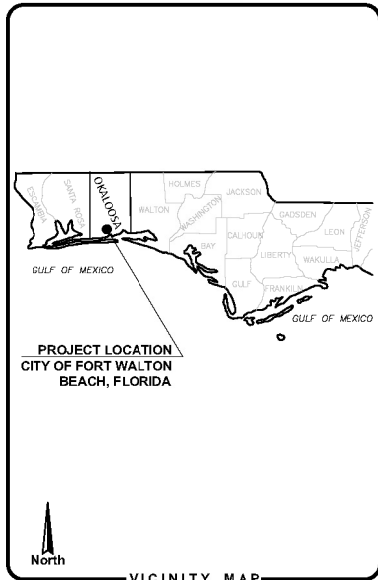


# CIVIL DESIGN DRAWINGS FOR: CITY OF FORT WALTON BEACH STORM DRAIN REPLACEMENT



DRAWN BY: J.A.W.  
CHECKED BY: T.D.N.  
APPROVED BY: C.L.  
DATE: OCTOBER 2015  
PROJECT NO. 2014.238.04

REVISIONS		
NO.	DATE	DESCRIPTION
1	11-24-15	FOR COMMENTS
2	3-24-16	FOR COMMENTS

**PREPARED FOR:**



**CITY OF FORT WALTON BEACH  
107 MIRACLE STRIP PARKWAY SW  
FORT WALTON BEACH, FL 32548**

**CITY COUNCIL MEMBERS AND STAFF**

- |                |          |
|----------------|----------|
| MIKE ANDERSON  | MAYOR    |
| SCOTT SMITH    | SEAT I   |
| DIANE KELLER   | SEAT II  |
| JOHN MEAD      | SEAT III |
| MIKE HOLMES    | SEAT IV  |
| AMY JAMIESON   | SEAT V   |
| MG MORAN       | SEAT VI  |
| DICK RYNEARSON | SEAT VII |

**FUNDED BY:**



**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
3900 COMMONWEALTH BLVD  
TALLAHASSEE, FL 32399-3000**

**ENGINEER:**

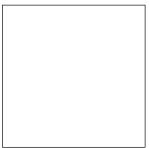


**AVCON, INC.**  
ENGINEERS & PLANNERS  
320 BAYSHORE DRIVE, SUITE A - NICEVILLE, FL 32578-2425  
OFFICE: (850) 678-0050 - FAX: (850) 678-0040  
CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 5057  
www.avconinc.com

**PROFESSIONAL SEAL**



TONIA D. NATION  
FL. LICENSE NO. 54631

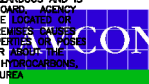


GENERAL NOTES:

- 1. CONTRACTOR SHALL PROTECT ALL EXISTING LANDSCAPING, SIDEWALKS, PAVEMENTS, CURBS, AND SOD NOT SPECIFIED FOR REMOVAL IN THESE PLANS. ANY DAMAGE TO THE EXISTING IMPROVEMENTS SHALL BE RESTORED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS OTHERWISE SPECIFIED HEREIN.
- 2. UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE PERFORMED CONSISTENT WITH THE FOLLOWING SPECIFICATIONS: OKALOOSA COUNTY, FDOT, NFWMD, AND FDEP.
- 3. THIS DESIGN HAS BEEN BASED UPON FIELD SURVEY BY NOBLES CONSULTING GROUP, PROJECT NO. D1818.100, DATE: MARCH 31, 2015. GEOTECHNICAL PROVIDED BY NOVA ENGINEERING & CONSULTING, PROJECT NO. 10118-8215018.000. AVCON INC. MAKES NO ASSURANCES REGARDING THE ACCURACY OF SUCH SURVEY.
- 4. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUB-SURFACE CONDITIONS, THE WORK REQUIRED AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.
- 5. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE IN VIOLATION THEREOF, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUIITS, POLES, GUYS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.
- 8. UNLESS OTHERWISE SPECIFIED IN THE GENERAL CONDITIONS, ALL CONSTRUCTION IS TO BE GOVERNED BY THE PLANS, APPLICABLE PERMITS, AND SPECIFICATIONS HEREIN, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING AND SAFETY CODES, LAWS AND ORDINANCES.
- 9. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN CONSISTENT WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- 10. IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE OWNER OR OWNER'S AGENT.
- 11. CONTRACTOR SHALL PRESERVE AND PROTECT ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS AND PROPERTY CORNERS. IN THE EVENT THE MONUMENTS, POINTS OR MARKERS ARE DISTURBED THE CONTRACTOR SHALL EMPLOY A FLORIDA REGISTERED LAND SURVEYOR TO RESET OR REPLACE THEM.
- 12. THE OWNER, OWNER'S AGENT AND INSPECTORS OF APPLICABLE GOVERNMENT JURISDICTIONS, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER AND WHENEVER IT IS IN PREPARATION OR PROGRESS, AND THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND FOR THE INSPECTION.
- 13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT STORED ON SITE ARE SAFE AND SECURED FROM UNAUTHORIZED ACCESS OR USE. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS.
- 14. CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY MANUFACTURER.
- 15. PRIOR TO INITIATING ANY EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORMWATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL FENCES AND TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO ENSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED.
- 16. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:
  - A. ALL EMPLOYEES ON THE WORK AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
  - B. ALL THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS; AND
  - C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION.
- D. CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS ON PUBLIC ROADS AT ALL TIMES.
- 17. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC, QUASI PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.
- 18. ALL DAMAGE OR LOSS TO ANY PROPERTY REFERRED TO IN CLAUSES 16.1(B) AND 16.1(C) CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR, A SUBCONTRACTOR, OR BY ANYONE FOR WHOMSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE SOLELY TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOMSE ACTS ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.

- 19. UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CARE AND CARE OF AND SHALL BEAR THE RISK OF INJURY OR DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE OCCURRENCE OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.
- 20. THOSE PARTS OF WORK IN PLACE WHICH ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, BOARDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
- 21. PERMANENT OPENINGS USED AS THROUGHFARES FOR THE INTRODUCTION OF WORK AND MATERIALS TO THE STRUCTURE SHALL HAVE HEADS, JAMBS AND SILLS WELL BLOCKED AND BOARDED BY THE CONTRACTOR. OWNER RETAINS THE AUTHORITY, BUT ASSUMES NO DUTY, TO ESTABLISH STANDARDS OF PROTECTION, AND TO REVIEW THE EFFICIENCY OF PROTECTIVE MEASURES TAKEN BY THE CONTRACTOR.
- 22. ADEQUATE TRAFFIC CONTROL, BARRIAGES AND FLAGMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONVEYING EQUIPMENT ENAGED ON THE WORK REGULARLY ENTERS ONTO OR CROSSES TRAFFIC-CARRYING ROADS.
- 23. THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.
- 24. THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEY'S FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTION IS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION, ANY AND ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY THE CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.
- 25. ALL WORK PERFORMED UNDER THE CONTRACT, AND ALL EQUIPMENT, APPLIANCES, TOOLS AND LIKE ITEMS USED IN THE WORK SHALL CONFORM TO APPLICABLE SAFETY CODES AND REGULATIONS OF ANY PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION. IN THE EVENT OF CONFLICTING REQUIREMENTS, THE MORE STRINGENT INTERPRETATION OR REGULATION SHALL GOVERN.
- 26. THE CONTRACTOR SHALL IMPLEMENT THE PROPOSED EROSION CONTROL PLAN TO MINIMIZE EROSION AND ENSURE FUNCTIONING OF STORMWATER MANAGEMENT SYSTEM DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION CONTRACTOR SHALL PROVIDE AS-BUILTS ENSURING THE STORMWATER MANAGEMENT SYSTEM IS OPERATING AS DESIGNED.
- 27. CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL HAZARDOUS MATERIALS (AS DEFINED PARAGRAPH 20.8) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.
- 28. CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
- 29. CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE ALL SUPPLIES, MATERIALS, AND WASTE CONTAINING AND HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS OF THIS PARAGRAPH 28.7.
- 30. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL APPROVALS, REMEDIATION AND CLEAN-UP ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FAILURE OF CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS OF THIS SECTION.
- 31. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THIS PARAGRAPH, CONTRACTOR SHALL IMMEDIATELY SO INFORM OWNER IN WRITING, IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE. CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
- 32. IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCLOSED MATERIAL REASONABLY BELIEVED TO BE A HAZARDOUS MATERIAL, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO OWNER IN WRITING.
- 33. IF CONTRACTOR OR ITS SUBCONTRACTORS DO NOT COMPLY WITH THE HAZARDOUS MATERIAL REQUIREMENTS, OWNER MAY, BUT IS NOT OBLIGATED TO, GIVE WRITTEN NOTICE OF VIOLATION TO CONTRACTOR. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS FAIL TO COMPLY WITH THE REQUIREMENTS OF THIS PARAGRAPH WITHIN TWENTY-FOUR (24) HOURS FROM THE TIME OWNER ISSUES SUCH WRITTEN NOTICE OF NONCOMPLIANCE OR WITHIN THE TIME OF AN ABATEMENT PERIOD SPECIFIED BY ANY GOVERNMENTAL AGENCY, WHICHEVER PERIOD IS SHORTER, CONTRACTOR SHALL BE IN MATERIAL DEFAULT OF THIS CONTRACT.

- 34. "HAZARDOUS MATERIAL" MEANS ANY SUBSTANCE, (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW, OR (B) WHICH IS OR BECOMES A "HAZARDOUS WASTE," "HAZARDOUS SUBSTANCE," POLLUTANT OR CONTAMINANT UNDER FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THEREOF, INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND/OR THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 8901 ET SEQ.), OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, THE STATE IN WHICH THE PREMISES ARE LOCATED OR ANY POLITICAL SUBDIVISION THEREOF, OR (D) THE PRESENCE OF WHICH ON THE PREMISES CAUSES OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR TO OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES, OR (E) WHICH CONTAINS GASOLINE, DIESEL FUEL OR OTHER PETROLEUM HYDROCARBONS, OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYL (PCBS), ASBESTOS, LEAD OR URIC FORMALDEHYDE FOAM INSULATION.
- 35. THE EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- 36. IF ANY TESTING, INSPECTION OR APPROVAL REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEERS AND DESIGN ENGINEER'S SERVICES AND OTHER RELATED COSTS.



**AVCON, INC.**  
 ENGINEERS & PLANNERS  
 220 BAYSHORE DRIVE, SUITE A  
 NICEVILLE, FL 32578  
 PHONE: (904) 878-0393  
 FAX: (904) 878-0949  
 FBR CERTIFICATE OF AUTHORIZATION NUMBER: 5957

CITY OF FORT  
 WALTON BEACH,  
 FLORIDA

STORM DRAIN  
 REPLACEMENT

INDEX OF DRAWINGS  
 AND GENERAL NOTES

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REVISIONS:

NO.	DESCRIPTION	DATE

INDEX OF DRAWINGS		
SHEET NO.	SHEET TITLE	PERMIT DOCUMENTS
G1	COVER SHEET	
G2	INDEX OF DRAWINGS AND GENERAL NOTES	DESIGNED BY:
G3	SUMMARY OF QUANTITIES	DRAWN BY:
G1	EXISTING CONDITIONS & DEMOLITION PLAN (SHEET 1 OF 2)	CHECKED BY:
C2	EXISTING CONDITIONS & DEMOLITION PLAN (SHEET 2 OF 2)	PROJECT NO.:
C3	PROPOSED SITE GEOMETRY PLAN	
C4	PROPOSED STORM DRAIN REPLACEMENT PLAN & PROFILE	
C5	GRADING PLAN	
C6	MISCELLANEOUS DETAILS	
C7	MISCELLANEOUS DETAILS	
C8	STORMWATER SEPARATOR DETAIL SHEET	

SHEET NUMBER  
**G2**

**SUMMARY OF QUANTITIES**

BID ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC (VEHICLE & PEDESTRIAN)	LS	1	
104-1	PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION	LS	1	
110-1	REMOVAL OF CONCRETE CURBING/PAVEMENT	SY	900	
110-2	REMOVAL OF DRAINAGE STRUCTURES	EA	4	
110-3	REMOVAL OF DRAINAGE PIPE	LF	370	
110-4	PROTECTION OF UTILITY AND STORMWATER STRUCTURES	LS	1	
110-5	UTILITY LINE PROTECTION	LS	1	
120-1	EXCAVATION AND EMBANKMENT	LS	1	
120-2	SUBGRADE COMPACTION	SY	1089	
285-1	CRUSHED AGGREGATE BASE (6")	SY	990	
334-1	2" SUPERPAVE ASPHALT, LEVEL C (PG67-22)	TN	101	
425-1	TYPE F TOP, TYPE J ALT B BOTTOM (6'-9" X 4')	EA	1	
425-2	TYPE F TOP, TYPE J ALT B BOTTOM (6'-9" X 6'-9")	EA	1	
425-3	TYPE F TOP, TYPE J ALT B BOTTOM (6'-9" X 8'-9")	EA	1	
425-4	STORMWATER SEPARATOR	EA	1	
430-1	48" RCP, CLASS III	LF	370	
520-1	CONCRETE CURBING	LF	535	
710-1	PAVEMENT MARKINGS	SF	250	
800-1	STEEL PIPE GUARDRAIL	LS	1	
981-1	SODDING, BAHIA ARGENTINA	SY	650	
AL-1	LIGHT POLE RELOCATION	EA	5	

**NOTES:**

- PAY ITEM 101-1 SHALL INCLUDE ALL MOBILIZATION COSTS. SIGN REPLACEMENT, RELOCATION, AND REMOVAL DURING CONSTRUCTION SHALL BE INCIDENTAL TO PAY ITEM 101-1.
- PAY ITEM 102-1 SHALL INCLUDE MAINTENANCE OF TRAFFIC FOR BOTH VEHICLES AND PEDESTRIANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PARKING LOT ACCESS DURING CONSTRUCTION. A SUGGESTED PHASING PLAN HAS BEEN PROVIDED FOR DRIVE CLOSURES. CONTRACTOR SHALL ALSO PROVIDE TEMPORARY FENCING/BARRIERS TO PROTECT PEDESTRIANS AND VEHICLES DURING CONSTRUCTION. PROTECTIVE BARRIERS SHALL BE INCIDENTAL TO THE PAY ITEM. TEMPORARY FENCING SHALL BE 6" HIGH CHAIN LINK.
- PAY ITEM 104-1 SHALL INCLUDE PROTECTION OF EXISTING UTILITY AND STORM STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION THAT ARE TO REMAIN AND NOT BE MODIFIED AS PART OF THE PROPOSED SCOPE OF WORK.



**AVCON, INC.**  
 ENGINEERS & PLANNERS  
 303 BAYSHORE DRIVE, SUITE A, NICEVILLE, FL 32578-0425  
 OFFICE: (850) 878-0850 FAX: (850) 878-0840  
 CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 0057  
 www.avconinc.com

**ENGINEER OF RECORD:**

NAME: TONIA D. NATION  
 FL LICENSE NO.: 04531

AVCON, INC.  
 303 BAYSHORE DRIVE, SUITE A  
 NICEVILLE, FL 32578  
 PHONE: (850) 878-0850  
 FAX: (850) 878-0840

FPBR CERTIFICATE OF AUTHORIZATION NO. 0557

**CITY OF FORT  
 WALTON BEACH,  
 FLORIDA**

**STORM DRAIN  
 REPLACEMENT**

**SUMMARY OF  
 QUANTITIES**

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**REVISIONS:**

NO.	DATE	BY	DESCRIPTION
1	3-22-2016	lb	PROPERTY OWNER NOTES ADDED

**PERMIT DOCUMENTS**

DESIGNED BY: T.D.N.  
 DRAWN BY: J.A.W.  
 CHECKED BY: V.C.L.  
 APPROVED BY: V.C.L.  
 DATE: AUGUST 2015

AVCON PROJECT NO. 2014.238.04

**SHEET NUMBER**

**G3**

**SURVEY NOTES AND INFORMATION:**

EXISTING CONDITIONS SURVEY PERFORMED BY: NOBLES CONSULTING GROUP, INC. CONTRACTOR RESPONSIBLE TO OBTAIN SIGNED AND SEALED SURVEY FROM OWNER AND VERIFY BENCHMARKS, CONTROL AND CONSTRUCTION FIELD STAKES PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTICED IMMEDIATELY OF ANY DISCREPANCIES. NOBLES CONSULTING GROUP, INC. 312 GOVERNMENT AVENUE, SUITE #1 NICEVILLE, FLORIDA 32578 PHONE: (850) 878-9932 FAX: (850) 878-9938

**GENERAL NOTES**  
THE BENCHMARKS SHOWN HEREON ARE GRID, BASED ON THE NORTH AMERICAN DATUM OF 1983(2011) FLORIDA NORTH ZONE STATE PLANE COORDINATE SYSTEM, REFERENCED TO THE LINE BETWEEN CONTROL POINT K 297 AND CONTROL POINT 2 AS BEING SOUTH 84 DEGREES 00 MINUTES 14 SECONDS EAST.  
THE HORIZONTAL DATUM IS REFERENCED TO NATIONAL GEODETIC SURVEY (NGS) CONTROL POINTS K 297 AND J 297.  
ELEVATIONS DEPICTED HEREON ARE ASSUMED, BASED ON NGS CONTROL POINT J 297 HAVING AN ELEVATION OF 3.23 FEET.  
MANY OF THE STRUCTURES SURVEYED CONTAINED AS MUCH AS 3.5 FEET OF WATER AND ALSO DEBRIS/SEDIMENT.  
IT APPEARS THERE ARE DISCREPANCIES IN LOT LINES WITHIN THE SEA BREEZE SEVENTH ADDITION TO FORT WALTON. WE DECIDED TO HOLD A FOUND 4 INCH SQUARE CONCRETE MONUMENT FOR THE SOUTHEAST CORNER OF THE SUBDIVISION. THAT PLACEMENT IS IN HARMONY WITH FOUND MONUMENTATION AT THE SOUTHEAST CORNER OF LOT 16 AND THE SOUTHWEST CORNER OF LOT 13. IT IS NOT IN HARMONY WITH FOUND MONUMENTATION NEAR THE SOUTHEAST CORNER OF LOT 11 AND THE SOUTHWEST CORNER OF LOT 5.  
THERE MAY BE ADDITIONAL RIGHTS OF WAY, EASEMENTS, BUILDING SETBACKS, OR OTHER RESTRICTIONS OF RECORD THAT ARE NOT SHOWN. THE SURVEYOR HAS NOT BEEN FURNISHED A TITLE COMMITMENT. THEREFORE NO CERTIFICATION IS GIVEN THAT ALL RESTRICTIONS OF RECORD ARE SHOWN. ALSO, NO CERTIFICATION IS GIVEN THAT DEED OVERLAPS AND UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS DO NOT EXIST. ADEQUATELY VISIBLE ENCROACHMENTS AND APPARENT USES LOCATED BY THE SURVEYOR ARE AS SHOWN HEREON.  
THIS TOPOGRAPHIC SURVEY IS CERTIFIED TO AVCON, INC.

**SPECIAL UTILITY NOTE:**

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS. PRIOR TO ANY EXCAVATION OR DEMOLITION, THE CONTRACTOR SHALL PROVIDE A WRITTEN NOTICE (RETURN RECEIPT REQUESTED) TO EACH OF THE UTILITY COMPANIES AFFECTED BY THE PROJECT, ALONG WITH THE VARIOUS DEPARTMENTS OF FLORIDA SUNSHINE ONE CALL AS PRESCRIBED BY STATE LAW. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE OWNER'S REP WITH A COPY OF THE RECEIPT OF SAID WRITTEN NOTIFICATION TO EACH OF THE UTILITY COMPANIES OR CITY/COUNTY DEPARTMENTS. THIS REQUIREMENT IS IN ADDITION TO ANY OTHER STATE LAWS REGARDING PUBLIC NOTIFICATION PRIOR TO EXCAVATION.



**NOTES:**

- 1. CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION OF ACCESS DRIVE CROSSINGS MAINTAINING ACCESS TO BUSINESSES DURING ALL TIMES. CONTRACTOR SHALL COORDINATE CLOSURES WITH CITY AND BUSINESSES TWO WEEKS PRIOR TO CLOSURE OF ALL PHASES.
- 2. CONTRACTOR SHALL INSTALL SILT FENCE PRIOR TO COMMENCING IN ANY CONSTRUCTION ACTIVITIES AND MAINTAIN SILT FENCE THROUGHOUT CONSTRUCTION AND UNTIL SITE STABILIZED.
- 3. CONTRACTOR SHALL NOTIFY THE ENGINEER IF EROSION CONTROL ISSUES DEVELOP ON SITE.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL MEASURES ON SITE 24 HOURS/DAY THROUGHOUT CONSTRUCTION.
- 5. CONTRACTOR SHALL PROVIDE INLET PROTECTION THROUGHOUT CONSTRUCTION.
- 6. SAW-CUT CLEAN EDGES AND MATCH EXISTING GRADE FOR ALL DEMOLITION TIE-IN LOCATIONS. APPLY TACK COAT ON ALL EDGES PER FOOT 300.
- 7. SAW CUT MIN 2 FOOT BACK OR PER FLEX BUTT JOINT DETAIL, TYPICAL PAVEMENT SECTION AND DETAILS SHEET(S), WHICHEVER IS GREATER. BUTT JOINT REQUIRES TACK AND CLEAN SAW CUT FOR THE FULL LENGTH OF THE TIE-IN.
- 8. CONTRACTOR TO PROVIDE ADEQUATE BRACED SHORING OR SHEETPIILING PER OSHA REQUIREMENTS DURING CONSTRUCTION. BRACING SHALL BE INCIDENTAL TO THE PIPE COSTS.
- 9. CONTRACTOR SHALL PROVIDE A 6" CHAIN LINK FENCE BETWEEN THE SIDEWALK AND WORK AREA TO ENSURE PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY DURING CONSTRUCTION. FENCE SHALL SECURE THE WORK AREA DURING TRENCHING OPERATIONS.
- 10. CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN FOR BOTH VEHICULAR AND PEDESTRIAN TRAFFIC PRIOR TO STARTING CONSTRUCTION.
- 11. CONTRACTOR SHALL TEMPORARILY REMOVE EXISTING LIGHTING AS NEEDED AND REPLACED TO MATCH EXISTING CONDITIONS. MUST SEPARATE CIRCUIT FROM REMAINING PARKING LOT LIGHTING SO THE SITE IS NOT WITHOUT SECURITY LIGHTING.
- 12. CONTRACTOR SHALL PROVIDE TEMPORARY STABILIZED ASPHALT DRIVE CONNECTIONS TO ENSURE ACCESS REMAINS OPEN TO DRIVES #1, #2 & #3.
- 13. CONTRACTORS SHALL COMPLETE DRIVEWAY WORK ON SUNDAYS WHEN BUSINESSES ARE CLOSED.

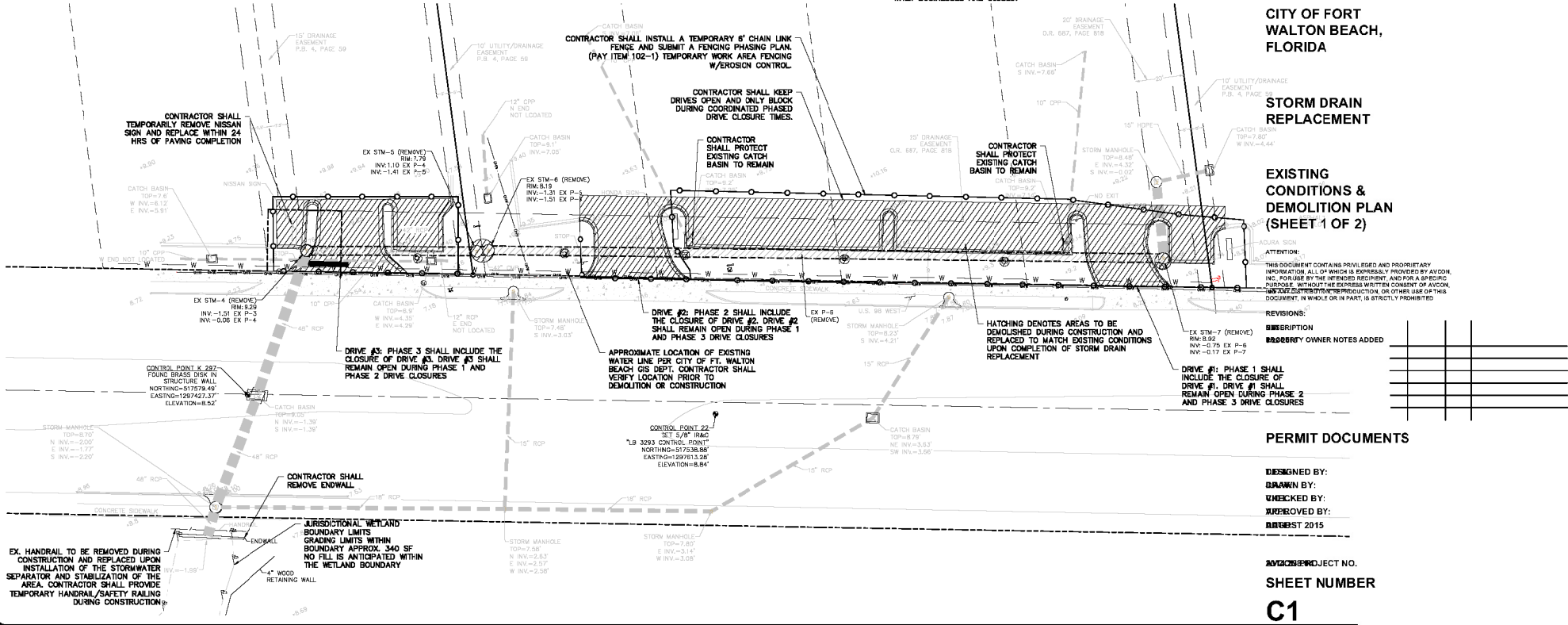


GRAPHIC SCALE IN FEET

**LEGEND**

- EXISTING STORMWATER INLET
- EXISTING STORMWATER PIPES
- STORM MANHOLES & COVERS
- LIGHT
- WATER MAIN
- BACKFLOW PREVENTER
- WATER METER OR RECORD
- WATER MAIN RECONSTRUCTION
- SPOT ELEVATION
- FIRE HYDRANT
- TEMPORARY WORK AREA

AVCON  
ENGINEERS & SURVEYORS  
OFFICE: (850) 878-9932 FAX: (850) 878-9938  
MOBILE: (850) 878-9932 FAX: (850) 878-9938  
WWW.AVCON.COM  
PROFESSIONAL ENGINEER LICENSE NO. 64331  
AVCON, INC.  
1500 W. GULF BREEZE DRIVE, SUITE 100  
NICEVILLE, FLORIDA 32578  
PHONE: (850) 878-9932  
FAX: (850) 878-9938  
TEMPORARY WORK AREA IDENTIFICATION NO. 537



CITY OF FORT WALTON BEACH, FLORIDA

**STORM DRAIN REPLACEMENT**

**EXISTING CONDITIONS & DEMOLITION PLAN (SHEET 1 OF 2)**

REVISIONS:

NO.	DESCRIPTION	DATE

**PERMIT DOCUMENTS**

DESIGNED BY:  
DRAWN BY:  
CHECKED BY:  
APPROVED BY:  
DATE: 2015

PROJECT NO.  
SHEET NUMBER  
**C1**



GRAPHIC SCALE IN FEET



**AVCON, INC.**  
 ENGINEERS & PLANNERS  
 220 BAYSHORE DRIVE, SUITE A, NICEVILLE, FL 32578-5452  
 OFFICE: (850) 878-0260 FAX: (850) 878-0246  
 CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 5937  
 www.avconinc.com

ENGINEER OF RECORD:  
 NAME: TONIA D. NATION  
 FL LICENSE NO.: 54631

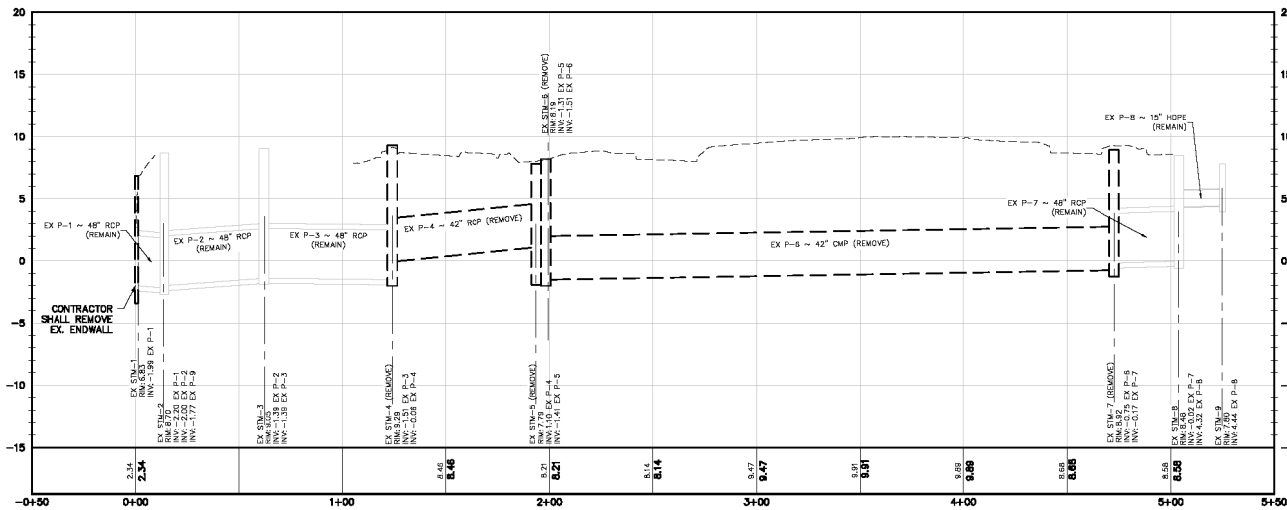
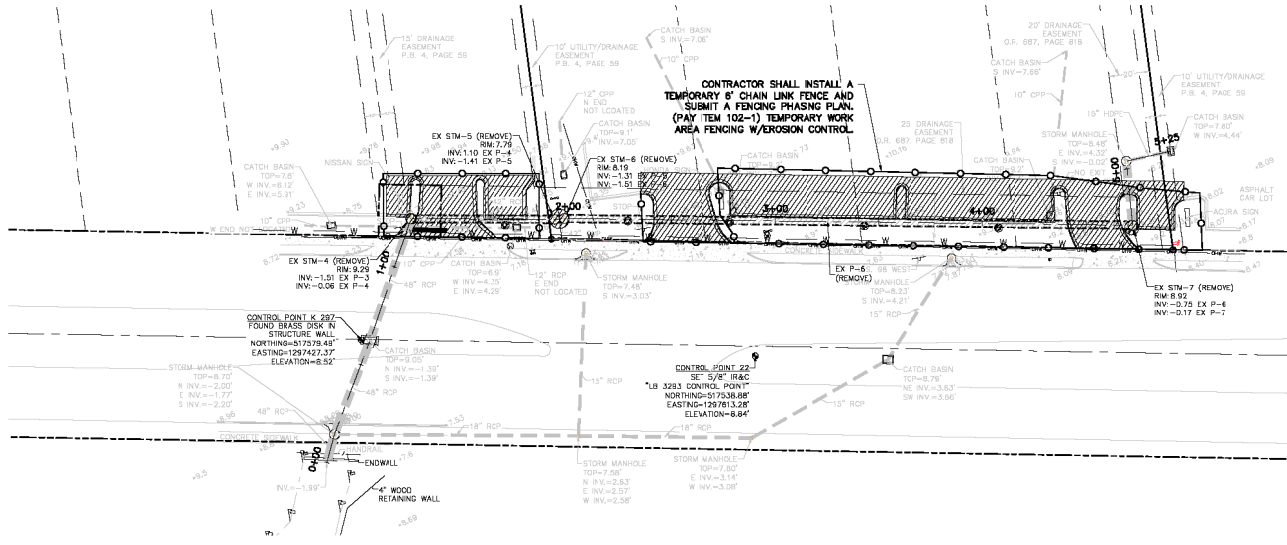
AVCON, INC.  
 220 BAYSHORE DRIVE, SUITE A  
 NICEVILLE, FL 32578  
 PHONE: (850) 878-0260  
 FAX: (850) 878-0246

FPCR CERTIFICATE OF AUTHORIZATION NO. 5957

**CITY OF FORT WALTON BEACH, FLORIDA**

**NOTES**

1. CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION OF ACCESS DRIVE CROSSINGS MAINTAINING ACCESS TO BUSINESSES DURING ALL STORM DRAIN REPLACEMENT



HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: 1" = 5'

**EXISTING CONDITIONS & DEMOLITION PLAN (SHEET 2 OF 2)**

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 APPROVED BY:  
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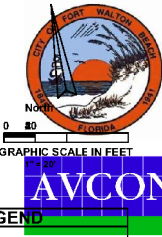
PROJECT NO.  
 SHEET NUMBER  
**C2**

**SITE & UTILITY NOTES:**

- ALL WORK DETAILED IN CONSTRUCTION DRAWINGS SHALL CONFORM TO FDOT STD. INDEXES AND SPECIFICATIONS, LATEST EDITION.
- CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS AT ALL TIMES ALONG ALL PUBLIC RIGHT-OF-WAYS.
- ALL PAVEMENT MARKINGS SHALL CONFORM TO FDOT STD. INDEXES 17346.
- ALL SIGNS AND PLACEMENTS OF SIGNS SHALL CONFORM TO FDOT STD. INDEXES 11880 AND 17302.
- REFER TO STD. INDEXES 600 AND 813 FOR PLACEMENT OF TRAFFIC CONTROL DEVICES.
- ALL DISTURBED AREAS SHALL BE SODED WITHIN TWO WEEKS AFTER FINAL GRADING IS COMPLETED. PAYMENT FOR SOD SHALL BE UNDER PAY ITEM 981-1.
- PAVEMENT SUBGRADE SHALL HAVE ALL UNSUITABLE MATERIALS REMOVED TO A DEPTH OF TWO FEET BELOW TOP OF SUBGRADE, AND 2.5 FEET BEYOND EDGE OF PAVEMENT OR BACK OF CURB. BACKFILL WITH SUITABLE MATERIAL. PAYMENT SHALL BE UNDER PAY ITEM 120-1.
- THE SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH SECTION 180 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- THE BASE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS. ALLOWABLE BASE MATERIALS ARE INDICATED ON THE DRAWINGS.
- ALL EXCAVATION AND EMBANKMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- WHERE DAMAGED OR REQUIRED TO BE CUT BY THE CONTRACTOR'S OPERATIONS, SIDEWALKS AND DRIVEWAYS SHALL BE REPAIRED TO CONFORM TO THE EXISTING TYPE OF CONSTRUCTION IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- PROVIDE CONTRACTION JOINTS AT 10' O.C. AND EXPANSION JOINTS AT 50' O.C. ON ALL EXTERIOR SIDEWALKS AND CURBING.
- ALL PERMANENT PAINT STRIPING WITHIN THE RIGHT-OF-WAY SHALL BE THERMO-PLASTIC REFLECTIVE PAINT, AND BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THERMO-PLASTIC MARKINGS SHALL BE PAID FOR UNDER PAY ITEM 710-1.

**NOTES**

- CONTRACTOR SHALL COORDINATE DRIVE CLOSURES WITH CITY AND OWNER TWO WEEKS PRIOR TO CLOSING DRIVES. CONTRACTOR SHALL MAINTAIN ACCESS/TEMPORARY ACCESS TO BUSINESSES AT ALL TIMES THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL REMOVE AND INSTALL CURB AND PARKING TO MATCH EXISTING CONDITIONS.
- CONTRACTOR SHALL REPLACE ANY SIGNAGE THAT WAS REMOVED DURING CONSTRUCTION AND INSTALL TO MATCH EXISTING CONDITIONS. REPLACEMENT SHALL BE INCIDENTAL TO PAY ITEM 101-1.
- CONTRACTOR SHALL REPLACE ANY PAVEMENT MARKINGS THAT WERE REMOVED DURING CONSTRUCTION AND INSTALL WITH THERMOPLASTIC PAINT PER F.D.O.T. STD. INDEX #17346 TO MATCH EXISTING CONDITIONS. MARKING SHALL BE PER PAY ITEM 710-1.
- PARKING LOT GRADES PROVIDED ARE TO EDGE OF ASPHALT PAVING AND ARE BASED ON EXISTING ELEVATIONS.
- CONTRACTOR SHALL BE REQUIRED TO DEWATER AS NECESSARY DURING INSTALLATION OF RCP. DEWATERING SHALL BE INCIDENTAL TO PAY ITEM 430-1.

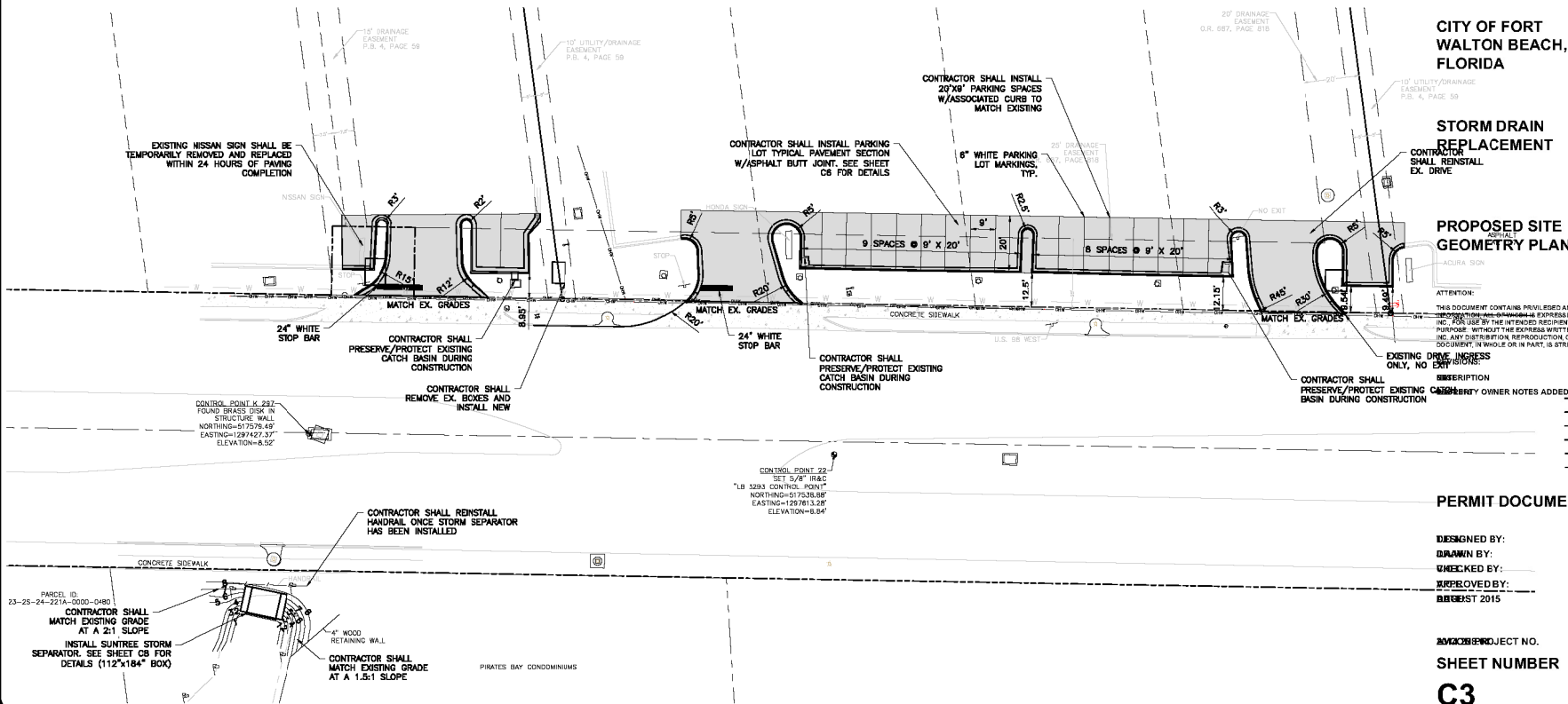


0 80  
GRAPHIC SCALE IN FEET  
1" = 20'

**LEGEND**

---	EXISTING SIDEWALK
⊙	EXISTING STORM DRAIN
○	EXISTING LIGHT POLE
⊖	WATER VALVE
⊕	SPOT ELEVATION
⊗	FIRE HYDRANT
⊘	PROPOSED STORMWATER INLET
⊚	PROPOSED STORMWATER PIPES

**AVCON ENGINEERING & PLANNERS**  
 1000 W. WALTON BLVD. #1000  
 FORT WALTON BEACH, FL 32548-0405  
 OFFICE: (850) 878-4200 FAX: (850) 878-0240  
 WWW.AVCON.COM  
 PROFESSIONAL ENGINEER LICENSE NO. 84821  
 PROFESSIONAL LAND SURVEYOR LICENSE NO. 84821  
 AVCON, INC.  
 1000 W. WALTON BLVD. SUITE A  
 FORT WALTON BEACH, FL 32548  
 PHONE: (850) 878-0200  
 FAX: (850) 878-0240  
 FDOT CERTIFICATE OF APPROVAL NUMBER 8807



**CITY OF FORT WALTON BEACH, FLORIDA**

**STORM DRAIN REPLACEMENT**

**PROPOSED SITE GEOMETRY PLAN**

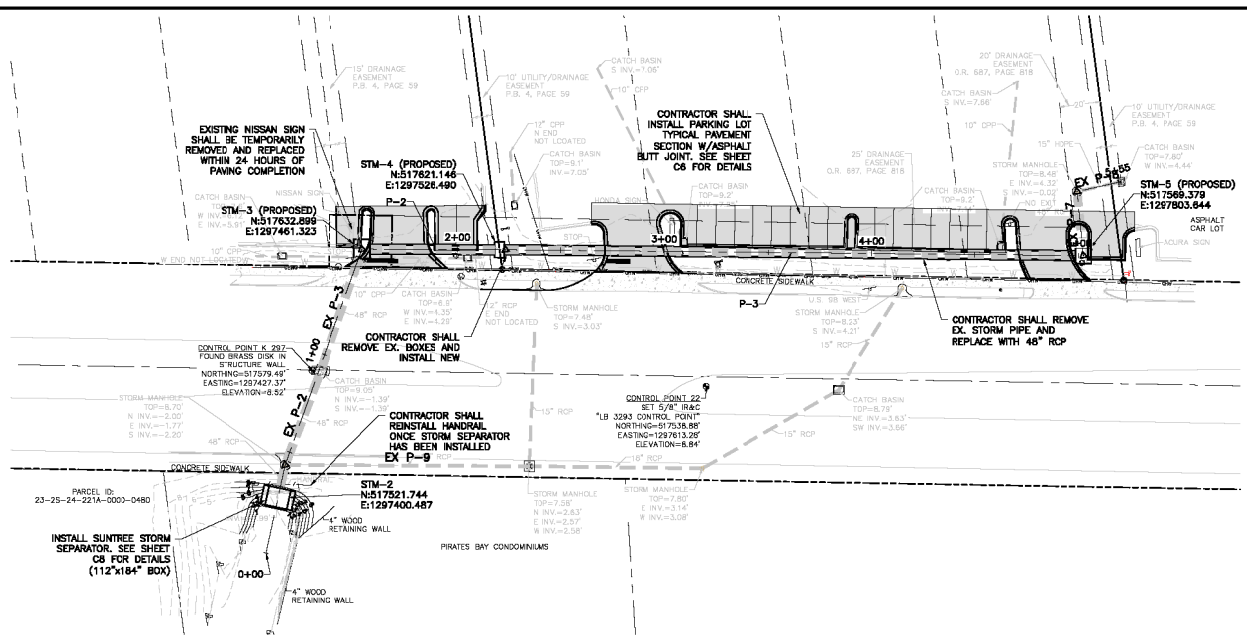
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OWNER NOTES ADDED	

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 DATE: 08/28/2015

AVCON PROJECT NO.  
**SHEET NUMBER**  
**C3**



**AVCON**  
 GRAPHIC SCALE IN FEET  
 0 80  
 1" = 30'

**LEGEND**

- EXISTING STORMWATER PIPES
- STORM SEWER MANHOLE
- LIGHT POLE
- BACKFLOW PREVENTER
- ⊗ WATER METER
- ⊗ FIRE HYDRANT
- NEW PAVEMENT
- PROPOSED STORMWATER PIPES
- PROPOSED STORMWATER PIPES

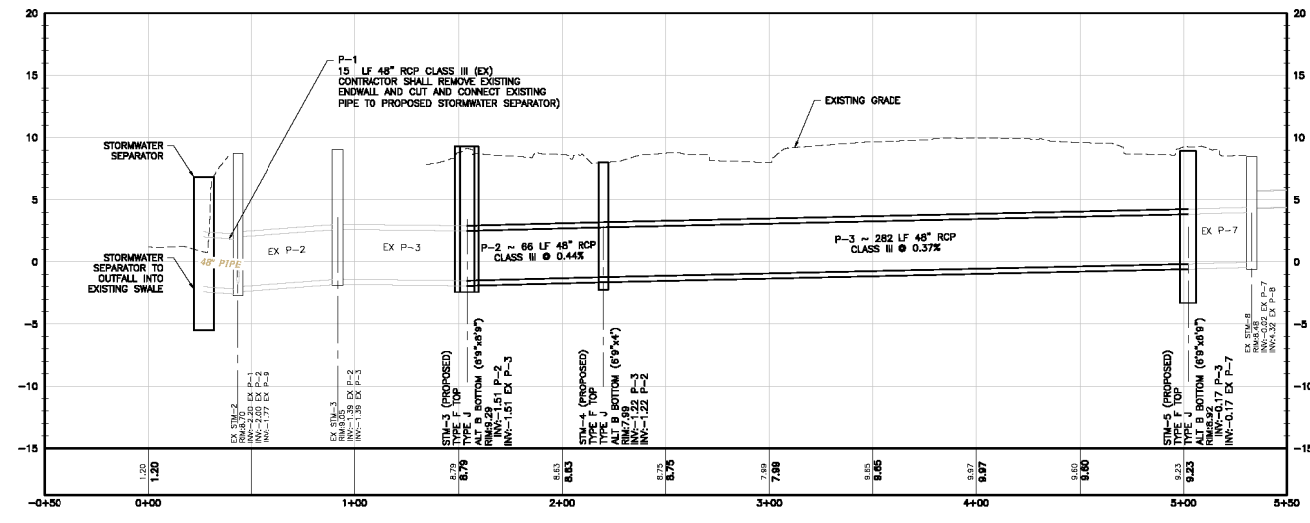
AVCON ENGINEERING & PLANNERS  
 100 WASHINGTON DRIVE, SUITE A, WACONVILLE, FL 32793-0405  
 PHONE: (407) 939-0000 FAX: (407) 939-0000  
 WWW.AVCONENGINEERING.COM  
 LICENSE NO. 14621  
 DONALD A. NATION  
 LICENSE NO. 14621  
 DONALD A. NATION  
 LICENSE NO. 14621  
 DONALD A. NATION  
 LICENSE NO. 14621

**NOTE**

- CONTRACTOR SHALL CLEAN EXISTING AND PROPOSED PIPES PRIOR TO INSTALLATION.

**CHERRYPORT  
 WALTON BEACH,  
 FLORIDA**

**STORM DRAIN  
 REPLACEMENT**



HORIZONTAL SCALE: 1" = 30'  
 VERTICAL SCALE: 1" = 5'

**PROPOSED STORM  
 DRAIN REPLACEMENT  
 PLAN & PROFILE**

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**DATE:** 2015

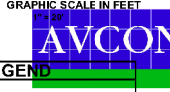
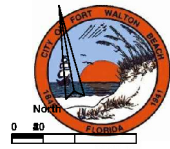
**AVCON PROJECT NO.**  
**SHEET NUMBER**  
**C4**

SITE & UTILITY NOTES:

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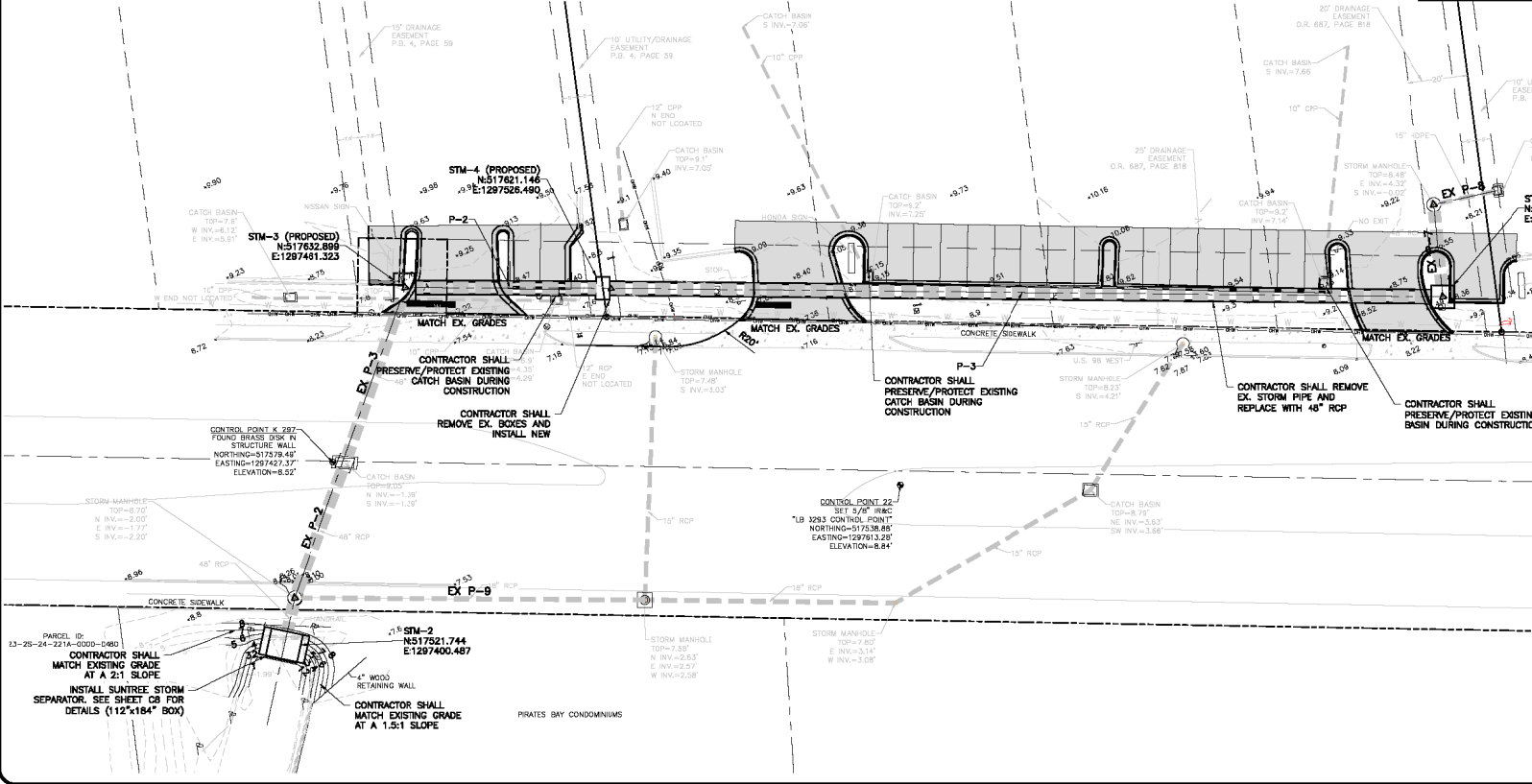
**LEGEND**

- EXISTING STORM DRAIN PIPES
- STORM DRAIN PIPES
- LIGHT POLYMER CONCRETE
- BACKFLOW PREVENTER
- WATER METER
- WATER VALVE
- SPOT ELEVATION
- FIRE HYDRANT
- NEW PAVEMENT
- PROPOSED STORM DRAIN INLET
- PROPOSED STORM DRAIN PIPES

CITY OF FORT WALTON BEACH, FLORIDA

STORM DRAIN REPLACEMENT

GRADING PLAN



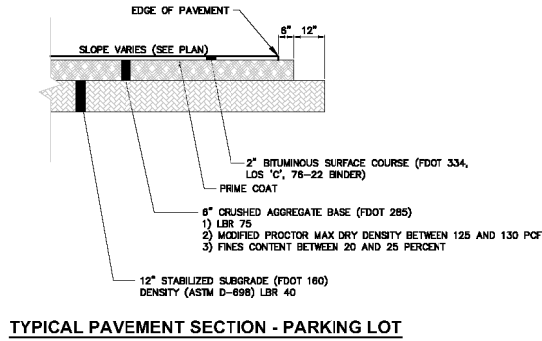
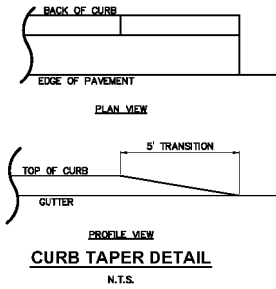
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	DESCRIPTION
	DESIGNER'S NOTES ADDED

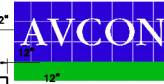
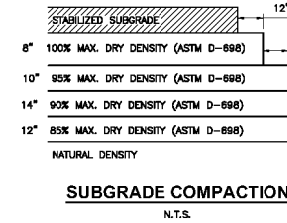
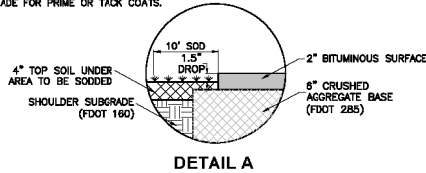
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 APPROVED BY:  
 DATE: 2015

PROJECT NO.  
 SHEET NUMBER  
**C5**



NOTE:  
PRIME AND TACK COATS SHALL BE INCIDENTAL TO PAY ITEM 334-1. NO SEPARATE PAYMENT SHALL BE MADE FOR PRIME OR TACK COATS.



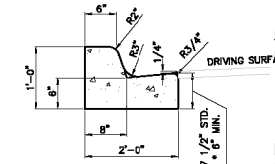
**AVCON, INC.**  
ENGINEERS & ARCHITECTS  
333 BAYSHORE DRIVE, SUITE A  
NICEVILLE, FL 32578  
PHONE: (850) 878-0393  
FAX: (850) 878-0943  
www.avcon.com

ENGINEER OF RECORD:  
NAME: TONIA D. NATION  
FL LICENSE NO.: 66331

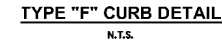
AVCON, INC.  
333 BAYSHORE DRIVE, SUITE A  
NICEVILLE, FL 32578  
PHONE: (850) 878-0393  
FAX: (850) 878-0943

FPR CERTIFICATE OF AUTHORIZATION NUMBER: 5957  
AUTHORIZATION NO. 5957

CITY OF FORT WALTON BEACH, FLORIDA

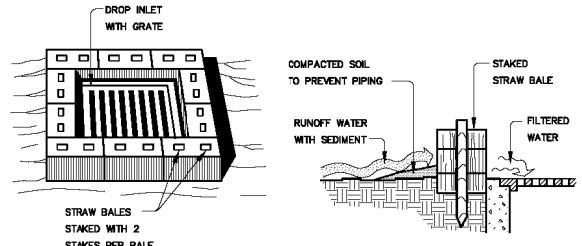


\* NOTE: WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.



MISCELLANEOUS DETAILS

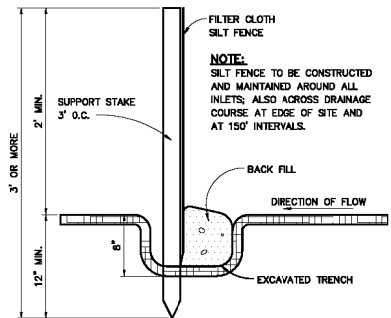
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**STRAW BALE DROP INLET SEDIMENT FILTER**  
N.T.S.

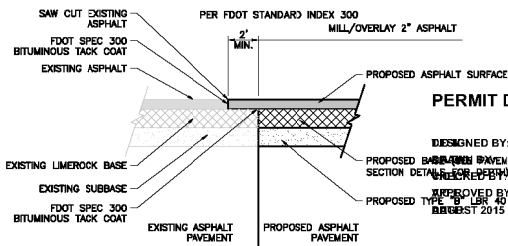
**SPECIFIC APPLICATION**

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.



**EROSION NOTES:**

1. ALL SILT FENCING SHALL BE INSTALLED AND SPACED ACCORDING TO FDOT INDEX #102.
2. EROSION PROTECTION, SUCH AS STAKED BALED HAY AND SILT FENCE BARRIERS, MUST BE INSTALLED PRIOR TO START OF CONSTRUCTION.
3. SILT FENCE BARRIER SHALL BE INSTALLED AS SHOWN ON PLANS, AND IN ALL AREAS SUBJECT TO SOIL EROSION, SEDIMENTATION, SPECIFICALLY ADJACENT TO ALL BODIES OF WATER AND WETLAND AREAS WHERE THERE IS A POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION.
4. SEDIMENT AND EROSION CONTROL DEVICES SHALL REMAIN IN PLACE THROUGHOUT CONSTRUCTION AND SHALL BE REMOVED AT COMPLETION OF THE PROJECT.



PERMIT DOCUMENTS

DESIGNED BY:  
SECTION DETAIL (285)

APPROVED BY:  
TYPE "B" LBR 40 (160) AUGUST 2015

PROJECT NO.

ASPHALT/ASPHALT PAVEMENT BUTT JOINT SHEET NUMBER

**C6**

**GENERAL UTILITY NOTES:**

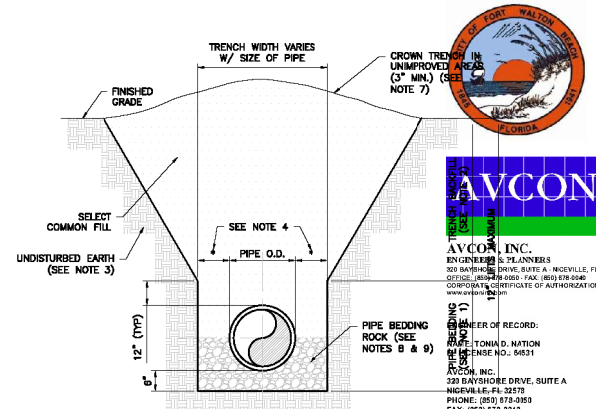
- THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE LOCAL UTILITY SERVICES FOR SITE UTILITY STAKE-OUT PRIOR TO BEGINNING WORK. PROJECT CONTACTS ARE AS FOLLOWS:  

WATER/SEWER - CITY OF FORT WALTON BEACH	(850) 833-8613
OKALOOSA COUNTY	(850) 851-7176
GAS - OKALOOSA COUNTY GAS DISTRICT	(850) 729-4880
TV - COX COMMUNICATIONS	(850) 862-4144
TELEPHONE - CENTURY LINK	(855) 742-8082
A T & T	(800) 778-9140
FIBER - CENTURY LINK	(855) 742-8082
A T & T	(803) 753-3145
COX COMMUNICATIONS	(352) 337-2852
SOUTHERN LIGHT	(251) 259-0807
ELECTRIC - GULF POWER	(800) 778-9140
OKALOOSA COUNTY TRAFFIC	(850) 851-7285

CALL SUNSHINE STATE ONE CALL 48 HOURS BEFORE YOU DIG: 1-800-432-4770
- LOCATIONS OF UTILITIES SHOWN ON THIS PLAN ARE AN APPROXIMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF THE LOCATION, TYPE, DEPTH, ETC. OF ALL UTILITIES. THE CONTRACTOR SHALL MAINTAIN A LOG OF ALL UTILITIES LOCATED IN THE FIELD AND SHALL INDICATE THEM ON THE RECORD (AS-BUILT) DRAWINGS.
- ALL METHODS AND MATERIALS OF RELOCATION, INSTALLATION, AND PROTECTION SHALL BE IN ACCORDANCE WITH INDIVIDUAL UTILITY STANDARDS. WHERE PROPOSED UTILITY INSTALLATIONS OR MODIFICATIONS CROSS EXISTING PAVEMENTS TO REMAIN, CONTRACTOR SHALL MAINTAIN EXISTING PAVEMENT OR RESTORE PAVEMENT TO MATCH EXISTING CONDITION. NO SEPARATE PAYMENT SHALL BE MADE FOR PAVEMENT RESTORATION.
- ALL UTILITIES SHALL REMAIN IN PLACE AND IN SERVICE UNLESS SHOWN OTHERWISE.

**WATER AND SEWER NOTES:**

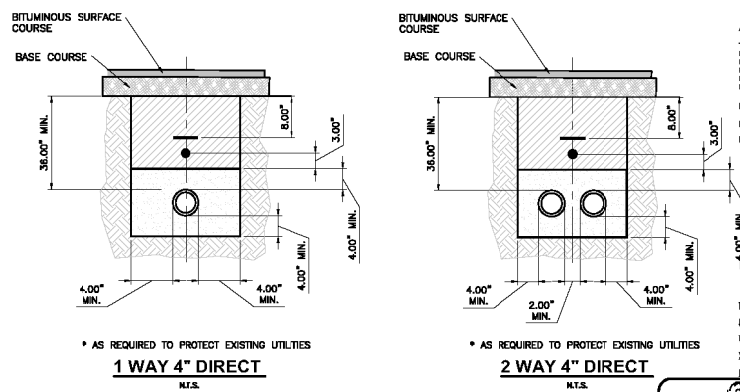
- A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH ALL INVOLVED PARTIES, INCLUDING THE CITY, FDEP PROJECT MANAGER, ENGINEER-OF-RECORD, CONTRACTOR(S) AND UTILITY PROVIDER STAFF A MINIMUM TWO (2) WEEKS PRIOR TO CONSTRUCTION TO ADDRESS ALL CONSTRUCTION & INSPECTION REQUIREMENTS. THIS MEETING SHALL BE COORDINATED BY THE ENGINEER-OF-RECORD BY LETTER NOTIFICATION AND HELD AT THE CITY ENGINEERING DEPARTMENT. FAILURE TO HOLD A PRECONSTRUCTION MEETING COULD RESULT IN EXPENSIVE REWORK OF ITEMS NOT ACCEPTABLE BY UTILITY PROVIDER STANDARDS.
- THE CONTRACTOR SHALL PROVIDE PROPER SEPARATION FROM PROPOSED DRAINAGE SYSTEMS AND UTILITY PIPES, INCLUDING SERVICES.
- NO UTILITY CONNECTIONS WILL BE MADE INTO CITY / FDOT RIGHT-OF-WAY, AND/OR EASEMENTS WITHOUT AN APPROVED UTILITY PERMIT. ALL EXISTING ROAD CROSSINGS WILL BE BORED, UNLESS PERMITTED OTHERWISE. THE CONTRACTOR MUST REPAIR ANY PAVEMENT CUTS WITHIN TIME SPECIFIED ON PERMIT AND COORDINATE ALL CUTS WITH GOVERNING AUTHORITY A MINIMUM 10 DAYS PRIOR TO WORK BEING DONE.
- THE CONTRACTOR WILL INSTALL TRACER WIRE ABOVE ALL PIPES BEING INSTALLED. THE WIRE WILL BE EXTENDED A MINIMUM 12" ABOVE FINAL GROUND ELEVATION AT THE VALVES AND ALL EXCESS WIRE COILED AND PLACED INSIDE THE VALVE BOX LID. THE WIRE WILL RUN THE ENTIRE SYSTEM, INCLUDING SERVICES TO CREATE A CONTINUOUS ELECTRIC CIRCUIT CAPABLE OF BEING FULLY TRACED WHEN CONNECTED TO A SINGLE DC SOURCE.
- A MINIMUM 36" COVER IS REQUIRED FROM TOP OF ALL PROPOSED UTILITY LINES AND SERVICES FROM FINISHED GRADES, INCLUDING SWALES AND BASINS. ALL FIRE AND FLUSH HYDRANTS WILL BE PLACED AT BACK OF THE PROPOSED UTILITY EASEMENT, WITH BOTTOM FLANGE SECTION LEVEL WITH FINISH PAVEMENT SURFACE AND HAVE AN ISOLATION VALVE FOR EACH HYDRANT, AS NOTED ON PLANS.



- NOTES:**
- PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY PER AASHTO T-180.
  - TRENCH BACKFILL: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
  - PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH CLASS B BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE COUNTY.
  - (\*) 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
  - WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
  - ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
  - REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXISTING TRENCH.
  - PIPES SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE COUNTY. BEDDING COVER SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
  - DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. COUNTY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

**CLASS A BEDDING AND TRENCHING DETAIL**

N.T.S.



**1 WAY 4" DIRECT**  
N.T.S.

**2 WAY 4" DIRECT**  
N.T.S.



**AVCON, INC.**  
ENGINEERS & PLANNERS  
200 BAYSHORE DRIVE, SUITE #1  
NICEVILLE, FL 32578  
PHONE: (850) 878-0389  
FAX: (850) 878-0394  
CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 0007  
www.avcon.com

**CITY OF FORT WALTON BEACH, FLORIDA**

**FORM DRAIN REPLACEMENT**

**MISCELLANEOUS DETAILS**

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REVISIONS:

NO.	DESCRIPTION
1	PROPERTY OWNER NOTES ADDED

**PERMIT DOCUMENTS**

DESIGNED BY:  
DRAWN BY:  
CHECKED BY:  
APPROVED BY:  
DATE: 08/20/15

CALL 2 WORKING DAYS BEFORE YOU DIG  
IT'S THE LAW  
DIAL 811  
SHEET NUMBER  
C7

