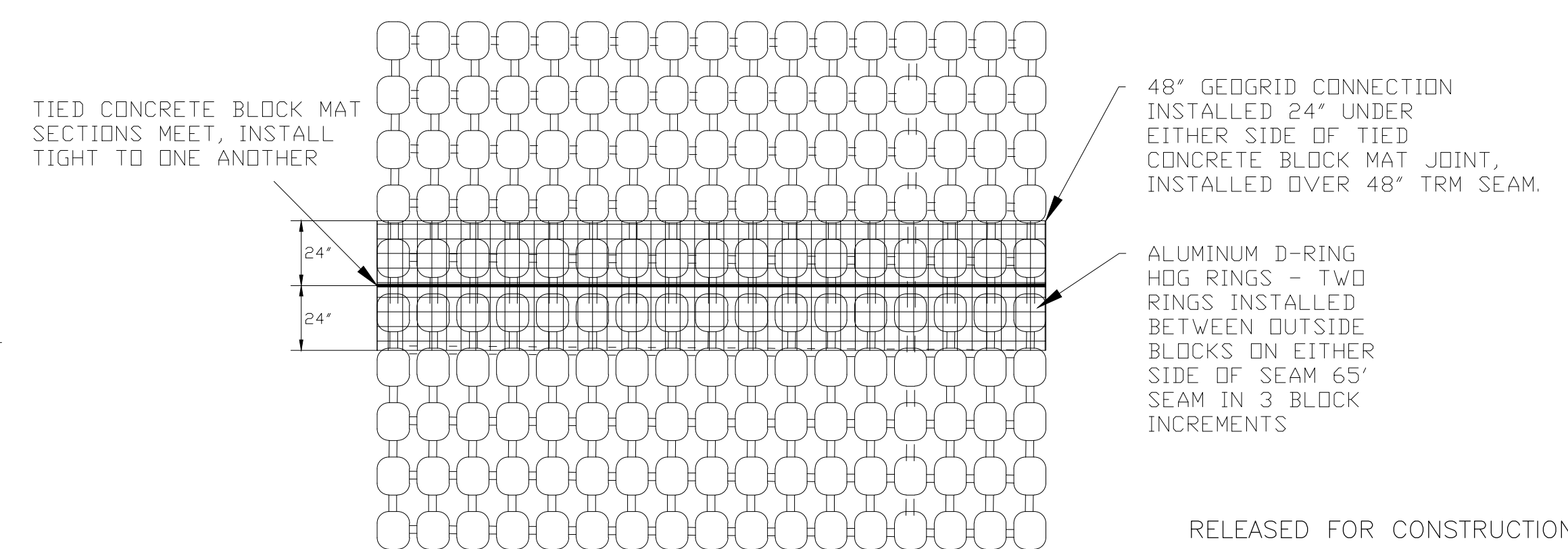
NOTES:

1. DIRT ROAD PATCH WORK SUB BASE MATERIAL SHALL BE PLACED IN NOT MORE THAN 8" LIFTS. EACH LAYER TO BE TAMPED TO A MINIMUM OF 40 LBR.
2. GRADED AGGREGATE BASE SHALL BE COMPACTED TO A MIN LBR 100.
3. ROAD CUTS SHALL BE MECHANICALLY SAW CUT TO FORM A SURFACE PAVEMENT JOINT AND TACK COATED ALONG THE FACE OF CUT JOINTS PRIOR TO ASPHALT PLACEMENT.
4. LONGITUDINAL ROAD CUTS THAT AFFECT ONE TRAVEL LANE SHALL REQUIRE MILLING AND REPAVING OF THE AFFECTED TRAVEL LANE 5.0' BEYOND THE CUT AND PATCHED WITH THE SAME BASE MATERIAL. LONGITUDINAL ROAD CUTS THAT AFFECT BOTH TRAVEL LANES SHALL REQUIRE MILLING AND REPAVING OF THE ENTIRE ROADWAY' BEYOND THE CUT AND PATCHED WITH THE SAME BASE MATERIAL.

LONGITUDINAL SEAM

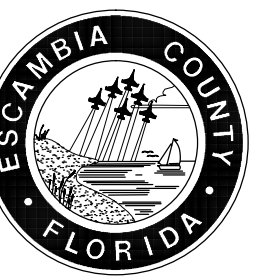


PROFILE VIEW LONGITUDINAL SEAM



**SHADOW GROVE SUBDIVISION
 DRAINAGE IMPROVEMENTS**

CONSTRUCTION DETAILS



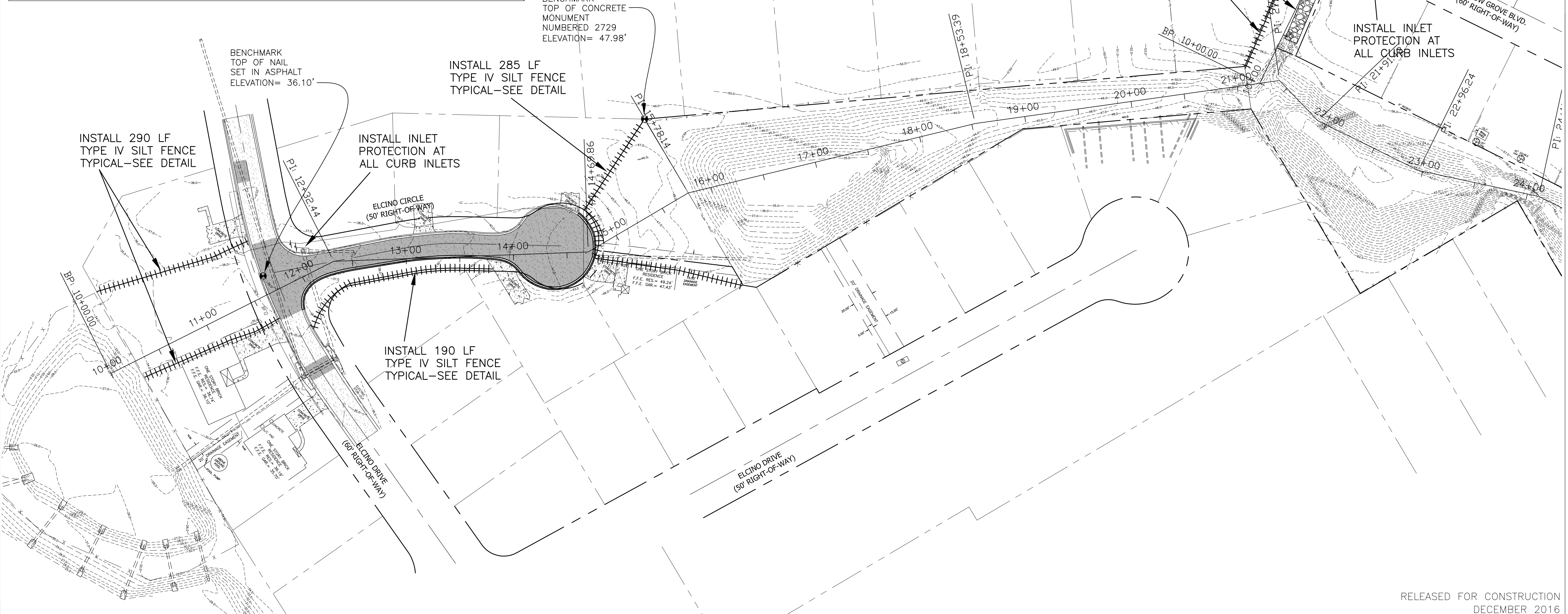
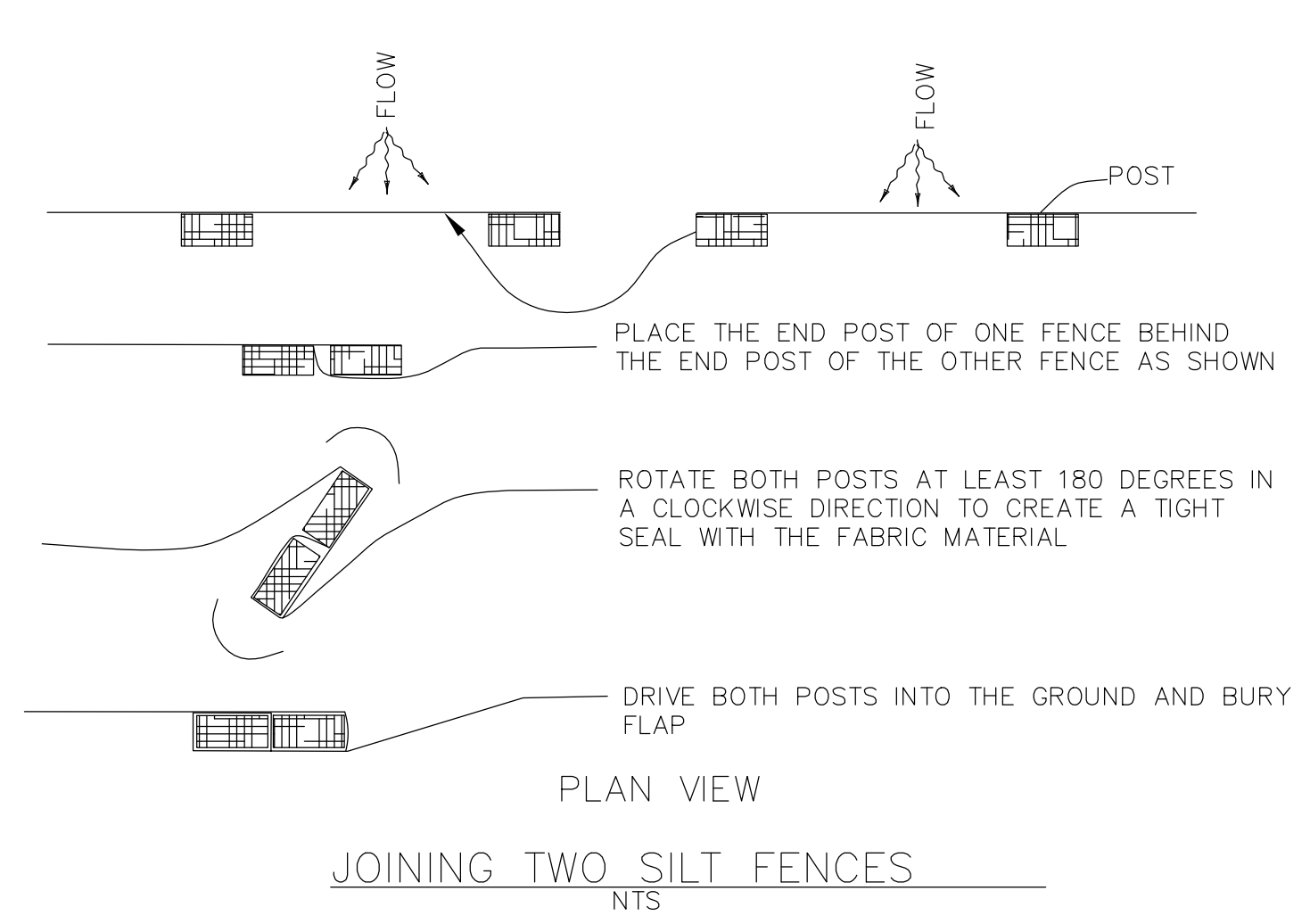
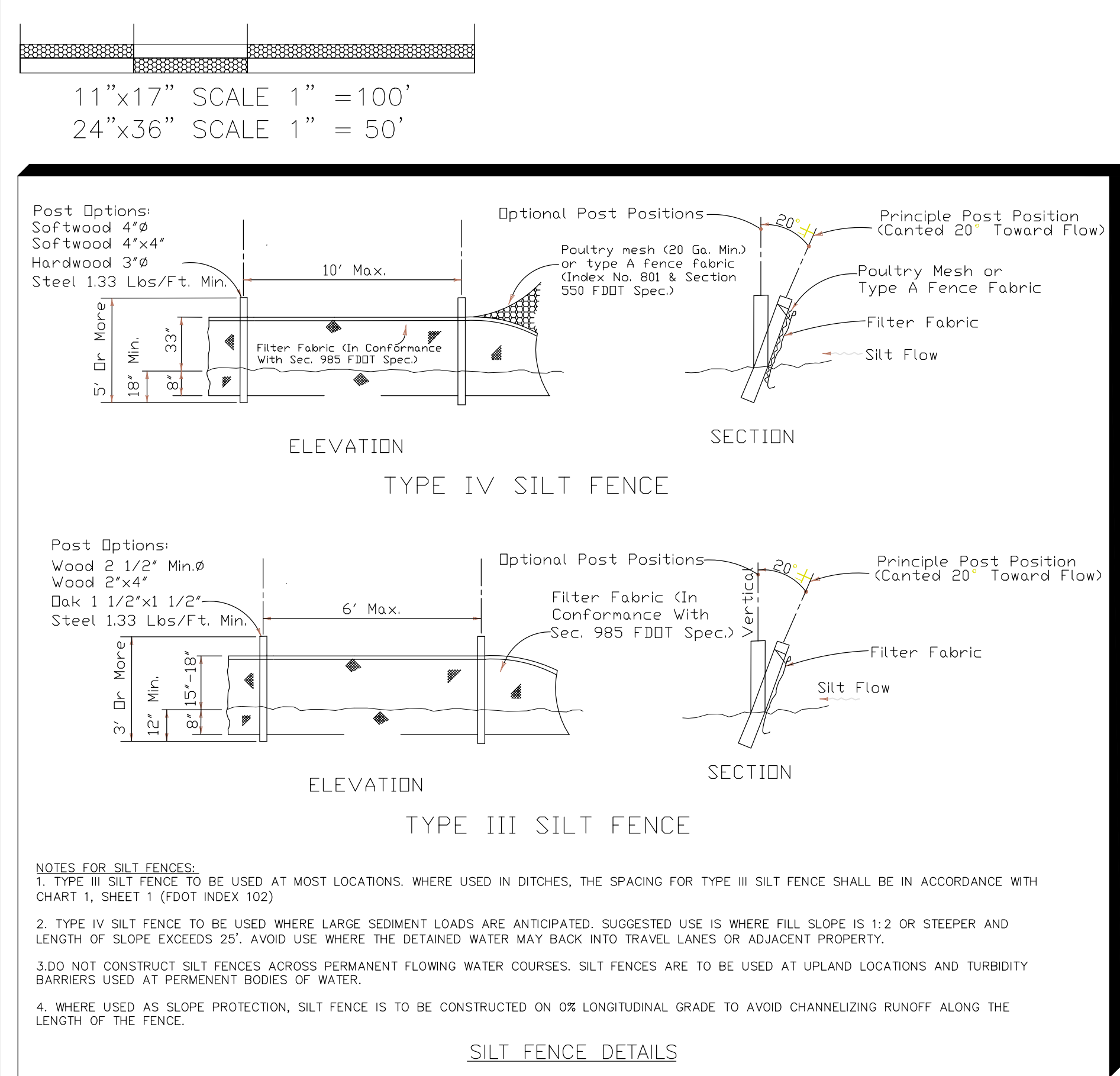
HAMMOND ENGINEERING, INC.
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 REMARK INCORPORATION (Blue Highlighter)
 ORIGINATOR VERIFICATION



SHADOW GROVE SUBDIVISION DRAINAGE IMPROVEMENTS

STORMWATER POLLUTION PREVENTION PLAN

ESCAMBIA COUNTY FLORIDA

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SHEET **C23**