CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH
2615 HIGHWAY 77
PANAMA CITY, FL 32405
PERMIT SET / CONSTRUCTION DOCUMENTS
DECEMBER 7, 2012

CENTRAL CREDIT UNION OF FLORIDA
You Belong.

ABBREVIATIONS LEGEND

(SOME ABBREVIATIONS MAY NOT BE USED)

ACOUS	ACOUSTICAL
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
AW	ASH/WASTE RECEPTACLE
BEJ	BRICK EXPANSION JOINT
BLDG	BUILDING
BRG	BEARING
BOTT	BOTTOM
BM	BEAM
BLKG	BLOCKING
CW	COLD WATER
CB	CHALKBOARD
CJ	COLD JOINT
CLG	CEILING
CLG HT	CEILING HEIGHT
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CT	CERAMIC TILE
CU	COPPER
DET	DETAIL
DIA	DIAMETER
DWG	DRAWING
DF	DRINKING FOUNTAIN
DS	DOWN SPOUT
DN	DOWN
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION (GRADE)
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST/EX	EXISTING
EWC	ELECTRIC WATER COOLER
EPS	ELECTRIC PROJECTION SCREEN
FBO	FURNISHED BY OWNER
FD	FLOOR DRAIN
FC	FIRE CODE (GYP. BD.)
FIN	FINISH
FF	FINISHED FLOOR
FTG	FOOTING
FLR	FLOOR
FE	FE FIRE EXTINGUISHER
FEC	FEC FIRE EXTINGUISHER IN WALL CABINET
FT	FT FACIAL TISSUE DISPENSER
FM	FM FORCE MAIN
FH	FH FIRE HYDRANT
GB	GB GRAB BAR
GA	GA. GAUGE
GALV	GALV. GALVANIZED
GL	GLASS
GYP BD	GYPSUM BOARD
HB	HOSE BIB
HDWD	HARDWOOD
HM	HOLLOW METAL
HMF	HOLLOW METAL FRAME
HORIZ	HORIZONTAL
HT	HEIGHT
HEWC	HANDICAPPED ELECTRIC WATER COOLER
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
L	LENGTH
MB	MARKER BOARD
MECH	MECHANICAL
MEMB	MEMBRANE
MDO	MEDIUM DENSITY OVERLAY PLYWOOD
MH	MANHOLE
MO	MASONRY OPENING
MR	MIRROR
MS	METAL SHELVING
MT	METAL THRESHOLD
MTD	MOUNTED
MW	MILLWORK
ND	NAPKIN DISPOSER
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
NV	NAPKIN VENDOR
OC	ON CENTER
OPP	OPPOSITE
PB	PEG BOARD
P/L	PLASTIC LAMINATE
PLUMB	PLUMBING
PS	PROJECTION SCREEN
PT	PRESSURE TREATED
PLWD	PLYWOOD
R	RISER
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REIN	REINFORCEMENT
RM	ROOM
RO	ROUGH OPENING
SD	STORM DRAIN
SC	SCALE
SMEP	SEEMLESS EPOXY FINISH
SMFF	SEEMLESS RESINOUS FLOOR SYS.
SS	SANITARY SEWER
ST STL	STAINLESS STEEL
STL	STEEL
STO	STORAGE
STRUCT	STRUCTURE
SUSP	SUSPENDED
SUSP SYS	SUSPENSION SYSTEM
TB	TACKBOARD
TR	TREATED (WOOD)
TYP	TYPICAL
TCP	THIN COAT PLASTER (SYSTEM)
TW	TOWEL DISPENSER/ WASTE RECEPTACLE
TP	TOILET PAPER DISPENSER
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITE TILE
W	WIDE
W/	WITH
WD	WOOD
WP	WATERPROOF
WR	WATER RESISTANT

SHEET INDEX

CODE ANALYSIS

FL BUILDING CODE 2010

BUILDING AREA	2,680 GROSS SQ. FT. (NOT INCLUDING COVERED ENTRY & DRIVE-THROUGH)
USE & OCCUPANCY CLASSIFICATION	BUSINESS (BANK)
BUILDING HEIGHT (STORY, FEET)	1 STORY, 21'-6" IN HEIGHT TO ROOF RIDGE
CONSTRUCTION TYPE	WOOD FRAME W/ BRICK VENEER TYPE V

SYMBOLS LEGEND

(SOME SYMBOLS MAY NOT BE USED)

206 — ROOM NUMBER	1 — DEMOLITION NOTE	12 — DETAIL NUMBER THAT SHEET	1 — WALL TYPE
150 — DOOR NUMBER	1 — CONSTRUCTION NOTE	B — BUILDING SECTION, DIRECTION INDICATED BY ARROW	1 — WALL TYPE MARKER
A — WINDOW TYPE	1/4.2 — DETAIL NUMBER SHEET NUMBER	1/4.3 — SECTION CUT, DIRECTION INDICATED BY ARROW	SPOT ELEVATION

CONSULTANTS

CIVIL

McNEIL CARROLL ENGINEERING, INC.
475 HARRISON AVE., SUITE 200
PANAMA CITY, FL 32401
T. (850) 763-5730
F. (850) 763-5744

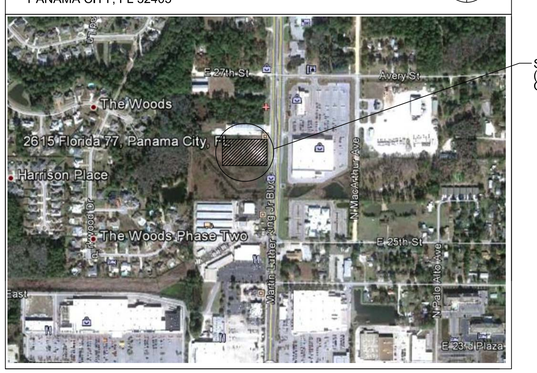
STRUCTURAL

BERUBE LEONARD, LLC.
3101 NORTH 12TH AVENUE
PENSACOLA, FL 32503
T. / F. (850) 473-9955

VICINITY MAP: NTS

2615 HIGHWAY 77
PANAMA CITY, FL 32405

N



FLORIDA PRODUCT APPROVAL NUMBERS

STOREFRONT
FL10008 (EXTRUDED ALUMINUM IMPACT RESISTANT)
KAWNEER COMPANY, INC.

SWINGING EXTERIOR DOORS
FL4553 (HOLLOW METAL DOOR & FRAME)
CECO

ASPHALT SHINGLES
FL5444
CERTAINTEED CORPORATION

VINYL SOFFIT
FL2633
OWENS CORNING

THESE ITEMS REPRESENT THE BASIS FOR THE DESIGN.
EACH SECTION OF THE SPECIFICATIONS LISTS EQUAL PRODUCTS.
THE EQUALS ARE REQUIRED TO HAVE FLORIDA PRODUCT APPROVAL NUMBERS AS WELL.

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title: COVER SHEET

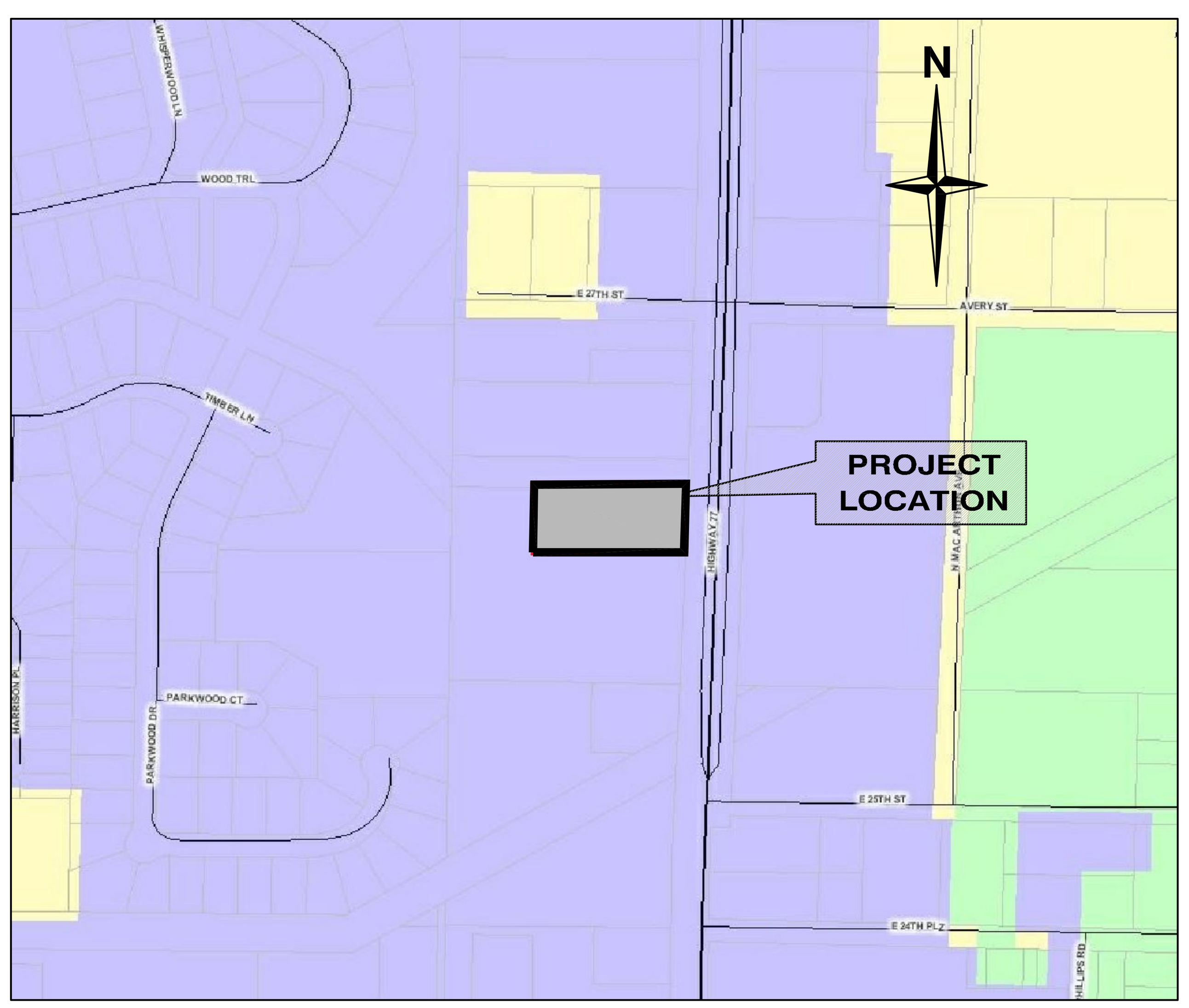
Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No. T-1

CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77

FOR:

CENTRAL CREDIT UNION OF FLORIDA
6200 NORTH W STREET
PENSACOLA, FLORIDA 32505



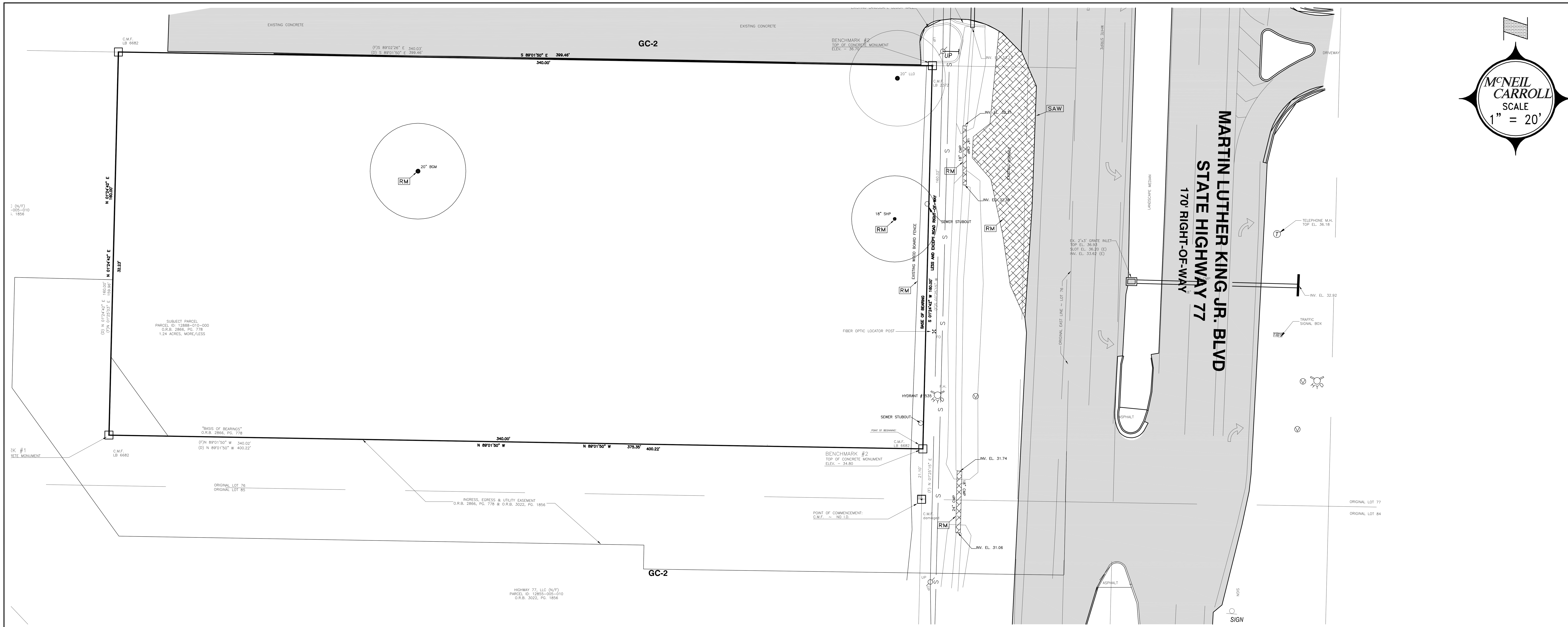
VICINITY MAP
NOT TO SCALE

PREPARED BY:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

PROJECT 85502

INDEX OF SHEETS	SHEETS
SITE DEMO PLAN	1
SITE EROSION CONTROL PLAN	2
SITE LAYOUT PLAN	3
SITE GRADING PLAN	4
SITE DRAINAGE PLAN	5
SITE UTILITY PLAN	6
CONSTRUCTION DETAILS	7-12



SITE DEMOLITION DRAWING NOTES:

1. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
2. ALL DEMOLISHED MATERIALS (ie., SIGNS, CONCRETE, ASPHALT, ETC...) TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
3. ALTHOUGH EVERY ATTEMPT TO LOCATE UNDERGROUND UTILITIES HAS BEEN MADE, THERE IS THE POSSIBILITY OF UNDERGROUND GAS, ELECTRICAL, WATER SEWER, ETC... THAT HAS NOT BEEN LOCATED. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
4. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR FOLLOWING REQUIRED WASTE MANAGEMENT PRACTICES AS DEFINED IN THE BAY COUNTY MUNICIPAL CODE SECTION 22-91 "UNLAWFUL DISPOSAL OF WASTE, FAILURE TO DELIVER WASTE", WHICH MAKES IT UNLAWFUL FOR ANY PERSON TO DUMP, LEAVE OR BURY ANY SOLID WASTE ON PUBLIC OR OR PRIVATE PROPERTY.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.

SYMBOL LEGEND

N|1 (SEE NOTE ie., #1 – SEE NOTES ON THIS SHEET)

RM (REMOVE EXISTING MATERIALS)

SAW (SAW CUT AND REMOVE EXISTING MATERIALS)

PERMIT PURPOSES ONLY

SITE DEMO PLAN

CENTRAL CREDIT UNION OF FLORIDA

STATE ROAD 77

PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION
BY:
DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

475 Harrison Avenue, Suite 200
Panama City, Florida 32401

Phone: 850-763-5730
Fax: 850-763-5744

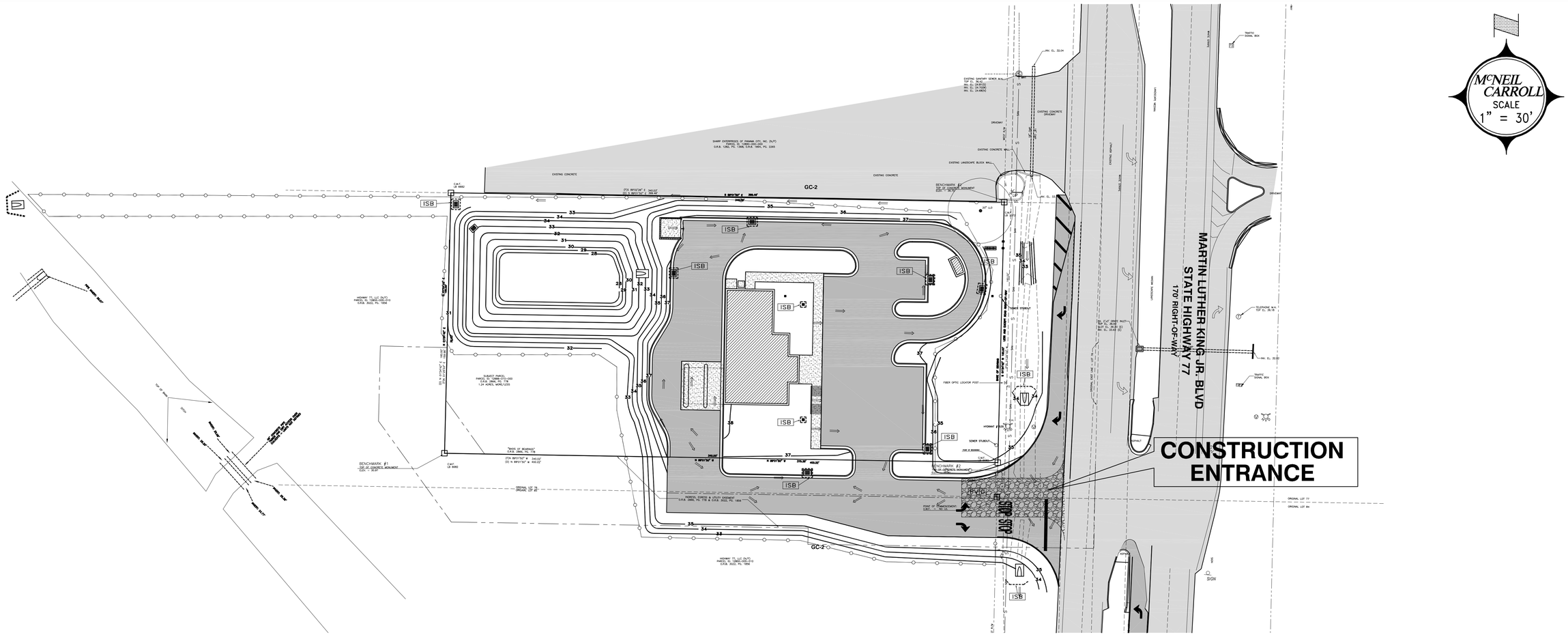
NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER 1 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA



SITE EROSION CONTROL DRAWING NOTES:

1. EROSION CONTROL SHALL BE MAINTAINED FOR THE DURATION FOR THE PROJECT.
2. ALL CONSTRUCTION OUTSIDE OF PROPERTY LINES IS SHOWN IN DETAIL ON PERMIT DRAWINGS. (SEE GENERAL NOTES.).
3. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
4. SEE SECTIONS IN CONSTRUCTION DETAILS.
5. SILT FENCE TO BE INSTALLED AT PERIMETER OF SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
6. CONTROL OF SEDIMENT–LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.
7. THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORMWATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62–3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.
8. ALL CATCH BASINS, INLETS AND ACCESSES TO UNDERGROUND STORMWATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.
9. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORMWATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).
10. CONSTRUCTION DRIVES SHALL SLOPE AWAY FROM THE ROADWAY AT A MINIMUM SLOPE OF 2.00% TO DISTANCE OF NOT LESS THAN 15 FEET FROM THE EDGE OF PAVEMENT. THE MAXIMUM WIDTH OF THE DRIVE SHALL BE 30 FEET WITH #57 GRAVEL SURFACE 6 INCHES THICK. SIGNS SHALL BE PLACED (IN ACCORDANCE WITH CITY AND STATE REQUIREMENTS) TO WARN APPROACHING DRIVERS AND PEDESTRIANS.
11. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR FOLLOWING REQUIRED WASTE MANAGEMENT PRACTICES AS DEFINED IN THE BAY COUNTY MUNICIPAL CODE SECTION 22–91 "UNLAWFUL DISPOSAL OF WASTE, FAILURE TO DELIVER WASTE", WHICH MAKES IT UNLAWFUL FOR ANY PERSON TO DUMP, LEAVE OR BURY ANY SOLID WASTE ON PUBLIC OR OR PRIVATE PROPERTY.
12. THE DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR OBTAINING COVERAGE UNDER THE FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES PRIOR TO START OF CONSTRUCTION OR ANY DISTURBANCE OF LAND GREATER THAN 1 ACRE. THE DEVELOPER/CONTRACTOR WILL FORWARD A COPY OF THE PERMIT AND WILL PROVIDE 48 HOUR NOTIFICATION TO THE APPROPRIATE AGENCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL REQUIRED ELEMENTS OF THE SWPP MUST BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION. FAILURE TO COMPLY COULD RESULT IN CODE ENFORCEMENT ACTION AND FINES.
13. QUALIFIED PERSONNEL SHALL INSPECT THE FOLLOWING ITEMS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND/OR WITHIN 24 HOURS OF THE END OF A STORM EVENT (RAINFALL) THAT IS A 1/2 INCH OR GREATER:
    - A. POINTS OF DISCHARGE TO WATERS OF THE UNITED STATES.
    - B. POINTS OF DISCHARGE TO MUNICIPAL SEPARATE STORM WATER SYSTEMS.
    - C. DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - D. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - E. STRUCTURAL CONTROLS.
    - F. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

SYMBOL LEGEND

⟹	(STORMWATER SURFACE FLOW)
ISB	(INLET SEDIMENT BARRIER – SEE CONSTRUCTION DETAILS)
SILT	(SILT FENCE – SEE CONSTRUCTION DETAILS)
PV|G	(24' WIDE x 50' DEEP FDOT #1 OR #2 GRAVEL CONSTRUCTION ENTRANCE 6" THICK)

14. THE CONTRACTOR SHALL INITIATE REPAIRS WITHIN 24 HOURS OF INSPECTION THAT INDICATE ITEMS ARE NOT IN GOOD WORKING ORDER. TO COMPLY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN RAIN GAGES AND DAILY RAINFALL RECORDS. WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. THE CONTRACTOR SHALL ALSO INSPECT AND CERTIFY THAT CONTROLS INSTALLED IN THE FIELD AGREE WITH THE LATEST STORMWATER POLLUTION PREVENTION PLAN.
15. IF INSPECTIONS INDICATE THAT THE INSTALLED STABILIZATION AND STRUCTURAL PRACTICES ARE NOT SUFFICIENT TO MINIMIZE EROSION, RETAIN SEDIMENT, AND PREVENT DISCHARGING POLLUTANTS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES, WHERE SITES HAVE BEEN PERMANENTLY STABILIZED, INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH. AS NEEDED.
16. RECORDS OF THE INSPECTIONS AND THE CONSTRUCTION PERMIT MUST BE MAINTAINED AT THE CONSTRUCTION SITE AND BE READILY AVAILABLE FOR INSPECTION.
17. ALL STORMWATER MANAGEMENT FACILITIES AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, DEMOLITION OR OTHER DISTURBANCE TO THE SUBJECT SITE.

CONSTRUCTION SEQUENCE AND BMP'S NWFWMD

18. THE INITIAL PART OF THE CONSTRUCTION PROCESS SHALL BE THE INSTALLATION OF SILT FENCE AROUND THE PERIMETER OF THE AREA THAT IS TO BE DISTURBED TO ENSURE NO TURBID RUNOFF LEAVES THE CONSTRUCTION SITE. THE SILT FENCE SHALL BE INSTALLED PER THE CONSTRUCTION DETAILS. IF THERE IS A POSSIBILITY OF RUNOFF TO A WATER BODY, TURBIDITY CURTAIN SHALL BE INSTALLED PER THE CONSTRUCTION DETAILS. THE SECOND STEP SHALL BE THE INSTALLATION OF THE CONSTRUCTION ENTRANCE AND DEMOLITION OF ANY EXISTING IMPROVEMENTS AS NEEDED (SEE DEMOLITION PLAN). THE THIRD STEP SHALL BE TO CLEAR AND GRUB AREAS WHERE IMPROVEMENTS ARE TO BE INSTALLED. AS FILL IS BROUGHT INTO THE SITE, THE STORMWATER BASIN SHOULD BE CREATED TO CAPTURE ANY OVERLAND FLOW AND ACT AS A SEDIMENT TRAP. IT IS RECOMMENDED THAT THE BASIN BE CONSTRUCTED APPROXIMATELY ½' HIGHER THAN DESIGN AT THIS POINT TO ENSURE ALL SILTS AND FINES ARE REMOVED AT THE TIME OF FINAL GRADING OF THE STORMWATER BASIN.

19. TYPICALLY, THE SANITARY SEWER, STORM SEWER, AND WATER MAINS ARE INSTALLED RESPECTIVELY. UPON INSTALLATION OF THE STORM SEWER, HAY BALES AND FILTER FABRICS SHALL BE USED AT ALL INLET OPENINGS PER THE CONSTRUCTION DETAILS TO THE KEEP THE SYSTEM FREE OF SEDIMENTS DURING THE CONSTRUCTION PHASE. DEPENDING ON SITE CONDITIONS AND SIZE, SEDIMENT TRAPS SHALL BE UTILIZED TO PREVENT TURBID RUNOFF FROM LEAVING THE SITE (SEE EROSION CONTROL PLAN).

20. SITE STABILIZATION SHALL BE PROVIDED AS SOON AS THE GRADING WILL ALLOW IN ORDER TO STOP EROSION AND REDUCE TURBID RUNOFF. SEEDING, SODDING, OR HYDROSEEDING SHALL BE USED WHEN FINAL GRADES ARE ESTABLISHED.

21. EROSION CONTROL MEASURES SHALL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT AND BE MANAGED IN ACCORDANCE THE THE STATE NPDES PROGRAM.

22. THE DESIGN OF THE STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT.

23. CENTRAL CREDIT UNION OF FLORIDA IS RESPONSIBLE FOR MONITORING CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITY AND SUBMITTING TO THE APPROPRIATE AGENCY NOTICE OF COMMENCEMENT AND AS–BUILT CERTIFICATIONS FOR THE PROJECT WHEN COMPLETED.

DEWATERING

DEWATERING EFFLUENT OF UNCONTAMINATED GROUNDWATER SHALL BE DISCHARGED SO AS TO PREVENT NEGATIVE IMPACTS TO PUBLIC HEALTH OR SAFETY, PROPERTY, OR THE WATER RESOURCE. DEWATERING OPERATIONS SHALL BE DIRECTED TO A SEDIMENT CONTROL DEVICE OR NATURAL ATTENUATION AREA PRIOR TO DISCHARGE TO WETLANDS OR OTHER SURFACE WATERS. A SEDIMENT CONTROL DEVICE MEANS SETTLING POND, EXCAVATED SEDIMENT TRAP OR BASIN, DEWATERING TRAP OR TEMPORARY SEDIMENT CONTROL MEASURE. A NATURAL ATTENUATION AREA MEANS A NORMALLY DRY, GRASSED MEADOW OR OPEN AREA WITH EXISTING VEGETATION THAT IS NOT SUBJECT TO EROSION. IF A NATURAL ATTENUATION AREA IS USED, A MINIMUM 50 FOOT SETBACK SHALL BE MAINTAINED FROM THE RECEIVING WATERS OR WETLANDS. WHEN WATER IS UNAVOIDABLY DISCHARGED TO WETLANDS OR OTHER SURFACE WATERS, THE WATER DISCHARGED SHALL BE DONE IN A MANNER THAT DOES NOT CAUSE EROSION OR OTHER DAMAGE TO ADJACENT LANDS AND DOES NOT CAUSE OR CONTRIBUTE TO VIOLATIONS OF WATER QUALITY STANDARDS. SETTLING PONDS AND SEDIMENT TRAPS OR BASINS SHALL BE IMPLEMENTED, AT A MINIMUM, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 11.0, APPLICANT'S HANDBOOK VOLUME I.

PERMIT PURPOSES ONLY

SITE GRADING AND DRAINAGE PLAN
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION
BY:
DATE:

McNEIL CARROLL
ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

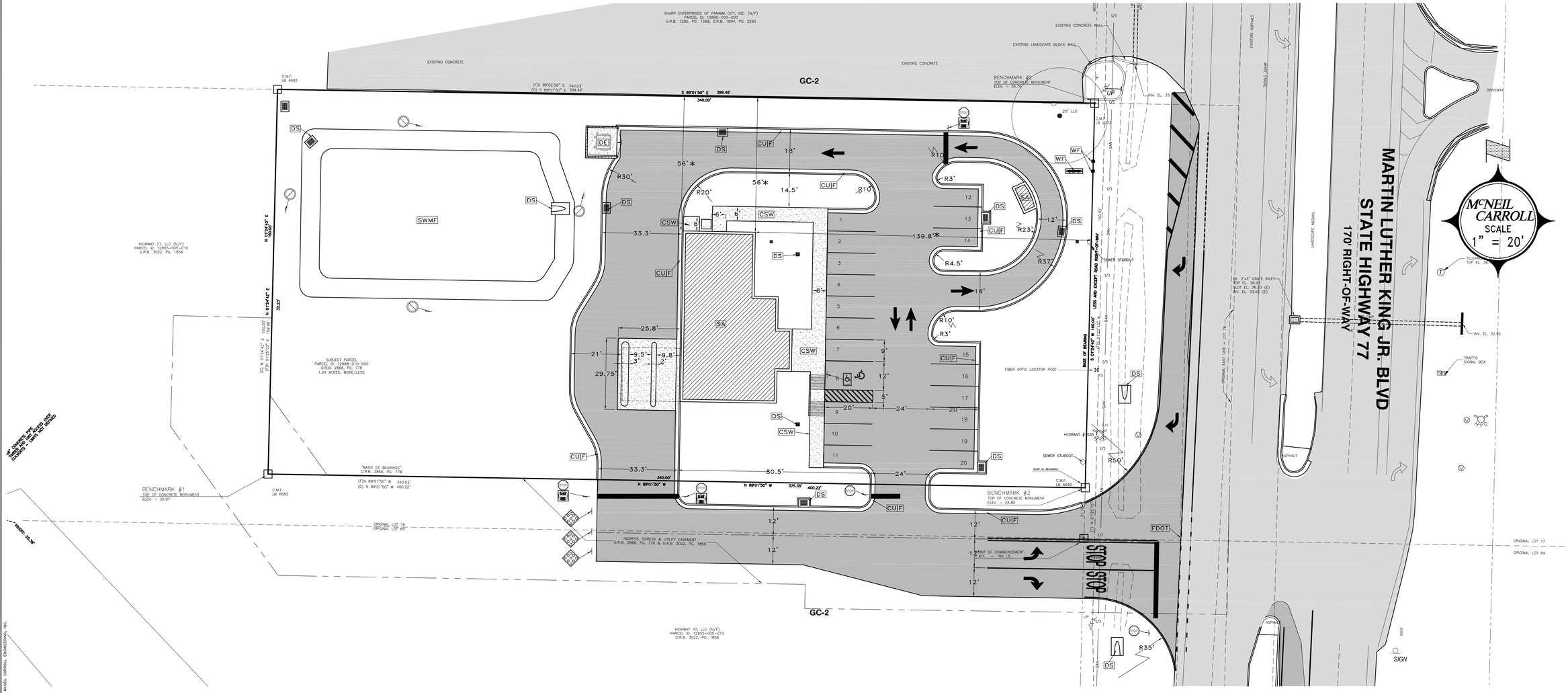
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER
2 OF 12



SITE LAYOUT DRAWING NOTES:

1. ALL RADII AT FACE OF CURB ARE 5' UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL PROVIDE McNEIL CARROLL ENGINEERING, INC. FIVE (5) SETS OF AS-BUILT DRAWINGS AND ONE (1) DIGITAL COPY (AUTOCAD FORMAT) OF THE COMPLETED PROJECT. DRAWINGS SHALL BE PREPARED AND SIGNED & SEALED BY A FLORIDA REGISTERED SURVEYOR.
3. ALL DIMENSIONS AT CURB ARE FROM FACE OF CURB.
4. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION AND SODDED PER FDOT INDEX 105.
5. A COPY OF ALL REGULATORY PERMITS SHALL BE KEPT ON SITE.
6. THE CONTRACTOR SHALL REVIEW THE COMPLETE NWFWMD PERMIT PRIOR TO CONSTRUCTION COMMENCEMENT.
7. AN 8 1/2 x 11 NWFWMD WEATHER RESISTANT SIGN, INCLUDING THE PERMIT NUMBER SHALL BE PLACED ON THE PROPERTY FACING THE ROAD.
8. ALL PROPOSED UTILITIES TO PLACED UNDERGROUND.

SYMBOL LEGEND

- STOP — (DENOTES NEW "STOP" SIGN)
- (DENOTES NEW "HANDICAP PARKING" SIGN)
- DO NOT ENTER — (DENOTES NEW "DO NOT ENTER" SIGN)
- (DENOTES NEW "NO-WATER RECREATION IS PROHIBITED" SIGN)
- (DENOTES NEW "END OF ROAD TERMINATION" SIGN - SEE FDOT INDEX # 17349)
- * (DENOTES CRITICAL DIMENSION TO OUTSIDE FACE OF BUILDING)
- CSW (CONCRETE SIDEWALK - SEE CONSTRUCTION DETAILS)
- CUF (F.D.O.T. CURB ie., TYPE F)
- DE (DUMPSTER ENCLOSURE - SEE CONSTRUCTION DETAILS)
- DS (DRAINAGE STRUCTURE - SEE GRADING & DRAINAGE PLAN)
- FDOT (SEE F.D.O.T. CONNECTION PERMIT)
- NI (SEE NOTE ie., #1 - SEE NOTES ON THIS SHEET)
- SA (SEE ARCH. PLANS)
- SWMF (STORM WATER MANAGEMENT FACILITY)
- WF (WATER FIXTURE - SEE UTILITY PLAN)

SITE DATA TABLE		
GOVERNING ENTITY - CITY OF PANAMA CITY		
ZONING - GENERAL COMMERCIAL - 2 (GC-2)		
TOTAL AREA OF SITE: 54,398 SQUARE FEET - 1.24 ACRES		
TOTAL BUILDING AREA: 2,680 SQUARE FEET - 0.60 ACRES		
FLOOD ZONES ON PROPERTY : X		
	ALLOWED/REQUIRED	PROPOSED
TOTAL IMPERVIOUS AREA	48,958 SQUARE FEET - 1.12 ACRES	20,395 SQUARE FEET - 0.47 ACRES
IMPERVIOUS SURFACE RATIO	0.90	0.37
FLOOR AREA RATIO	3.00	0.05
OPEN SPACE AREA	5,440 SQUARE FEET - 0.12 ACRES	34,003 SQUARE FEET - 0.77 ACRES
OPEN SPACE RATIO	0.10 MIN.	0.63
FRONT YARD SETBACK	15 FEET	123 FEET
SIDE YARD SETBACK	20 FEET	33 FEET
REAR YARD SETBACK	7 FEET	170 FEET

PARKING SPACE SCHEDULE				
NO.	ANGLE	WIDTH	DEPTH	NOTES:
1-7	90°	9	20	
8	90°	12	20	W/ DRIVERS SIDE 5' WIDE AISLE
9-20	90°	9	20	

ALL PARKING STALLS SHALL BE 4" WHITE STRIPING ON ASPHALT AND 4" YELLOW ON CONCRETE. HANDICAP SIGNAGE AND STRIPING SHALL BE TO STATE AND CITY CODE. LANE SEPARATION LINES SHALL BE 6" WIDE.

REQUIRED PARKING CALCULATION			
PROPOSED USE	PARKING REQUIREMENT	SQUARE FOOTAGE/UNITS	SPACES REQUIRED
FINANCIAL INSTITUTION	1 PER 300 SQ. FT	2,680 SQUARE FEET	8.933
		TOTAL PARKING REQUIRED =	9
		TOTAL PARKING PROVIDED =	20

TRIP GENERATION SCHEDULE				
DESCRIPTION/ ITE CODE	UNIT DESIGNATION	EXPECTED UNITS	EXPECTED DAILY TRIPS	P.M. PEAK TRIPS
DRIVE-IN BANK	DRIVE-IN LANES	3.0	418	82

CALCULATION DERIVED FROM ITE 8th. EDITION.

PERMIT PURPOSES ONLY

SITE LAYOUT PLAN
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION BY:
DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LIC # 48303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LIC # 57988

SHEET NUMBER 3 OF 12

85502 - CENTRAL CREDIT UNION OF FLORIDA

SITE GRADING DRAWING NOTES:

1. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
2. ALL DEMOLISHED MATERIALS (ie., SIGNS, CONCRETE, ASPHALT, ETC...) TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
3. SEE SECTIONS IN CONSTRUCTION DETAILS.
4. CONTRACTOR SHALL PROVIDE McNEIL CARROLL ENGINEERING, INC. FIVE (5) SETS AND ONE (1) DIGITAL COPY (AUTOCAD FORMAT) OF AS-BUILT DRAWINGS OF THE COMPLETED PROJECT. DRAWINGS SHALL BE PREPARED AND SIGNED & SEALED BY A FLORIDA REGISTERED SURVEYOR.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.
6. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION AND SODDED PER FDOT INDEX 105.

STORM WATER MANAGEMENT FACILITY SCHEDULE

NO.	AREA AT PERM. POOL	TOP OF BANK ELEV.	SIDE SLOPE	PERM. POOL ELEV.	WATERSHED AREA
SWMF1	0.12 AC.	EL. 34.00	VARIES	EL. 32.00	0.93 AC.

SEE SITE LAYOUT PLAN FOR DIMENSIONS

SYMBOL LEGEND

- 34.60 (EXISTING SPOT ELEVATION)
- 36 (EXISTING CONTOUR)
- 12 (PROPOSED FINISHED CONTOUR)
- +12.50 (PROPOSED FINISHED GRADE)
- ⟹ (STORMWATER SURFACE FLOW)
- CSW (CONCRETE SIDEWALK– SEE CONSTRUCTION DETAILS)
- CU|F (F.D.O.T. CURB ie., TYPE F – SEE CONSTRUCTION DETAILS)
- GB (PROPOSED GRADE BREAK)
- HR (5' WIDE HANDICAP RAMP ie.,12:1 SLOPE)
- PV|A (ASPHALT PAVEMENT – SEE CONSTRUCTION DETAILS)
- PV|C (CONCRETE PAVEMENT – SEE CONSTRUCTION DETAILS)
- MAT (MATCH PROPOSED FLUSH WITH EXISTING SURFACE)
- N|1 (SEE NOTE ie.,#1 – SEE NOTES THIS SHEET)
- SA (SEE ARCHITECTURAL PLANS)
- SWMF|1 (SEE STORM WATER MANAGEMENT FACILITY SCHEDULE THIS SHEET)
- SK (SKIMMER – SEE CONSTRUCTION DETAILS)
- TRANS (TRANSITION CURB 3')

STORMWATER OPERATION AND MAINTENANCE SCHEDULE

(A) STORMWATER MANAGEMENT SYSTEM SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED DESIGN, PLANS AND CALCULATIONS.

(B) THE OPERATION AND MAINTENANCE ENTITY SHALL PROVIDE FOR THE INSPECTION OF THE STORMWATER MANAGEMENT SYSTEM IN ACCORDANCE WITH SUBSECTION 62–346.095(6), F.A.C. DURING THE INSPECTION, SPECIAL ATTENTION SHOULD BE MADE TO INSURE THAT:
   1. ALL EROSION IS CONTROLLED AND SOIL IS STABILIZED TO PREVENT SEDIMENT DISCHARGE TO WATERS IN THE STATE.
   2. THE SURFACE WATER MANAGEMENT SYSTEM IS KEPT FREE OF DEBRIS, TRASH, GARBAGE, OILS AND GREASES, AND OTHER REFUSE.
   3. ENGINEERED STORMWATER MANAGEMENT SYSTEM THAT INCLUDE OIL AND GREASE SEPARATORS, SKIMMERS, OR COLLECTION DEVICES ARE WORKING PROPERLY AND DO NOT ALLOW THE DISCHARGE OF OIL OR GREASES. OILS AND GREASES OR OTHER MATERIALS REMOVED FROM SUCH A DEVICE DURING ROUTINE MAINTENANCE SHALL BE DISPOSED OF AT A SANITARY LANDFILL OR BY OTHER LAWFUL MEANS.
   4. ALL STRUCTURES WITHIN STORMWATER MANAGEMENT SYSTEMS HAVE NOT BECOME CLOGGED OR CHOKED WITH VEGETATIVE OR AQUATIC GROWTH TO SUCH AN EXTENT AS TO RENDER THEM INOPERABLE.

(C) INSPECTIONS OF THE PERMITTED SYSTEM SHOULD BE CONDUCTED AT LEAST ONCE EVERY THIRD YEAR AFTER CONVERSION OF A PERMIT TO THE OPERATION PHASE.

PERMIT PURPOSES ONLY

SITE GRADING PLAN

CENTRAL CREDIT UNION OF FLORIDA

STATE ROAD 77

PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION
BY:
DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

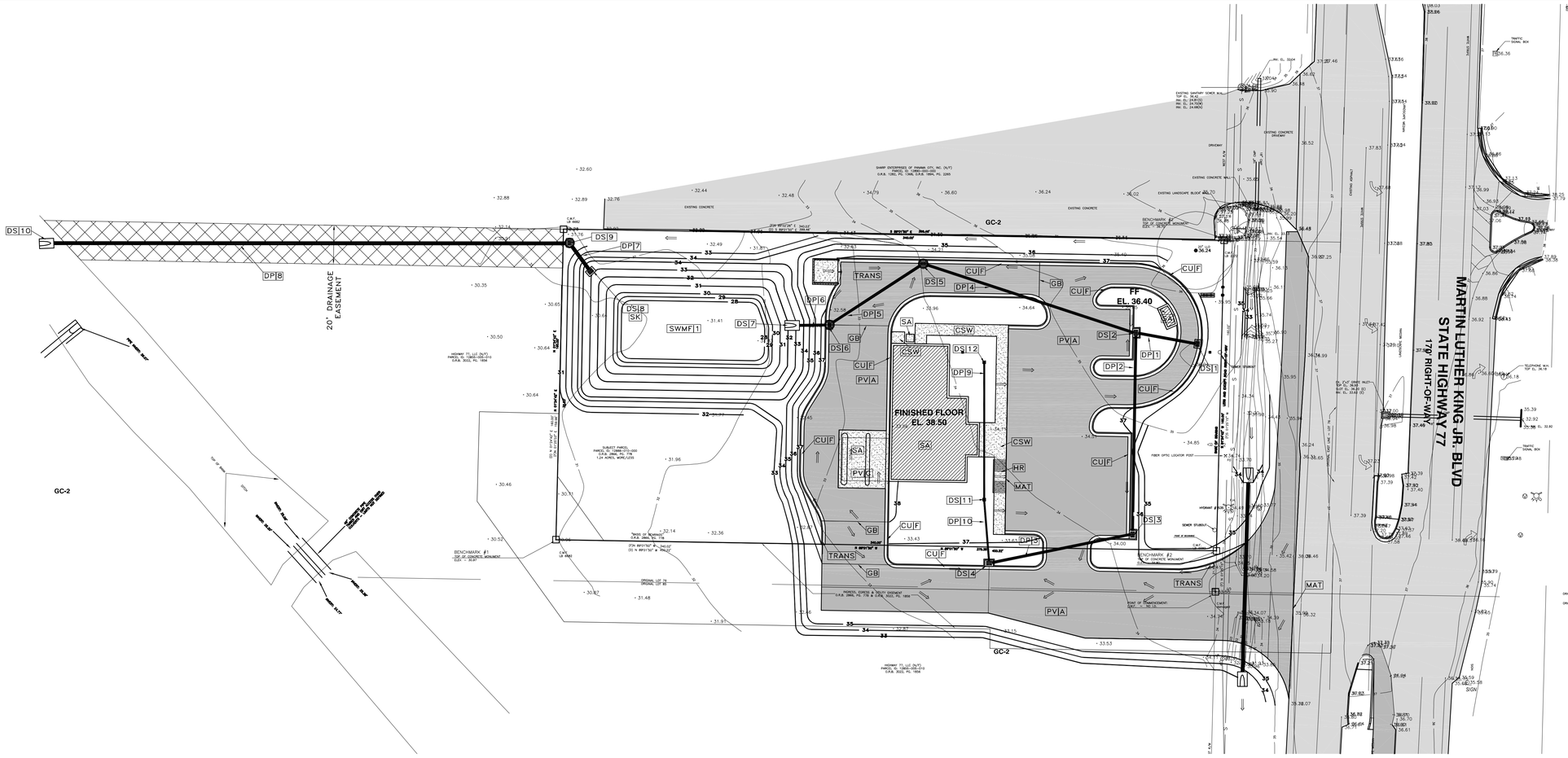
NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER 4 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA



SITE DRAINAGE DRAWING NOTES:

1. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
2. ALL DEMOLISHED MATERIALS (ie., SIGNS, CONCRETE, ASPHALT, ETC...) TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.
3. SEE SECTIONS IN CONSTRUCTION DETAILS.
4. CONTRACTOR SHALL PROVIDE McNEIL CARROLL ENGINEERING, INC. FIVE (5) SETS AND ONE (1) DIGITAL COPY (AUTOCAD FORMAT) OF AS–BUILT DRAWINGS OF THE COMPLETED PROJECT. DRAWINGS SHALL BE PREPARED AND SIGNED & SEALED BY A FLORIDA REGISTERED SURVEYOR.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.
6. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION AND SODDED PER FDOT INDEX 105.

SYMBOL LEGEND

·34.60	(EXISTING SPOT ELEVATION)
—36—	(EXISTING CONTOUR)
—12—	(PROPOSED FINISHED CONTOUR)
⟹	(STORMWATER SURFACE FLOW)
CSW	(CONCRETE SIDEWALK– SEE CONSTRUCTION DETAILS)
CU|F	(F.D.O.T. CURB ie., TYPE F – SEE CONSTRUCTION DETAILS)
DP|16	(SEE DRAINAGE PIPE SCHEDULE THIS SHEET ie.,#16)
DS|12	(SEE DRAINAGE STRUCTURE SCHEDULE THIS SHEET ie.,#12)
GB	(PROPOSED GRADE BREAK)
HR	(5' WIDE HANDICAP RAMP ie.,12:1 SLOPE)
PV|A	(ASPHALT PAVEMENT – SEE CONSTRUCTION DETAILS)
PV|C	(CONCRETE PAVEMENT – SEE CONSTRUCTION DETAILS)
MAT	(MATCH PROPOSED FLUSH WITH EXISTING SURFACE)
N|1	(SEE NOTE ie.,#1 – SEE NOTES THIS SHEET)
SA	(SEE ARCHITECTURAL PLANS)
SWMF|1	(SEE STORM WATER MANAGEMENT FACILITY SCHEDULE THIS SHEET)
SK	(SKIMMER – SEE CONSTRUCTION DETAILS)
TRANS	(TRANSITION CURB 3')

DRAINAGE PIPE SCHEDULE

NO.	SIZE	LF	TYPE	SLOPE
DP1	18	30	ADS	0.20%
DP2	18	101	ADS	0.20%
DP3	18	73	ADS	0.20%
DP4	18	112	ADS	0.20%
DP5	18	54	ADS	0.20%
DP6	18	14	ADS	0.20%
DP7	18	16	ADS	1.17%
DP8	18	239	ADS	1.17%
DP9	15	70	ADS	0.20%
DP10	15	32	ADS	8.93%

ALL ADS PIPE SHALL BE AS SHOWN OR EQUAL
ALL PERFORATED PIPE SHALL HAVE A GRAVEL PACK
ALL ADS PIPE SHALL BE RATED N–12
SEE CONSTRUCTION DETAILS.

STORM WATER MANAGEMENT FACILITY SCHEDULE

NO.	AREA AT PERM. POOL	TOP OF BANK ELEV.	SIDE SLOPE	PERM. POOL ELEV.	WATERSHED AREA
SWMF1	0.12 AC.	EL. 34.00	VARIES	EL. 32.00	0.93 AC.

SEE SITE LAYOUT PLAN FOR DIMENSIONS

DRAINAGE STRUCTURE SCHEDULE

NO.	TYPE STRUCTURE	TOP OF GRATE	PIPE INVERT	BOTTOM INVERT
DS1	FDOT TYPE C INLET (INDEX 232)	EL. 36.00	EL. 32.50 18" OUT W	EL. 31.50
DS2	FDOT TYPE C INLET (INDEX 232)	EL. 36.50	EL. 32.44 18" IN E, 31.64 18" S, 18" OUT W	EL. 31.44
DS3	FDOT TYPE C INLET (INDEX 232)	EL. 36.25	EL. 31.85 18" IN W, OUT N	EL. 30.85
DS4	FDOT TYPE C INLET (INDEX 232)	EL. 35.50	EL. 32.00 18" OUT E, 15" IN N	EL. 31.00
DS5	48" DIA. FDOT TYPE MODIFIED C INLET (INDEX 232)	EL. 37.00	EL. 31.41 18" IN E, OUT W	EL. 30.41
DS6	48" DIA. FDOT TYPE MODIFIED C INLET (INDEX 232)	EL. 37.00	EL. 31.30 18" IN E, OUT W	EL. 30.30
DS7	18" CONCRETE MITERED END 3 TO SLOPE	EL. N/A	EL. 31.24 18" OUT	EL.
*DS8	FDOT TYPE C INLET (INDEX 232)	EL. 33.25	EL. 29.00 18" OUT W	EL. 28.00
DS9	FDOT TYPE C INLET (INDEX 232)	EL. 31.75	EL. 28.81 18" IN E, OUT W	EL. 28.00
DS10	18" CONCRETE MITERED END 3 TO SLOPE	EL. N/A	EL. 26.00 18" OUT	EL.
DS11	15" ADS CATCH BASIN	EL. 37.50	EL. 35.00 15" OUT	EL. 34.00
DS12	15" ADS CATCH BASIN	EL. 37.50	EL. 34.86 15" IN N. OUT S	EL. 33.86

*–SEE DETAIL FOR STRUCTURE
SEE CONSTRUCTION DETAILS.

STORMWATER OPERATION AND MAINTENANCE SCHEDULE

(A) STORMWATER MANAGEMENT SYSTEM SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED DESIGN, PLANS AND CALCULATIONS.
(B) THE OPERATION AND MAINTENANCE ENTITY SHALL PROVIDE FOR THE INSPECTION OF THE STORMWATER MANAGEMENT SYSTEM IN ACCORDANCE WITH SUBSECTION 62–346.095(6), F.A.C. DURING THE INSPECTION, SPECIAL ATTENTION SHOULD BE MADE TO INSURE THAT:
    1. ALL EROSION IS CONTROLLED AND SOIL IS STABILIZED TO PREVENT SEDIMENT DISCHARGE TO WATERS IN THE STATE.
    2. THE SURFACE WATER MANAGEMENT SYSTEM IS KEPT FREE OF DEBRIS, TRASH, GARBAGE, OILS AND GREASES, AND OTHER REFUSE.
    3. ENGINEERED STORMWATER MANAGEMENT SYSTEM THAT INCLUDE OIL AND GREASE SEPARATORS, SKIMMERS, OR COLLECTION DEVICES ARE WORKING PROPERLY AND DO NOT ALLOW THE DISCHARGE OF OIL OR GREASES. OILS AND GREASES OR OTHER MATERIALS REMOVED FROM SUCH A DEVICE DURING ROUTINE MAINTENANCE SHALL BE DISPOSED OF AT A SANITARY LANDFILL OR BY OTHER LAWFUL MEANS.
    4. ALL STRUCTURES WITHIN STORMWATER MANAGEMENT SYSTEMS HAVE NOT BECOME CLOGGED OR CHOKED WITH VEGETATIVE OR AQUATIC GROWTH TO SUCH AN EXTENT AS TO RENDER THEM INOPERABLE.
(C) INSPECTIONS OF THE PERMITTED SYSTEM SHOULD BE CONDUCTED AT LEAST ONCE EVERY THIRD YEAR AFTER CONVERSION OF A PERMIT TO THE OPERATION PHASE.

PERMIT PURPOSES ONLY

SITE DRAINAGE PLAN
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION
BY:
DATE:

McNEIL CARROLL
ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288

475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER
5 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA

L:\85502 – CENTRAL CREDIT UNION\DWG\85502E01.DWG 12/11/2012 4:21 PM

SITE UTILITY DRAWING NOTES:

1. SEE SYMBOL LEGEND ON THIS SHEET FOR SYMBOL INFORMATION AND REFERENCED DETAILS.
2. SEE SECTION AND DETAILS IN CONSTRUCTION DETAILS.
3. ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND.
4. CONTRACTOR SHALL PROVIDE McNEIL CARROLL ENGINEERING, INC. FIVE (5) SETS AND ONE (1) DIGITAL COPY (AUTOCAD FORMAT) OF AS-BUILT DRAWINGS OF THE COMPLETED PROJECT. DRAWINGS SHALL BE PREPARED AND SIGNED & SEALED BY A FLORIDA REGISTERED SURVEYOR.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO CALL SUNSHINE ONE AT 811 FOR UTILITY LOCATES PRIOR TO CONSTRUCTION.
6. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION AND SODDED PER FDOT INDEX 105.
7. MINIMUM INVERT OF SEWER LATERAL SHALL BE EL. 34.03.
8. APPROXIMATE LOCATION OF EXISTING SEWER STUB OUT.
9. APPROXIMATE LOCATION OF EXISTING 6" WATER MAIN. CONTRACTOR SHALL VERIFY SIZE AND LOCATION PRIOR TO CONSTRUCTION.

SYMBOL LEGEND

- CO (4" CLEANOUT – SEE CONSTRUCTION DETAILS)
- N|1 (SEE NOTE IE., #1 – SEE NOTES THIS SHEET)
- SA (SEE ARCH. PLANS)
- WF|14 (SEE WATER FIXTURE SCHEDULE THIS SHEET IE.,#14 SEE CONSTRUCTION DETAILS)
- WP|10 (SEE WATER PIPE SCHEDULE THIS SHEET IE.,#10 SEE CONSTRUCTION DETAILS)
- LAT (TYPICAL 6" SEWER SERVICE LATERAL W/ 1.00% SLOPE – SEE CONSTRUCTION DETAILS)

WATER MAIN PIPE SCHEDULE

NO.	SIZE	LF	TYPE	QTY
WP1	2"	25	PVC	--
WP2	2"	160	PVC	--
WP3	1"	20	PVC	--

UP TO 4" WATER MAIN – CLASS 200
4–12" WATER MAIN – C900 DR18
ALL LINES SHALL BE THE COLOR BLUE.

WATER FIXTURE SCHEDULE

NO.	TYPE
WF1	2" X 6" TAPPING SLEEVE ASSEMBLY W/ GATE VALVE
WF2	1" WATER METER ASSEMBLY
WF3	1.5" REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY
WF4	2" X 6" TAPPING SLEEVE ASSEMBLY W/ GATE VALVE
WF5	1" IRRIGATION METER

SEE CONSTRUCTION DETAILS.
ALL LINES SHALL BE THE COLOR BLUE

PERMIT PURPOSES ONLY

SITE UTILITY PLAN
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E01
NOT RELEASED FOR CONSTRUCTION
BY:
DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER 6 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA

GENERAL NOTES

PREVENTION, CONTROL AND ABATEMENT OF EROSION

ALL ON AND OFF SITE WORK INCLUDED CONSISTS OF BUT NOT LIMITED TO THE FOLLOWING:

I0.2643; SEEDING AND MULCHING OR SODDING FOR STABILIZATION.

CONSTRUCTION OF SEDIMENT BASINS, CHECK DAMS OR FLOATING BARRIERS.

PLACEMENT OF SILTATION FENCES DURING THE COURSE OF CONSTRUCTION.

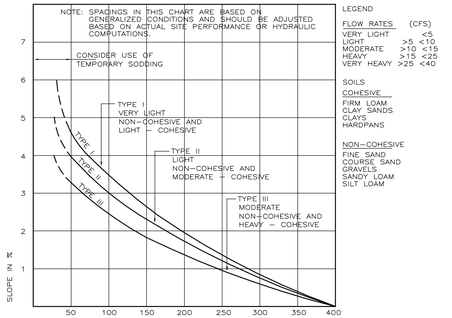
SILT FENCE TO BE INSTALLED AT PERIMETER OF SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT TO RESTRICT ANY TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CONTROL OF SEDIMENT–LADEN RUNOFF SHALL BE PROVIDED WITH HAY BALES AND/OR GEOTECH STYLE FABRICS. ALL CONTROL MEASURES SHALL BE PROPERLY LOCATED AND CONSTRUCTED TO PREVENT SEDIMENT TRANSPORT. THE MEANS FOR RETAINING THE SEDIMENTS WILL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT IMPROVEMENTS ARE COMPLETE.

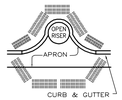
THE CONTRACTOR IS RESPONSIBLE FOR TREATING ALL ONSITE STORM WATER DRAINAGE AS REQUIRED TO MEET THE CRITERIA OF 62–3 FLORIDA ADMINISTRATIVE CODE, F.A.C. PRIOR TO DISCHARGE.

ALL CATCH BASINS, INLETS AND ACCESSES TO UNDERGROUND STORM WATER SYSTEMS SHALL BE PROTECTED IN ACCORDANCE WITH THE ATTACHED DETAILS.

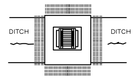
THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS AND CONDITIONS OF ANY STORM WATER PERMITS THAT MAY APPLY (FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FLORIDA DEPARTMENT OF TRANSPORTATION, BAY COUNTY, WATER MANAGEMENT DISTRICT, ETC.).



FDOT CHART I (BALED HAY OR STRAW BARRIERS AND SILT FENCES - INDEX 102



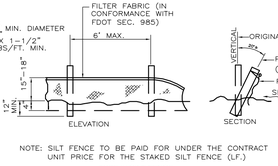
PARTIAL INLET



DITCH BOTTOM INLET

ANCHOR BALES WITH 2 – 2"X2"X4' STAKES PER BALE (SEE DETAIL)

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES

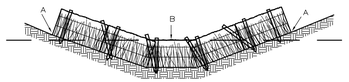


NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR THE STAKED SILT FENCE (LF.)

TYPE III SILT FENCE

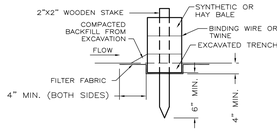
NOTE:

I0.315,T0.252;DO NOT DEPLOY SILT FENCES IN A MANNER THAT WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES.
SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND AS TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
SILT FENCE SHOULD BE REPLACED EVERY SIX (6) MONTHS.
SILT FENCE SHALL EXTEND A MINIMUM OF 4" BELOW GRADE.
SILT FENCE SHALL EXTEND 4" AWAY FROM STAKES.



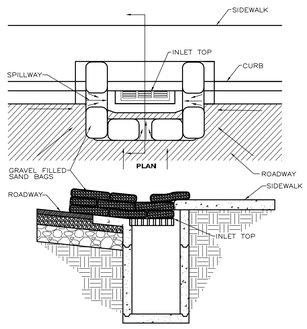
POINTS A SHOULD BE HIGHER THAN B

PROPER PLACEMENT OF BALES IN DRAINAGE WAY



EROSION CONTROL DETAILS

NOT TO SCALE

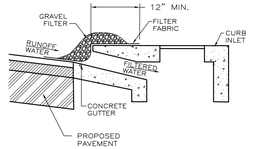


NOTE:

1. GRAVEL FILLED BAGS TO BE PLACED TIGHTLY TOGETHER AS TO NOT ALLOW ANY GAPS IN BETWEEN THE BAGS VERTICALLY AND HORIZONTALLY.
2. IF SEDIMENT IS PENETRATING BAGS, BAGS MAY NEED TO BE WRAPPED IN ADDITIONAL FILTER FABRIC.

CURB INLET SEDIMENT BARRIER (OPTION 1)

NOT TO SCALE

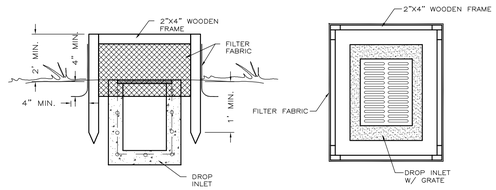


NOTES:

1. GRAVEL SHALL BE #57 STONE.

GRAVEL CURB INLET SEDIMENT FILTER (OPTION 2)

NOT TO SCALE

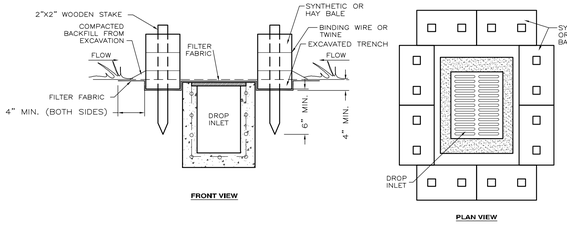


NOTES:

1. TOP FRAME REQUIRED FOR STABILITY.
2. THIS METHOD OF INLET PROTECTION IS NOT TO BE USED IN RIGHT–OF–WAYS OR MEDIANS.
3. STAKES SHALL EXTEND 1" MIN. BELOW GRADE.
4. FILTER FABRIC SHALL EXTEND 4" MIN. BELOW GRADE AND 4" MIN. BEYOND WOODEN FRAME.

DROP INLET SEDIMENT FILTER OPTION 1

NOT TO SCALE



DROP INLET SEDIMENT FILTER OPTION 2

NOT TO SCALE

WORK IN RIGHTS-OF-WAYS

ALL WORK WITHIN RIGHTS–OF–WAYS SHALL BE IN STRICT ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE RESPECTIVE AGENCIES.

THE CONTRACTOR SHALL COOPERATE WITH THE GOVERNING STATE AND LOCAL AGENCIES IN ALL PROCEDURES, MATERIALS AND METHODS OF CONSTRUCTION.

ALL OFF–SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING:

CONSTRUCTION OF DRIVEWAY CONNECTIONS TO EXISTING MUNICIPAL ROADWAYS AS SHOWN ON PLANS.

PLACEMENT OF ABOVE OR BELOW GROUND UTILITIES AND CONNECTION TO EXISTING UTILITIES AS SHOWN ON PLANS.

SITE CLEARING AND DEMOLITION

ANY WORK WITHIN STREET OR HIGHWAY RIGHT–OF–WAY SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNMENTAL AGENCIES HAVING JURISDICTION AND SHALL NOT COMMENCE UNTIL THESE GOVERNING AUTHORITIES HAVE BEEN NOTIFIED AND PROPER PERMITS OBTAINED.

KEEP ALL AREAS WITHIN THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO PREVENT DUST FROM RISING DUE TO CONSTRUCTION. COMPLY WITH ALL ANTI–POLLUTION ORDINANCES.

THIS SUBCONTRACTOR SHALL SEE TO IT THAT TRUCKS LEAVING THE SITE SHALL DO SO IN SUCH A MANNER THAT MUD AND EARTH WILL NOT BE DEPOSITED ON ADJACENT STREET PAVEMENTS. ANY MUD OR EARTH DEPOSITED ON STREET PAVEMENTS SHALL BE PROMPTLY REMOVED BY THIS SUBCONTRACTOR.

ALL CLEARING SHALL BE PERFORMED IN A MANNER SUCH AS TO PREVENT ANY WASH–OFF OF SOILS FROM THE SITE INTO STREAMS AND/OR STORM DRAINAGE SYSTEMS. APPROPRIATE SEDIMENTATION PONDS, DIKES, COLLARS, AND FILTER MEDIA SHALL BE EMPLOYED TO INSURE COMPLIANCE WITH THESE REQUIREMENTS. WHERE A SPECIFIC STATUTE GOVERNS THESE PROCEDURES, SUCH STATUTE SHALL BE COMPLIED WITH IN IT'S ENTIRETY.

TOPSOIL IS DEFINED AS FRIABLE CLAY LOAM SURFACE SOIL FOUND IN A DEPTH OF NOT LESS THAN 4". SATISFACTORY TOPSOIL IS REASONABLY FREE OF SUBSOIL, CLAY LUMPS, STONES, AND OTHER OBJECTS OVER 2" IN DIAMETER, AND WITHOUT WEEDS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.

STRIP TOPSOIL TO WHATEVER DEPTHS ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OTHER OBJECTIONABLE MATERIAL.

REMOVE HEAVY GROWTHS OF GRASS FROM AREAS BEFORE STRIPPING. WHERE TREES ARE INDICATED TO BE LEFT STANDING, STOP TOPSOIL STRIPING A SUFFICIENT DISTANCE TO PREVENT DAMAGE TO MAIN ROOT SYSTEM. DISPOSE OF UNSUITABLE OR EXCESS TOPSOIL SAME AS WASTE MATERIAL, HEREIN SPECIFIED.

BURNING WILL NOT BE PERMITTED ON PROJECT SITE.

ALL EXISTING STRUCTURES, UTILITIES AND OTHER OBSTACLES IN CONFLICT WITH THE PROPOSED FACILITY SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER. SEE OTHER UTILITY AND MISCELLANEOUS NOTES CONCERNING REMOVAL.

ALLOW TESTING SERVICES TO INSPECT AND APPROVE SUBGRADE AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS PERFORMED.

ATTENTION IS CALLED TO THE FACT THAT THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES TO OBTAIN LOCATIONS OF ALL EXISTING UTILITIES OR OBSTRUCTIONS WHICH HE MAY ENCOUNTER DURING CONSTRUCTION.

AFTER LOCATION OF UTILITIES BY THE APPROPRIATE UTILITY COMPANY, IT IS THE CONTRACTOR'S LIABILITY TO PROTECT ALL SUCH UTILITY LINES, INCLUDING SERVICE LINES AND APPURTENANCES, AND TO REPLACE AT HIS OWN EXPENSE ANY WHICH MAY BE DAMAGED BY THE CONTRACTOR'S EQUIPMENT OR FORCES DURING CONSTRUCTION.

TO PROTECT PERSON FROM INJURY AND TO AVOID PROPERTY DAMAGE, ADEQUATE BARRICADES, CONSTRUCTION SIGNS, TORCHES, RED LANTERNS AND GUARDS AS REQUIRED SHALL BE PLACED AND MAINTAINED DURING THE PROGRESS OF THE CONSTRUCTION WORK.

ADEQUATE PROVISION SHALL BE MADE FOR THE FLOW OF SEWERS, DRAINS, AND WATER COURSES ENCOUNTERED DURING CONSTRUCTION, AND THE STRUCTURES WHICH MAY HAVE BEEN DISTURBED SHALL BE SATISFACTORILY RESTORED BY THE CONTRACTOR.

EXCAVATING, FILLING AND GRADING

ALL ON AND OFF–SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING:

ALL ON AND OFF–SITE PREPARATION WORK FOR EXCAVATION, PIPE BED PREPARATION AND BACKFILL FOR UNDERGROUND UTILITIES.

COMPACTION OF BACKFILL.

REMOVAL OF ALL EXCESS OR UNUSABLE MATERIAL.

APPROVAL REQUIRED: ALL FILL MATERIAL SHALL BE SUBJECT TO APPROVAL OF THE GEO–TECHNICAL ENGINEER.

ALL ON–SITE FILL MATERIAL SHALL BE SOIL–ROCK MIXTURE WHICH IS FREE FROM ORGANIC MATTER (LESS THAN 3% BY IGNITION), AND OTHER DELETERIOUS SUBSTANCE. IT SHALL CONTAIN NO ROCKS OR LUMPS OVER SIX (6) INCHES IN GREATEST DIMENSION AND NOT MORE THAN 15% OF THE ROCKS OR LUMPS BY DRY WEIGHT, SHALL BE LARGER THAN 2 AND 1/2 INCHES IN GREATEST DIMENSION.

ALL IMPORTED FILL MATERIAL SHALL MEET THE REQUIREMENTS OF ON–SITE FILL MATERIAL AND SHALL IN ADDITION, BE PREDOMINANTLY GRANULAR WITH A MAXIMUM PARTICLE SIZE OF TWO (2) INCHES AND A PLASTICITY INDEX OF 12 OR LESS.

ALL ON–SITE FILL MATERIAL USED FOR TRENCH AND STRUCTURAL BACKFILL SHALL MEET THE REQUIREMENTS OF ARTICLE ABOVE.

ALL IMPORTED COHESIONLESS MATERIAL USED FOR TRENCH AND STRUCTURAL BACKFILL SHALL BE FREE FROM ORGANIC SUBSTANCE (LESS THAN 3% BY IGNITION) AND OTHER DELETERIOUS MATTER, SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

PRIOR TO ALL WORK OF THIS SECTION, CONTRACTOR IS TO BECOME THOROUGHLY FAMILIAR WITH THE SITE, THE SITE CONDITIONS, AND ALL PORTIONS OF THE WORK, FALLING WITHIN THIS SECTION.

DO NOT ALLOW OR CAUSE ANY OF THE WORK PERFORMED OR INSTALLED TO BE COVERED UP OR ENCLOSED BY WORK OF THIS SECTION PRIOR TO ALL REQUIRED INSPECTIONS, TESTS AND APPROVALS.

AFTER THE WORK HAS BEEN COMPLETELY TESTED, INSPECTED AND APPROVED, MAKE ALL REPAIRS AND REPLACEMENTS NECESSARY TO RESTORE THE WORK TO THE CONDITION IN WHICH IT WAS FOUND AT THE TIME OF UNCOVERING, ALL AT NO ADDITIONAL COST TO THE OWNER.

FOR SETTING AND ESTABLISHING FINISH ELEVATIONS AND LINES, SECURE THE SERVICES OF A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR ACCEPTABLE TO THE OWNER, CAREFULLY PRESERVE ALL DATA AND ALL MONUMENTS SET BY THE CIVIL ENGINEER OR LAND SURVEYOR, AND IF DISPLACED OR LOST, IMMEDIATELY REPLACE TO THE APPROVAL OF THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER.

PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, ETC. NECESSARY AND INCIDENTAL TO THE COMPLETION OF ALL EARTHWORK AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS. ALL OFF–SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING: THIS WORK CONSISTS OF GRADING IN ORDER TO ACHIEVE FINISHED ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS.

ALL GRADED SURFACES SHALL BE SMOOTH AND UNIFORM, WITHOUT ABRUPT CHANGES IN SLOPE OR GRADE. AREAS TO BE COVERED WITH PAVING SHALL BE FINISHED TO THE REQUIRED ELEVATIONS AND SLOPES. FINISHED SURFACES IN ALL OTHER AREAS MAY VARY UP TO 0.1 FEET FROM THE REQUIRED ELEVATIONS.

PERFORM EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF GOVERNING AUTHORITIES HAVING JURISDICTION. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, LATEST EDITION.

EMPLOY, AT CONTRACTOR'S EXPENSE, DESIGN LABORATORY TO PERFORM SOIL TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. SUBMIT FOLLOWING REPORTS DIRECTLY TO ENGINEER AND COPIES TO CITY ENGINEERING DEPARTMENT FROM THE TESTING SERVICES, WITH COPY TO THE CONTRACTOR.

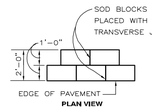
TEST REPORTS ON BORROW MATERIAL.

FIELD DENSITY TEST REPORTS.

ONE OPTIMUM MOISTURE–MAXIMUM DENSITY CURVE FOR EACH TYPE OF SOIL ENCOUNTERED.

WHERE REQUIRED, THE SITE SHALL BE EXCAVATED TO THE GRADES COURSE, EXCAVATED MATERIAL THAT IS SUITABLE SHALL BE USED IN THE FILL SECTIONS OF THE SITE. NO SUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE. ANY EXCESS SUITABLE MATERIAL SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER.

EXCAVATION FOR MANHOLES, CATCH BASINS, AND OTHER ACCESSORIES SHALL BE SUFFICIENT TO LEAVE AT LEAST 12 INCHES IN THE CLEAR BETWEEN THEIR OUTER SURFACES AND THE EMBANKMENT OF TIMBER THAT MAY BE USED TO PROTECT THEM.



PLAN VIEW

THIS WORK CONSISTS OF SODDING AREAS CLEARED DURING CONSTRUCTION AND NOT PAVED, OR AS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS. ALL MATERIAL AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH SECTION 570, 571, 573, OR 575 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST REVISION.

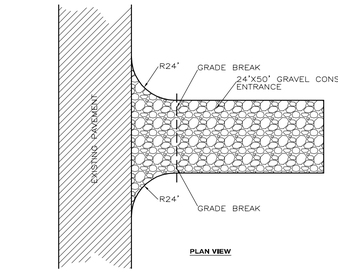
USE ST. AUGUSTINE GRASS (FLORATAM) SOD. THE SOD SHALL BE LIVE, FRESH AND UNINJURED AT THE TIME OF PLANTING AND SHALL HAVE A THICK MAT OF ROOTS WITH ENOUGH ADHERING SOIL TO ASSURE GROWTH. APPLY SOD WITHIN 72 HOURS OF CUTTING OR STACKING TO KEEP MOIST.

PREPARE THE GROUND BY LOOSENING THE SOIL. PLACE SOD ON THE PREPARED SOIL WITH EDGES IN CLOSE CONTACT, STAGGER THE SOD PIECES SO AS TO AVOID A CONTINUOUS DOWNHILL SEAM. TAMP THE OUTER EDGES OF THE SODDED AREA TO PRODUCE A SMOOTH CONTOUR.

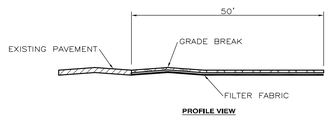
KEEP SOD CONTINUOUSLY MOIST TO A DEPTH BELOW THE ROOT ZONE FOR THREE WEEKS AFTER PLACEMENT.

SODDING DETAIL

NOT TO SCALE



PLAN VIEW



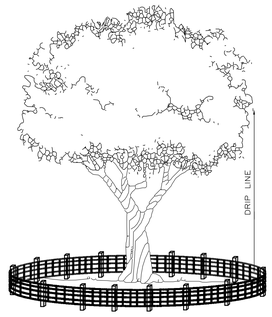
PROFILE VIEW

NOTE:

1. GRAVEL CONSTRUCTION ENTRANCE SHALL BE 24' WIDE AND 50' LONG.
2. CONSTRUCTION ENTRANCE SHALL BE 6" OF #57 STONE OVERLAYING FILTER FABRIC.
3. ALGEBRAIC DIFFERENCE OF SLOPE FROM EXISTING ROAD AND SLOPE FROM EDGE OF PAVEMENT TO GRADE BREAK SHALL NOT EXCEED 12%.
4. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS.
5. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR BASIN.

CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



CORD FENCE – POSTS WITH A MINIMUM SIZE 2 INCHES SQUARE OR 2 INCHES IN DIAMETER SET SECURELY IN GROUND AND PROTRUDING AT LEAST 4 FEET ABOVE THE GROUND SHALL BE PLACED AT THE LIMITS OF CLEARING WITH ORANGE CONSTRUCTION MESH FENCING RUNNING BETWEEN POSTS.

TREE BARRIER DETAIL

NOT TO SCALE

SEEDING RATE ZONES

TYPE OF SEED	SEEDING RATES (LBS/AC) ZONE I COASTAL	ZONE I INLAND	ZONE II COASTAL	ZONE II INLAND
	MAR. TO NOV.	NOV. TO MAR.	MAR. TO OCT.	OCT. TO MAR.	FEB. TO DEC.	DEC. TO FEB.	FEB. TO DEC.	DEC. TO FEB.
PERMANENT GRASS								
UNHULLED BERMUDA	15	15	10	15	15	15	10	15
BAHIA ARGENTINA OR PENSACOLA			30	30			30	30
QUICK GROWING								
BROWN TOP MILLET	20		20		20		20	
ANNUAL RYE GRASS		20		20		20		20
TOTAL POUNDS PER ACRE	35	35	60	65	35	35	60	65

NOTE: THE SEEDING RATES SHOWN IN THIS TABLE APPLY ONLY WHEN SEED IS SPREAD BY AN APPROVED MECHANICAL SPREADER MEETING THE REQUIREMENTS OF SECTION 570 AND 577 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES

1. SPECIAL ATTENTION IS TO BE DIRECTED TO THE CONSTRUCTION OF THE REQUIRED 1" DROP–OFF AT EDGE OF PAVEMENT.
2. FERTILIZE ENTIRE UNPAVED SHOULDER AND FRONT SLOPE TO TOE OF SLOPE OR BOTTOM OF DITCH.
3. TOPSOIL OBTAINED FROM BORROW PITS OR OTHER SOURCES MAY BE USED IN LIEU OF EXCAVATED TURF AND TOPSOIL WHEN ECONOMICALLY FEASIBLE. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUBSTITUTING TOPSOIL FOR EXCAVATED TURF OR TOPSOIL.

TOPSOIL: IF THE QUANTITY OF EXISTING STORED OR EXCAVATED TOPSOIL IS INADEQUATE FOR PLANTING, SUFFICIENT ADDITIONAL TOPSOIL SHALL BE FURNISHED. TOPSOIL FURNISHED SHALL BE A NATURAL, FERTILE, FRIABLE SOIL, POSSESSING CHARACTERISTICS OF REPRESENTATIVE PRODUCTIVE SOILS IN THE VICINITY. IT SHALL BE OBTAINED FROM NATURALLY WELL–DRAINED AREAS.

TOPSOIL SHALL BE WITHOUT ADMIXTURE OF SUBSOIL AND FREE FROM JOHNSON GRASS (SORGHUM HALEPENSE), NUT GRASS (CYPERUS ROTUNDUS) AND OBJECTIONABLE WEEDS AND TOXIC SUBSTANCES.

GROUND LIMESTONE (DOLOMITE) CONTAINING NOT LESS THAN 85 PERCENT OF TOTAL CARBONATES, AND SHALL BE GROUND TO SUCH A FINENESS THAT 50 PERCENT WILL PASS A 100–MESH SIEVE AND 90 PERCENT WILL PASS A 20–MESH SIEVE.

16–16–16 FORMULATION OF WHICH 60 PERCENT OF THE NITROGEN IS IN THE UREA–FORMALDEHYDE FORM AND SHALL CONFORM TO THE APPLICABLE STATE FERTILIZER LAWS. IT SHALL BE GRANULATED SO THAT 80 PERCENT IS HELD ON A 16–MESH SCREEN, UNIFORM IN COMPOSITION, DRY AND FREE–FLOWING. MULCH: CLEAN HAY OR FREE STRAW MULCH.

AREAS TO BE GRASSED SHALL BE GRADED TO REMOVE DEPRESSIONS, UNDULATIONS, AND IRREGULARITIES IN THE SURFACE BEFORE GRASSING.

PLACING TOPSOIL: AREAS TO BE GRASSED SHALL HAVE A MINIMUM TOPSOIL OVER OF TWO INCHES. TOPSOIL SHALL NOT BE PLACED WHEN THE SUBGRADE IS EXCESSIVELY WET, EXTREMELY DRY OR IN A CONDITION OTHERWISE DETRIMENTAL TO THE PROPOSED PLANTING OR PROPER GRADING

TILLAGE: THE AREA TO BE GRASSED SHALL BE THOROUGHLY TILLED TO A DEPTH OF FOUR INCHES WITH A PLOW AND DISC HARROW OR ROTARY TILLING MACHINERY UNTIL A SUITABLE BED HAS BEEN PREPARED AND NO CLODS OR CLUMPS REMAIN LARGER THAN 1–1/2 INCHES IN DIAMETER.

APPLICATION OF LIME: THE PH OF THE SOIL SHALL BE DETERMINED. IF THE PH IS BELOW 5.0, SUFFICIENT LIME SHALL BE ADDED TO PROVIDE A PH BETWEEN 5.5 AND 6.5. THE LIME SHALL BE THOROUGHLY INCORPORATED INTO THE TOP THREE TO FOUR INCHES OF THE SOIL. LIME AND FERTILIZER MAY BE APPLIED IN ONE OPERATION.

APPLICATION OF FERTILIZER: FERTILIZER SHALL BE APPLIED AT THE RATE OF 6 POUNDS PER 1,000 SQUARE FEET AND SHALL BE THOROUGHLY INCORPORATED INTO THE TOP THREE TO FOUR INCHES OF SOIL.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AS SPECIFIED HEREIN. IMMEDIATELY BEFORE SEEDS ARE SOWN AND AFTER FERTILIZER AND LIME ARE APPLIED, THE GROUND SHALL BE SCARIFIED AS NECESSARY AND SHALL BE RAKED UNTIL HE SURFACE IS SMOOTH, FRIABLE, AND OF UNIFORMLY FINE TEXTURE. AREAS TO BE GRASSED SHALL BE SEEDED EVENLY WITH A MECHANICAL SPREADER, RAKED LIGHTLY, ROLLED WITH A 200–POUND ROLLER, AND WATERED WITH A FINE SPRAY.

SEEDS SHALL BE APPLIED AT THE FOLLOWING RATE:

SEEDS RATE OF APPLICATION

BERMUDA 6 LBS./1000 SQ.FT.

SEEDED AREAS SHALL BE MULCHED AT THE RATE OF NOT LESS THAN 1–1/2" LOOSE MEASUREMENT OVER ALL SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT. MULCH SHALL BE CUT INTO THE SOIL WITH EQUIPMENT CAPABLE OF CUTTING THE MULCH UNIFORMLY INTO THE SOIL. MULCHING SHALL BE DONE WITHIN 24 OURS OF THE TIME SEEDING IS COMPLETED.

AFTER SEEDING AND MULCHING, A CULTIPACKER, TRAFFIC ROLLER, OR OTHER SUITABLE EQUIPMENT SHALL BE USED FOR ROLLING THE GRASSED AREAS. AREAS SHALL THEN BE WATERED WITHIN A FINE SPRAY.

ALL AREAS TO BE GRASSED SHALL BE PROTECTED AGAINST EROSION AT ALL TIMES. FOR PROTECTION DURING WINTER MONTHS (NOVEMBER 1ST THRU MARCH 31ST) ITALIAN RYE GRASS SHALL BE PLANTED AT A RATE OF FOUR POUNDS PER 1,000 SQUARE FEET ON ALL AREAS WHICH ARE NOT PROTECTED BY PERMANENT GRASS.

SEEDING DETAIL

NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
C/D: B5502702
NOT RELEASED FOR CONSTRUCTION UNTIL DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LC # 57988

SHEET NUMBER 7 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA

SITE DRAINAGE

ALL OFF-SITE AND ON-SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING:

EXCAVATION, BEDDING, FILTER MATERIAL AND BACKFILL FOR ALL STORM SEWER, SUBSURFACE DRAINS AND DRAINAGE STRUCTURES.

COMPLETE INSTALLATION OF ALL STORM SEWER, SUBSURFACE DRAINS, CATCH BASINS, JUNCTION BOXES, MANHOLES, ETC., INCLUDING ALL RELATED FITTINGS, JOINTS COVERS, GRATES, FRAMES, RUNGS, ETC.

ANY WORK WITHIN STREET OR HIGHWAY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNMENTAL AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL OF THESE GOVERNING AUTHORITIES HAVE BEEN NOTIFIED.

POLYVINYL CHLORIDE (PVC), FOR PIPE UP TO AND INCLUDING TEN INCHES (10") IN DIAMETER, SHALL CONFORM TO ASTM D3034 SDR 35 WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D3212.

REINFORCED CONCRETE PIPE, FOR PIPE TWELVE INCHES (12") IN DIAMETER AND UP, SHALL CONFORM TO ASTM C-76, CLASS IV OR AASHTO M-170 WITH BELL AND SPIGOT OR TONGUE AND GROOVE COMPRESSION JOINT CONFORMING TO ASTM C-443.

MANHOLES, CATCH BASINS, ETC. SHALL BE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL BE CONSTRUCTED OF THE FOLLOWING:

REINFORCED PRECAST CONCRETE MANHOLE SECTIONS INCLUDING CONCENTRIC OR ECCENTRIC CONES AND GRADE RINGS SHALL BE 4000 PSI CONCRETE AND CONFORM TO ASTM C478 OR AASHTO M-199. SECTIONS SHALL BE COMPLETE WITH 3/4" ROUND CAST IN PLACE WROUGHT IRON STEPS.

BRICK SHALL BE SOUND, HARD BURNED THROUGHOUT AND OF UNIFORM SIZE AND QUALITY AND SHALL BE IN ACCORDANCE WITH ASTM C-32, GRADE MS OR MM.

CONCRETE MASONRY SHALL BE SOLID PRECAST SEGMENTAL CONCRETE MASONRY UNITS CONFORMING TO ASTM C-139.

IRON CASTINGS SHALL CONFORM TO ASTM A-48, CLASS 30. BEARING SURFACES BETWEEN CAST IRON FRAMES, COVERS AND GRATES SHALL BE MACHINED, FITTED TOGETHER AND MATCH MARKED TO PREVENT ROCKING.

SYSTEM IDENTIFYING LETTER 2" HIGH SHALL BE STAMPED OR CAST INTO ALL COVERS SO THAT THE MAY BE PLAINLY VISIBLE.

CASTINGS SHALL BE MANUFACTURED BY EAST JORDAN IRON WORKS, INC. NEENAH FOUNDRY COMPANY, VULCAN FOUNDRY COMPANY OR EQUAL.

MANHOLE STEPS FOR BRICK OR CONCRETE MASONRY STRUCTURES SHALL BE CAST IRON ASPHALT COATED, NEENAH FOUNDRY COMPANY "R-1980-E" OR EQUAL.

CONCRETE AND MASONRY MATERIALS FOR CONSTRUCTION OF STORM DRAINAGE STRUCTURES SHALL CONSIST OF THE FOLLOWING:

PORTLAND CEMENT SHALL BE STANDARD BRAND OF PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I OR II.

FINE AND COARSE AGGREGATES FOR CONCRETE SHALL BE PER ASTM C-33. AGGREGATES SHALL BE WELL GRADED FROM FINE TO COARSE WITHIN LIMITS SPECIFIED IN ASTM C-33. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4".

AGGREGATE FOR CEMENT MORTAR SHALL BE CLEAN, SHARP SAND CONFORMING TO ASTM C-144. GRADE SAND FROM COARSE TO FINE WITH 100% PASSING NO. 8 SIEVE, AND NOT OVER 10 TO 30% PASSING NO. 50 SIEVE. HYDRATED LIME SHALL COMPLY WITH ASTM C-207, TYPE S. WATER SHALL BE CLEAN AND FREE FROM DELETERIOUS MATERIALS.

ALL MATERIAL USED FOR CONCRETE AND THE DESIGN OF ALL CONCRETE MIXES SHALL CONFORM WITH THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE (ACI 211.1-81).

ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL DEVELOP A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.

JOINT SEALANT SHALL BE HOT LAID BITUMINOUS SEALER.

RIP RAP SHALL BE SOUND, TOUGH DURABLE ROCK OR BROKEN CONCRETE AS APPROVED BY THE GEOTECHNICAL ENGINEER. RIP RAP SHALL BE AT LEAST EIGHT INCH (8") IN ONE DIMENSION AN SHALL HAVE A VOLUME OF NOT LESS THAN 1/3 CUBIC FOOT. SMALLER PIECES PERMITTED FOR FILLING VOIDS.

REINFORCING STEEL FOR CONCRETE SHALL BE INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 40. WELDED WIRE MESH SHALL CONFORM TO ASTM DESIGNATION A185 FOR SMOOTH WIRE AND ASTM A497 FOR DEFORMED WIRE.

FORMS FOR FOUNDATIONS AND OTHER CONCRETE WORK SHALL BE WOOD. FORMS SHALL BE OF SUFFICIENT STRENGTH TO PREVENT DEFORMATION UNDER LOAD AND TIGHT ENOUGH TO PREVENT LEAKAGE. FOUNDATIONS MAY BE POURED AGAINST EARTH WHERE CONDITIONS PERMIT.

ALL REINFORCEMENT SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318-77. WELDED WIRE MESH SHALL BE LAPPED 6-INCHES AT ALL EDGES.

THE MIXING, PLACING, CURING AND FINISHING OF CONCRETE SHALL COMPLY WITH ACI 304 AND ACI 318. ALL EXPOSED SURFACES SHALL BE GIVEN A HARD STEEL TROWEL FINISH WITH NO TROWEL MARKS REMAINING. NO CEMENT SHALL BE DUSTED ON THE SURFACE. ALL CONCRETE SHALL BE CURED BY COATING WITH A CLEAR CURING NO CEMENT CONFORMING TO ASTM C-309, OR BY KEEPING IT WET FOR AT LEAST SIX DAYS AFTER POURING. AFTER THE FORMS ARE STRIPPED, ALL EXPOSED CONCRETE SURFACES SHALL BE POINTED AS NEEDED AND RUBBED TO A UNIFORM FINISH.

CONCRETE, UNLESS OTHERWISE NOTED, SHALL HAVE COMPRESSIVE STRENGTH AFTER 28 DAYS OF 3000 PSI MINIMUM. MIX SHALL BE SO PROPORTIONED TO PROVIDE A MINIMUM OF 517 POUNDS OF CEMENT PER CUBIC YARD.

CONCRETE FILL BELOW GRADE FOR PIPE CRADLES ETC. MAY BE 2500 PSI AT 28 DAYS.

CONCRETE, WHERE EXPOSED TO THE WEATHER, SHALL BE AIR ENTRAINED. AIR ENTRAINMENT SHALL BE ACCOMPLISHED BY THE USE OF ADDITIVES CONFORMING TO ASTM C-260. AIR CONTENT SHALL BE 6% + 1%. ADDITIVE SHALL BE USED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S PRINTED DIRECTIONS.

READY-MIX CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-94.

CEMENT MORTAR SHALL BE AS SPECIFIED HEREINAFTER. USE METHODS OF MIXING MORTAR MATERIALS CAN BE CONTROLLED AND ACCURATELY MAINTAINED DURING WORK PROGRESS. MORTAR SHALL NOT BE MIXED IN GREATER QUANTITIES THAN SATISFACTORY WORKABILITY. RETEMPERING OF MORTAR IS NOT PERMITTED.

MORTAR FOR LAYING BRICK OR CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C-270, TYPE M, AVERAGE COMPRESSIVE STRENGTH 2500 AT 28 DAYS. MORTAR MIX SHALL BE PROPORTIONED BY VOLUME. MORTAR FOR PARGING SHALL CONSISTS OF ONE PART PORTLAND CEMENT AND TWO PARTS SAND.

MORTAR FOR GROUTING OF RIP RAP SHALL CONSIST OF ONE PART PORTLAND CEMENT AND THREE PARTS SAND.

STORM WATER SEWERS: STORM SEWERS SHALL BE INSTALLED IN LOCATIONS AND OF SIZES INDICATED ON DRAWING.

LAY PIPE, EMBED IT FIRMLY TO REQUIRED LINE AND GRADE WITH BELLS OF GROOVE END UP-GRADE. FIT ENDS TOGETHER, EXCAVATE BELL HOLES SO THAT SEWER WILL HAVE SMOOTH AND UNIFORM INVERT THROUGHOUT ITS LENGTH.

CORRUGATED METAL PIPE SHALL BE PLACED ON A FLAT BOTTOM TRENCH WITH HAUNCHES SOLIDLY SUPPORTED BY TAMPED BEDDING MATERIAL.

WHERE GROUND IS FOUND UNSUITABLE TO SUPPORT PIPE, PROVIDE CONCRETE CRADLES. DEPOSIT CONCRETE FULL WIDTH OF TRENCH 4" DEEP MINIMUM TO BOTTOM OF PIPE, REINFORCE CONTINUOUSLY WITH TWO (2) NO. 4 REINFORCING BARS. BEFORE CONCRETE IS SET, EMBED PIPE EVENLY, DEPOSIT REMAINDER OF CONCRETE TO CENTERLINE OF PIPE AND TAMP IN A MANNER TO AVOID DISTURBING PIPE.

WHERE STORM SEWER CROSSES A SANITARY SEWER OR WATER LINE AND THE STORM SEWER IS WITHIN ONE AND A HALF (1-1/2) FEET OF THE SANITARY SEWER PIPE OR WATER LINE, THE INTERSECTION OF THE PIPE OR LINE SHALL BE EMBEDDED IN CONCRETE FOR A DISTANCE OF FIVE FEET (5') EACH WAY FROM CENTERLINE OF INTERSECTION.

PROVIDE POURED CONCRETE FOUNDATIONS FOR DRAINAGE STRUCTURES.

PRECAST CONCRETE BASE MAY BE USED WHERE APPROVED BY THE GEO-TECHNICAL ENGINEER. PRECAST CONCRETE BASE MUST BE SET LEVEL ON SAND CUSHION OF NOT LESS THAN 2" NOR MORE THAN 4".

MANHOLES AND CATCH BASINS SHALL BE CONSTRUCTED OF BRICK, CONCRETE MASONRY OR PRECAST CONCRETE WITH CAST IRON FRAMES, COVERS AND MANHOLE STEPS, AS INDICATED ON DRAWINGS AND SPECIFIED HEREIN.

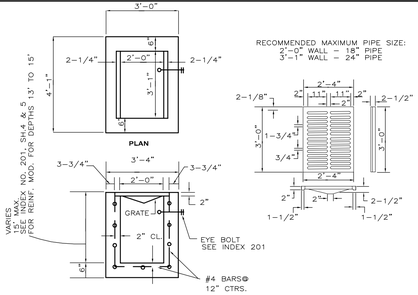
RIP RAP SHALL BE LAID OVER FILTER FABRIC FROM THE BOTTOM UPWARD, STONES SHALL BE LAID BY HAND WITH EIGHT (8") INCH MINIMUM DIMENSION PERPENDICULAR TO GRADE WITH WELL BROKEN JOINTS, COMPACTED AS IT GOES, TRUE TO LINE. ALL JOINTS SHALL BE FILLED WITH CEMENT MORTAR SURFACE OF STONE TO BE EXPOSED. CLEAN JOINTS WITH SIRE BRUSH.

BEFORE BACKFILLING AROUND DRAINAGE STRUCTURES, ALL FORMS, TRASH AND DEBRIS SHALL BE REMOVED AND CLEARED AWAY. SELECTED EXCAVATED MATERIAL SHALL BE PLACED SYMMETRICALLY ON ALL SIDES IN EIGHT INCH (8") MAXIMUM LAYERS; EACH LAYER SHALL BE MOISTENED AND COMPACTED WITH MECHANICAL OR HAND TAMPERS.

INFILTRATION OF THE STORM DRAINAGE SYSTEM SHALL NOT EXCEED 0.60 GALLONS PER INCH OF INTERNAL PIPE DIAMETER PER ONE HUNDRED FEET (100') OF PIPELINE PER HOUR WITH A MAXIMUM HYDROSTATIC HEAD AT THE CENTER LINE OF THE PIPE OF TWENTY FIVE FEET (25'), OR AS REQUIRED BY GOVERNING CODE AUTHORITIES.

CATCH BASIN FRAMES AND GRATINGS: ASPHALT COATED GRAY CAST IRON, ANSI/ASTM A 48, CLASS 30 B.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY ALL MATERIALS NECESSARY TO COMPLETE DRAINAGE.



GENERAL NOTES

1. THESE INLETS ARE SUITABLE FOR BICYCLE AND PEDESTRIAN AREAS AND ARE TO BE USED IN DITCHES, MEDIANS AND OTHER AREAS SUBJECT TO INFREQUENT TRAFFIC LOADINGS BUT ARE NOT TO BE PLACED IN AREAS SUBJECT TO ANY HEAVY WHEEL LOADS.

2. INLETS SUBJECT TO MINIMAL DEBRIS SHOULD BE CONSTRUCTED WITHOUT SLOTS. WHERE DEBRIS IS A PROBLEM INLETS SHOULD BE CONSTRUCTED WITH SLOTS. SLOTTED INLETS LOCATED WITHIN ROADWAY CLEAR ZONES AND IN AREAS ACCESSIBLE TO PEDESTRIANS SHALL HAVE TRAVERSABLE SLOTS. THE TRAVERSABLE SLOT MODIFICATION IS NOT ADAPTABLE TO INLET TYPE H. SLOTS MAY BE CONSTRUCTED AT EITHER OR BOTH ENDS AS SHOWN ON PLANS.

3. STEEL GRATES ARE TO BE USED ON ALL INLETS WHERE BICYCLE TRAFFIC IS ANTICIPATED. STEEL GRATES ARE TO BE USED ON ALL INLETS WITH TRAVERSABLE SLOTS. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON INLETS WITHOUT SLOTS WHERE BICYCLE TRAFFIC IS NOT ANTICIPATED. EITHER CAST IRON OR STEEL GRATES MAY BE USED ON ALL INLETS WITH NON-TRAVERSABLE SLOTS. SUBJECT TO THE SELECTION DESCRIBED ABOVE, WHEN ALTERNATE G GRATE IS SPECIFIED IN THE PLANS, EITHER THE STEEL GRATE, HOT DIPPED GALVANIZED AFTER FABRICATION, OR THE CAST IRON GRATE MAY BE USED, UNLESS THE PLANS STIPULATE THE PARTICULAR TYPE.

4. RECOMMENDED MAXIMUM PIPE SIZES SHOWN ARE FOR CONCRETE PIPE. PIPE SIZES LARGER THAN THOSE RECOMMENDED MUST BE CHECKED FOR FIT.

5. ALL EXPOSED CORNERS AND EDGES OF CONCRETE ARE TO CHAMFERED 3/4".

6. PAVEMENT TO BE USED ON INLETS WITHOUT SLOTS AND INLETS WITH NON-TRAVERSABLE SLOTS ONLY WHEN CALLED FOR IN THE PLANS; BUT REQUIRED ON ALL TRAVERSABLE SLOT INLETS. COST TO BE INCLUDED IN CONTRACT UNIT PRICE FOR INLETS. QUANTITIES SHOWN ARE FOR INFORMATION ONLY.

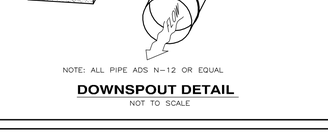
7. TRAVERSABLE SLOTS CONSTRUCTED IN EXISTING INLETS SHALL BE PAID FOR AS INLETS PARTIAL, AND SHALL INCLUDE THE COST FOR SLOT OPENINGS, PAVING AND ANY REQUIRED REPLACEMENT GRATES.

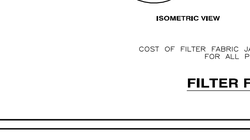
8. SODDING TO BE USED ON ALL INLETS NOT LOCATED IN PAVED AREAS AND PAID FOR UNDER CONTRACT UNIT PRICE FOR SODDING, SY.

9. FOR SUPPLEMENTARY DETAILS SEE INDEX NO. 201.

FDOT TYPE "C" INLET DETAIL

NOT TO SCALE





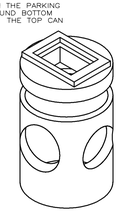
CONCRETE MITERED END DETAIL

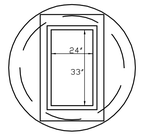
NOT TO SCALE

PRODUCT SPECIFICATIONS

THIS INLET IS A 48" & 60" DIA. MODIFIED TYPE "C" INLET. IT IS USED IN THE PARKING LOTS AND SWALE LOCATIONS. THE ADVANTAGE OF THIS DESIGN IS THE ROUND BOTTOM WHICH ALLOWS FOR PIPES TO ENTER AND EXIT AT 90 DEG. TO THE WALL. THE TOP CAN THEN BE ROTATED TO POSITION GRATE AS REQUIRED.

DIMENSIONS:			
A	B	C	D
48"	5"	0"	VARIES
60"	6"	6"	VARIES





MATERIALS

CONCRETE: 4000 PSI, TYPE II CEMENT

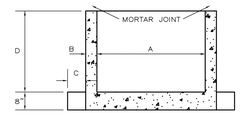
WALL REINFORCING:
PER ASTM C-478 STANDARDS

TOP SLAB REINFORCING:
48" DIA. - #6 @ 6" C.C.E.W. WITH 2 EA. #6 (4 SIDES) AROUND OPENING*
60" DIA. - #6 @ 6" C.C.E.W. WITH 2 EA. #6 (4 SIDES) AROUND OPENING*

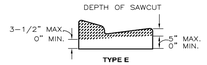
BOTTOM SLAB REINFORCING:
48" DIA. - #4 @ 12" C.C.E.W. *
60" DIA. - #5 @ 12" C.C.E.W. *

NOTE:

* GRADE 40, OR EQUIVALENT WELDED WIRE MESH.

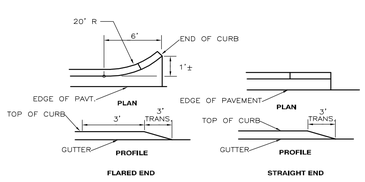


MODIFIED TYPE "C" INLET DETAIL.

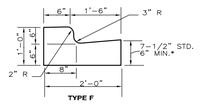


SAWCUTS SHOULD BE AVOIDED WITHIN VALLEY GUTTER AND WITHIN CURB AND GUTTER ENDINGS.

CONTRACTION JOINT IN CURB AND GUTTER



CURB AND GUTTER TYPES E AND F



* 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.

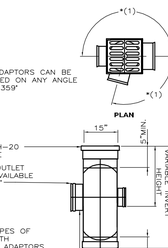
NOTE:
FOR USE ADJACENT TO CONCRETE OF FLEXIBLE PAVEMENT, CONCRETE SHOWN.
FOR DETAILS DEPICTING USAGE ADJACENT TO FLEXIBLE PAVEMENT, SEE DIAGRAM RIGHT.
EXPANSION JOINT, PERFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURB & GUTTER AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.

GENERAL NOTES

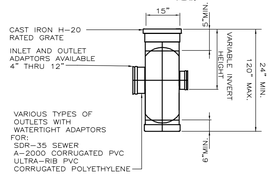
1. FOR CURB, GUTTER AND CURB AND GUTTER PROVIDE 1/8" - 1/4" CONTRACTION JOINTS AT 10' CENTERS (MAX.). CONTRACTION JOINTS ADJACENT TO CONCRETE PAVEMENT ON TANGENTS AND FLAT CURVES ARE TO MATCH THE PAVEMENT JOINTS, WITH INTERMEDIATE JOINTS NOT TO EXCEED 10' CENTERS. CURB, GUTTER AND CURB AND GUTTER EXPANSION JOINTS SHALL BE LOCATED IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS.
2. ENDS OF CURBS TYPES B AND D SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

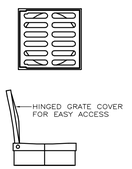
TYPE "F" CURB DETAIL

NOT TO SCALE



GRATE HAS H-20 (HEAVY TRAFFIC) DOT RATING
QUALITY: MATERIAL SHALL CONFORM TO ASTM A48 - CLASS 30B
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT

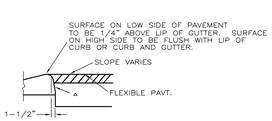




NOTE: USE ADS CATCH BASIN OR EQUAL.

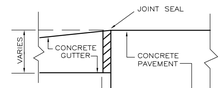
15" ADS CATCH BASIN DETAIL

NOT TO SCALE



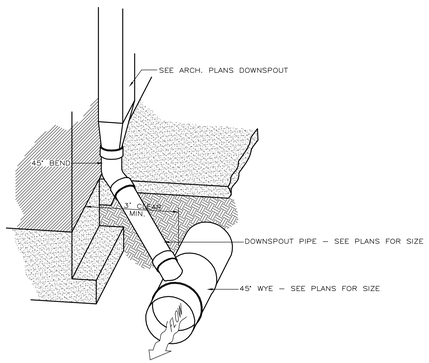
Δ APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN.

CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT



□ APPLIES TO BOTH HIGH AND LOW SIDES OF PAVEMENT, LOW SIDE SHOWN

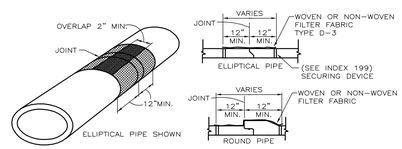
EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT



NOTE: ALL PIPE ADS N-12 OR EQUAL

DOWNSPOUT DETAIL

NOT TO SCALE



COST OF FILTER FABRIC JACKET TO BE INCLUDED IN COST OF PIPE CULVERTS. FOR ALL PIPE TYPES - CONCRETE PIPE SHOWN

FILTER FABRIC JACKET DETAIL

NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E02
NOT RELEASED FOR CONSTRUCTION UNTIL DATED:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7285
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LIC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LIC # 57988

SHEET NUMBER 8 OF 12

85502 - CENTRAL CREDIT UNION OF FLORIDA

SITE UTILITIES

MATERIALS: WHERE GROUND IS FOUND UNSUITABLE TO SUPPORT PIPE, PROVIDE CRADLES OF 2500 PSI. CONCRETE FULL WIDTH OF TRENCH WITH TWO NO. 4 REINFORCING BARS CONTINUOUSLY ALONG THE BOTTOM OF PIPE.

BACKFILL: UNLESS OTHERWISE NOTED, SHALL BE COARSE SAND, FINE GRAVEL OR EARTH HAVING A LOW PLASTICITY INDEX, FREE OF ROCKS, DEBRIS AND OTHER FOREIGN MATERIALS AND DEFINED AS ALL PASSING THROUGH A 3/8" SIEVE AND NOT MORE THAN TEN PERCENT (10%) BY VOLUME PASSING THROUGH A 200 MESH SIEVE.

UTILITY PIPING AND FITTINGS SHALL BE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL CONFORM TO THE FOLLOWING: MANHOLES STRUCTURES SHALL BE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL BE CONSTRUCTED OF THE FOLLOWING:

REINFORCED PRECAST CONCRETE MANHOLE SECTIONS INCLUDING CONCENTRIC OR ECCENTRIC CONES AND GRADE RINGS SHALL BE 4000 PSI. CONCRETE AND CONFORM TO ASTM C-478 OR AASHTO M-199. SECTIONS SHALL BE COMPLETE WITH 3/4" ROUND CAST IN PLACE WROUGHT IRON STEPS.

BRICK SHALL BE SOUND, HARD BURNED THROUGHOUT AND OF UNIFORM SIZE AND QUALITY AND SHALL BE IN ACCORDANCE WITH ASTM C-32, GRADE MS OR MM.

CONCRETE MASONRY SHALL BE SOLID PRECAST SEGMENTAL CONCRETE MASONRY UNITS CONFORMING TO ASTM C-139.

IRON CASTING SHALL CONFORM TO ASTM A-48, CLASS 30. BEARING SURFACES BETWEEN CAST IRON FRAMES, COVERS, GRATES SHALL BE MACHINED, FITTED TOGETHER AND MATCH MARKED TO PREVENT ROCKING. SYSTEM IDENTIFYING LETTER 2" HIGH SHALL BE STAMPED OR CAST INTO ALL COVERS SO THAT THEY MAY BE PLAINLY VISIBLE. CASTING SHALL BE MANUFACTURED BY EAST JORDAN IRON WORKS, INC., NEENAH FOUNDRY COMPANY OR EQUAL.

CONCRETE AND MASONRY MATERIALS FOR CONSTRUCTION OF SITE UTILITY STRUCTURES AND PADS SHALL CONSIST OF THE FOLLOWING:

PORTLAND CEMENT SHALL BE STANDARD BRAND OF PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I OR II.
FINE OR COARSE AGGREGATES FOR CONCRETE SHALL BE PER ASTM C-33. AGGREGATES SHALL BE WELL GRADED FROM FINE TO COARSE WITHIN LIMITS SPECIFIED IN ASTM C-33. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4".
AGGREGATE FOR CEMENT MORTAR SHALL BE CLEAN, SHARP SAND CONFORMING TO ASTM C-144. GRADE SAND FROM COARSE TO FINE WITH 100% PASSING NO. 8 SIEVE, AND NOT OVER 10% TO 30% PASSING NO. 50 SIEVE.
HYDRATED LIME SHALL COMPLY WITH ASTM C-207, TYPE S.
WATER SHALL BE CLEAN AND FREE FROM DELETERIOUS MATERIALS.

REINFORCING STEEL FOR CONCRETE SHALL BE INTERMEDIATE GRADE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 40.

FORMS FOR CONCRETE WORK SHALL BE WOOD. FORMS SHALL BE SUFFICIENT STRENGTH TO PREVENT DEFORMATIONS UNDER LOAD AND TIGHT ENOUGH TO PREVENT LEAKAGE. FOUNDATIONS MAY BE POURED AGAINST EARTH WHERE CONDITIONS PERMIT.

CONCRETE, UNLESS OTHERWISE NOTED, SHALL HAVE COMPRESSIVE STRENGTH AFTER 28 DAYS OF 3000 PSI MINIMUM. MIX SHALL BE SO PROPORTIONED TO PROVIDE A MINIMUM OF 517 POUNDS OF CEMENT PER CUBIC YARD. CONCRETE FILL BELOW GRADE FOR THRUST BLOCKS, PIPE CRADLES ETC. MAY BE 2500 PSI. AT 28 DAYS.

CONCRETE, WHERE EXPOSED TO THE WEATHER, SHALL BE AIR ENTRAINED. AIR ENTRAINMENT SHALL BE ACCOMPLISHED BY THE USE OF ADDITIVES CONFORMING TO ASTM C-260. AIR CONTENT SHALL BE 6% + 1%. ADDITIVE SHALL BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED DIRECTIONS.

READY-MIX CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-94.

TYPE M, AVERAGE COMPRESSIVE STRENGTH 2500 PSI. AT 28 DAYS. MORTAR MIX SHALL BE PROPORTIONED BY VOLUME.

MORTAR FOR PARGING SHALL CONSIST OF ONE PART PORTLAND CEMENT AND TWO PARTS SAND.

BACKFILL SHALL BE SAME MATERIAL SPECIFIED FOR PIPE BEDDING. WHERE SERVICE OR UTILITY LINES CROSS A STREET, BEDDING SHALL BE CARRIED TO FIVE FEET (5') BEHIND THE CURB, OR WHERE SIDEWALKS EXIST, TO THE SIDE OF THE SIDEWALK FARTHEST AWAY FROM THE STREET.

FLUSHING REQUIREMENTS FOR WATER AND SEWER FORCE MAINS

FLUSHING TIME SHALL BE AT LEAST THAT AMOUNT OF TIME NEEDED TO FLUSH TWO TIMES THE PIPE VOLUME AFTER 3 FPS VELOCITY IS REACHED OR UNTIL CLEAR, WHICHEVER IS LONGER. MAXIMUM LENGTH OF PIPE BETWEEN FLUSHING ASSEMBLIES SHALL BE 5,000 FEET.

SEWER COLLECTION SYSTEM

POLY (VINYL CHLORIDE) PIPE (PVC): PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL BE UNPLASTICIZED POLYVINYL CHLORIDE (PVC) MEETING AND/OR EXCEEDING ASTM SPECIFICATIONS D-3034 (LATEST EDITION).

PIPE LENGTHS SHALL NOT EXCEED 20 FEET AND PROVISIONS SHALL BE MADE AT EACH JOINT TO ACCOMMODATE EXPANSION AND CONTRACTIONS.

COMPLY WITH REQUIREMENTS OF FS RR-F-621, FOR TYPE AND STYLE REQUIRED.

MATERIALS FOR SEWER FORCE MAINS: PVC PIPE FOR FORCE MAINS SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-2241 FOR PRESSURE RATING OF 160 PSI 230 C (73 DEGREES F). PIPE JOINTS SHALL BE INTEGRAL BELL AND SPIGOT TYPE WITH RUBBER RING SEALING GASKET. THE PIPE BELL SHALL BE DESIGNED TO BE AT LEAST AS STRONG AS THE PIPE WALL. STANDARD LENGTHS SHALL BE 20 FEET, EXCEPT THAT 15% OF TOTAL FOOTAGE FOR A PARTICULAR PROJECT MAY BE RANDOM LENGTHS OF NOT LESS THAN 10 FEET EACH. EACH PIECE OF PIPE SHALL BE TESTED BY THE MANUFACTURER OF 6000 PSI FOR A MINIMUM OF 5 SECONDS. THE BELL SHALL BE TESTED WITH THE PIPE. ALL PIPE SHALL BE LISTED BY UNDERWRITER'S LABORATORIES, INC., AND BY FACTORY MUTUAL AS APPROVED FOR USE IN UNDERGROUND MUNICIPAL WATER DISTRIBUTION SYSTEMS AND PRIVATE FIRE PROTECTION SYSTEM. CAST IRON OR DUCTILE IRON FITTINGS SHALL BE USED WITH PVC PIPE.

CAST IRON FITTINGS SHALL BE MECHANICAL JOINT AND SHALL CONFORM TO ANSI SPECIFICATION A21.10 FOR SIZES 3 INCHES THROUGH 12 INCHES AND SHALL BE CLASS 250. FITTINGS 14 INCHES AND LARGER SHALL BE CLASS 150 AND SHALL BE OF THE DIMENSIONS AND METAL THICKNESSES AS SHOWN IN THE HANDBOOK OF CAST IRON PIPE AS PUBLISHED BY THE CAST IRON PIPE RESEARCH ASSOCIATION. CAST IRON FITTINGS MAY BE USED IN DUCTILE IRON OR CAST IRON LINES, EXCEPT WHERE SHOWN OTHERWISE ON THE DRAWINGS.

DUCTILE IRON FITTINGS SHALL BE DESIGNED FOR PRESSURE RATING OF 250 PSI AND SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATIONS A21.10. FITTING SHALL BE MECHANICAL JOINT. DUCTILE IRON FITTINGS MAY BE USED IN DUCTILE IRON OR CAST IRON LINES, EXCEPT WHERE SHOWN OTHERWISE ON THE DRAWINGS.

THE INTERIOR AND EXTERIOR OF ALL CAST IRON AND DUCTILE IRON FITTINGS SHALL BE COATED WITH AN APPROVED BITUMINOUS COATING. AT THE CONTRACTOR'S OPTION, THE INTERIOR OF THE PIPE MAY BE CEMENT LINED IN ACCORDANCE WITH ANSI A21.4 IN LIEU OF BITUMINOUS COATING.

MATERIALS FOR CONCRETE MANHOLES: PRECAST OF CAST-IN-PLACE, AT CONTRACTOR'S OPTION. USE CONCRETE WHICH WILL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.

INSPECTIONS AND TESTS: IT IS IMPERATIVE THAT ALL SEWERS AND MANHOLES BE BUILT PRACTICALLY WATERTIGHT AND THAT THE CONTRACTOR MUST ADHERE RIGIDLY TO THE SPECIFICATIONS FOR MATERIAL AND WORKMANSHIP.

THE ALLOWABLE LIMIT OF GROUNDWATER INFILTRATION FOR THE GRAVITY SYSTEM OF NEW SEWERS OR ANY ONE TRUNK, OR INTERCEPTOR, SHALL BE IN COMPLETE ACCORDANCE WITH ASTM 425-71T AND SHALL NOT EXCEED A LIMIT OF INFILTRATION EQUAL TO 0.2 GAL/INCH DIAMETER/HOUR/100 LINEAR FEET OF PIPE.

THE TEST WILL BE MADE BY MEASURING THE INFILTRATED FLOW OF WATER OVER A MEASURING WEIR SET UP IN THE INVERT OF THE SEWER, OR BY ALTERNATE METHOD APPROVED BY THE ENGINEER, A KNOWN DISTANCE FROM A TEMPORARY BULKHEAD OR OTHER LIMITING POINT OF INFILTRATION. AFTER THE SEWER OF SEWERS HAVE BEEN PUMPED OUT, AND NORMAL INFILTRATION CONDITIONS PREVAIL, TESTS SHALL BE STARTED.

TESTS SHALL BE RUN CONTINUOUSLY FOR A PERIOD OF NOT LESS THAN THREE HOURS, WITH WEIR READINGS TAKEN AT 20 MINUTE INTERVALS.

PRESSURE AND LEAKAGE TESTS OF SEWAGE FORCE MAIN PIPING

CONTRACTOR SHALL FURNISH ALL GAUGES, METERS, PRESSURE PUMPS, EQUIPMENT, FITTINGS, AND LABOR NEEDED TO TEST THE LINE. THE COST OF THESE ITEMS SHALL BE INCLUDED IN THE PRICE OF THE PIPE. CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO START OF TEST. ALL PIPE INSTALLED SHALL BE TESTED AND WRITTEN ACCEPTANCE ISSUED BY THE ENGINEER PRIOR TO CONNECTION OF NEW LINE TO EXISTING LINES.

THE CONTRACTOR MAY TEST THE SYSTEM WITH JOINTS EXPOSED OR BACKFILLING COMPLETE AT HIS OPTION. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL WATER USED. CARE SHALL BE USED TO PREVENT BACKFLOW OF TEST WATER INTO POTABLE WATER SOURCE. POTABLE WATER SOURCE SHALL BE DISCONNECTED PRIOR TO PRESSURIZING TEST LINE. WATER USED DURING TEST SHALL BE TAKEN FROM A CONTAINER, NOT DIRECTLY FROM THE EXISTING WATER SYSTEM.

AT LEAST 24 HOURS PRIOR TO THE START OF THE PRESSURE AND LEAKAGE TEST, PRESSURE SHALL BE RAISED TO 150 PSIG AND HELD TO ALLOW ANY "SOIL CREEP" OR OTHER STRESS RELAXATION TO OCCUR. IF ANY PRESSURE REDUCTION OCCURS DURING THE 24 HOUR "SHAKEDOWN" PERIOD, REESTABLISH THE REQUIRED HYDROSTATIC TEST PRESSURE, THEN PROCEED WITH THE LEAKAGE TEST.

THE PRESSURE REQUIRED FOR THE FIELD HYDROSTATIC PRESSURE TEST SHALL BE 150 PSI. THE CONTRACTOR SHALL PROVIDE TEMPORARY PLUGS AND BLOCKING NECESSARY TO MAINTAIN THE REQUIRED TEST PRESSURE. CONNECTIONS CONSIST OF AT LEAST ¾ INCHES IN DIAMETER, PIPE RISERS AND ANGLE GLOBE VALVES SHALL BE PROVIDED AT EACH PIPE DEAD-END AND HIGH POINTS IN ORDER TO BLEED AIR FROM THE LINE. DURATION OF PRESSURE TEST SHALL BE AT LEAST TWO HOURS. ALL LEAKS EVIDENT AT THE SURFACE SHALL BE REPAIRED AND LEAKAGE ELIMINATED REGARDLESS OF TOTAL LEAKAGE AS SHOWN BY TEST. LINES WHICH FAIL TO MEET TESTS SHALL REPAIRED AND RETESTED AS NECESSARY UNTIL TEST REQUIREMENTS ARE COMPLIED WITH. DEFECTIVE MATERIALS, PIPES, VALVES AND ACCESSORIES SHALL BE REMOVED AND REPLACED. THE PIPE LINES SHALL BE TESTED IN SUCH SECTION AS MAY BE DIRECTED BY THE ENGINEER BY SHUTTING VALVES OR INSTALLING TEMPORARY PLUGS AS REQUIRED. THE LINE SHALL BE FILLED WITH WATER, ALL AIR REMOVED, AND TEST PRESSURE SHALL BE MAINTAINED IN THE PIPE FOR THE ENTIRE TEST PERIOD BY MEANS OF A GASOLINE OR ELECTRIC DRIVEN TEST PUMP TO BE FURNISHED BY THE CONTRACTOR. ACCURATE MEANS SHALL BE PROVIDED FOR MEASURING THE WATER REQUIRED TO MAINTAIN THIS PRESSURE. THE AMOUNT OF WATER REQUIRED IS A MEASURE OF THE LEAKAGE.

NO PIPE INSTALLATION WILL BE ACCEPTED UNTIL THE LEAKAGE (EVALUATED ON A PRESSURE BASIS OF 150 PSI) IS LESS THAN 2.2 GALLONS PER 24 HOURS PER THOUSAND FEET PER INCH NOMINAL DIAMETER. THE FOLLOWING TABULATES THE ALLOWABLE LEAKAGE:

ALLOWABLE LEAKAGE PER 1000 FT OF PIPELINE (IN GALLONS)

DURATION OF TEST	2	3	4	6	8	10	12	14
1 HOUR	0.18	0.28	0.37	0.55	0.74	0.92	1.10	1.29
2 HOURS	0.37	0.55	0.74	1.10	1.47	1.84	2.20	2.57

WHERE ANY SECTION OF A MAIN IS PROVIDED WITH CONCRETE REACTION BACKING THE HYDROSTATIC PRESSURE TEST SHALL NOT BE MADE UNTIL AT LEAST FIVE (5) DAYS HAVE ELAPSED AFTER THE CONCRETE REACTION BACKING WAS INSTALLED. IF HIGH EARLY-STRENGTH CEMENT IS USED IN THE CONCRETE REACTION BACKING, THE HYDROSTATIC PRESSURE TEST SHALL NOT BE MADE UNTIL AT LEAST THREE (3) DAYS HAVE ELAPSED.

LEAKAGE TESTS FOR GRAVITY SEWER

LINES SHALL BE TESTED FOR LEAKAGE BY LOW PRESSURE AIR TESTING. LOW PRESSURE AIR TESTING FOR CONCRETE PIPES SHALL BE AS PRESCRIBED IN ASTM C 828. LOW PRESSURE AIR TESTING FOR PVC PIPE SHALL BE AS PRESCRIBED IN ASTM F1417 AND PRESSURE DROP LIMITS SHALL BE DETERMINED BY USING ASTM F1417 TABLE 1 SHOWN BELOW. LOW PRESSURE AIR TESTING PROCEDURES FOR OTHER PIPE MATERIALS SHALL USE THE PRESSURES AND TESTING TIMES PRESCRIBED IN ASTM C 828 AND ASTM C 924, AFTER CONSULTATION WITH THE PIPE MANUFACTURER. VISIBLE LEAKS ENCOUNTERED SHALL BE CORRECTED REGARDLESS OF LEAKAGE TEST RESULTS. WHEN LEAKAGE EXCEEDS THE MAXIMUM AMOUNT SPECIFIED, SATISFACTORY CORRECTION SHALL BE MADE AND RETESTING ACCOMPLISHED. TESTING, CORRECTION, AND RETESTING SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.

ASTM F1417 TABLE 1
MINIMUM SPECIFIED TIME REQUIRED FOR 1.0 PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q=0.0015

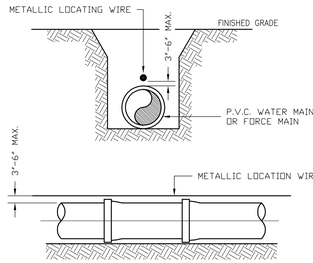
1. SEE PRACTICE UNI-B-6-90.
2. CONSULT WITH PIPE AND APPURTENANCE MANUFACTURER FOR MAXIMUM TEST PRESSURE FOR PIPE SIZE GREATER THAN 30IN DIA.

PIPE DIAMETER IN.	MINIMUM TIME MIN:S	LENGTH FOR MINIMUM TIME,FT	TIME FOR LONGER LENGTH,S	SPECIFICATION TIME FOR LENGTH (L) SHOWN, MIN:S							
				100FT	150FT	200FT	250FT	300FT	350FT	400FT	450FT
4	3:46	597	0.380L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	0.854L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470L	19.50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13,674L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

DRAINAGE AS-BUILT DRAWINGS AND INFORMATION CHECKLIST

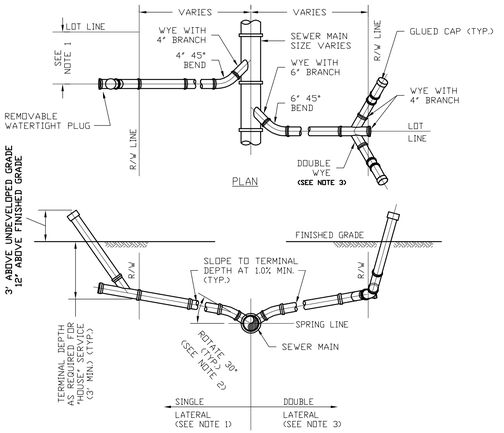
FOLLOWING IS A LIST OF INFORMATION THAT IS TO BE VERIFIED AND SUBMITTED BY THE REGISTERED PROFESSIONAL IN SUPPORT OF THE "AS-BUILT CERTIFICATION."

1. AS-BUILT DRAWINGS ARE TO BE BASED ON THE CONSTRUCTION DRAWINGS PERMITTED BY THE DEPARTMENT OR NWFWMD, AND REVISED AS NECESSARY TO REFLECT ANY CHANGES MADE DURING CONSTRUCTION. BOTH THE ORIGINAL DESIGN AND CONSTRUCTED CONDITION MUST BE CLEARLY SHOWN. THE PLANS NEED TO BE CLEARLY LABELED AS "AS-BUILT" OR "RECORD" DRAWINGS. ALL SURVEYED DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED AND SIGNED, DATED, AND SEALED BY A REGISTERED PROFESSIONAL. THE FOLLOWING INFORMATION, AT A MINIMUM, SHALL BE VERIFIED ON THE AS-BUILT DRAWINGS, AND SUPPLEMENTAL DOCUMENTS, IF NEEDED:
   A. DISCHARGE STRUCTURES -- LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL, INCLUDING WEIRS, ORIFICES, GATES, PUMPS, PIPES, AND OIL AND GREASE SKIMMERS;
   B. SIDE BANK AND UNDERDRAIN FILTERS, OR EXFILTRATION TRENCHES -- LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL, INCLUDING CLEAN-OUTS, PIPES, CONNECTIONS TO CONTROL STRUCTURES AND POINTS OF DISCHARGE TO RECEIVING WATERS;
   C. STORAGE AREAS FOR TREATMENT AND ATTENUATION -- DIMENSIONS, ELEVATIONS, CONTOURS OR CROSS-SECTIONS OF ALL, SUFFICIENT TO DETERMINE STAGE-STORAGE RELATIONSHIPS OF THE STORAGE AREA AND THE PERMANENT POOL DEPTH AND VOLUME BELOW THE CONTROL ELEVATION FOR NORMALLY WET SYSTEMS;
   D. SYSTEM GRADING -- DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES OR CROSS-SECTIONS TO DETERMINE CONTRIBUTING DRAINAGE AREAS, FLOW DIRECTIONS, AND CONVEYANCE OF RUNOFF TO THE SYSTEM DISCHARGE POINTS(S);
   E. CONVEYANCE -- DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES OR CROSS SECTIONS OF SYSTEMS UTILIZED TO DIVERT OFF-SITE RUNOFF AROUND OR THROUGH THE NEW SYSTEM;
   F. WATER LEVELS -- EXISTING WATER ELEVATIONS(S) AND THE DATE DETERMINED;
   G. BENCHMARK(S) -- LOCATION AND DESCRIPTION (MINIMUM OF ONE PER MAJOR WATER CONTROL STRUCTURE).
2. SUBMIT THE FINAL SUBDIVISION PLAT OR OTHER LEGAL DOCUMENTS, AS RECORDED IN THE COUNTY PUBLIC RECORDS, SHOWING DEDICATED RIGHTS-OF-WAY, EASEMENT LOCATIONS, AND SPECIAL USE AREAS THAT ARE RESERVED FOR WATER MANAGEMENT PURPOSES AND CONTINUING OPERATION AND MAINTENANCE;
3. ADDITIONAL INFORMATION WILL BE SHOWN ON THE AS-BUILT DRAWINGS OTHERWISE PROVIDED AS NEEDED TO VERIFY AND SUPPORT THE AS-BUILT CERTIFICATION (EXAMPLE: HOMEOWNER'S ASSOCIATION FINAL DOCUMENTS AND OTHER ITEMS REQUIRED BY PERMIT CONDITIONS).



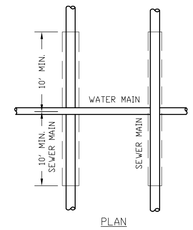
NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 GAUGE COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
2. LOCATING WIRE SHALL TERMINATE AT THE TOP OF EACH VALVE BOX AND BE CAPABLE OF EXTENDING 24" ABOVE TOP OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
3. ALL SPLICES SHALL BE MADE USING A WATER-TIGHT SEALING METHOD APPROVED BY THE CITY.

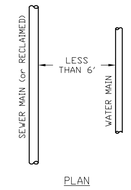
PVC PIPE LOCATING WIRE DETAIL
NOT TO SCALE

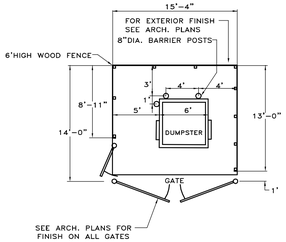


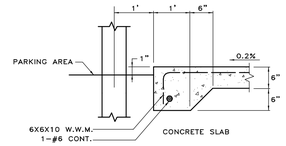
NOTES:
1. LOCATE SINGLE LATERAL AS NEAR TO CENTER OF LOT AS POSSIBLE.
2. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
3. UPON CITY APPROVAL, DOUBLE SERVICE LATERALS SHALL ONLY BE PERMITTED ON TAPS TO OVERSIZED GRAVITY MAINS, LATERALS AND WHERE EXISTING ROAD PAVEMENT MUST BE CUT.

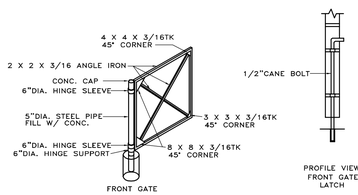
SERVICE LATERAL DETAIL
NOT TO SCALE



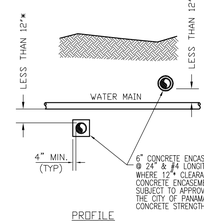


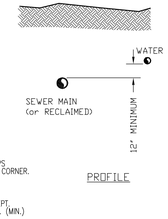






DUMPSTER DETAIL
NOT TO SCALE



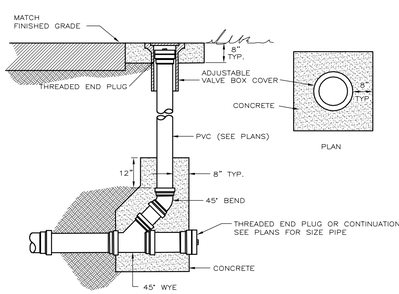


'*' Location of PWS Mains,'

Water mains to provide a horizontal distance of (3) three feet between the water main and any vacuum-type sanitary sewer, storm sewer, stormwater force main, or pipeline conveying public-access reclaimed water and a horizontal distance of (6) six feet between the water main and any gravity or pressure-type sanitary sewer, wastewater force main, or pipeline conveying non-public-access reclaimed water.

Water mains crossing any gravity or vacuum-type sanitary sewer or storm sewer may be laid so the water main crosses (6) six inches above or (12) twelve inches below the other pipeline, and water mains crossing any pressure type sanitary sewer, stormwater or waste-water force main, or pipeline conveying reclaimed water laid so the water main crosses only (12) twelve inches above or below the other pipeline.

WATER & SEWER MAIN CROSSING/ SEPARATION DETAIL
NOT TO SCALE



NOTE: SEE SEWER SIZE IN PLANS

CLEANOUT DETAIL
NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE:	SHOWN
DESIGNED BY:	JFP
DRAWN BY:	JFP
REVIEWED BY:	SDM
ISSUE DATE:	12/11/2012
C/D:	8502E02
NOT RELEASED FOR CONSTRUCTION BY: DATE:	

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E. — PROFESSIONAL ENGINEER — FL LIC # 49303
Robert L. Carroll, P.E. — PROFESSIONAL ENGINEER — FL LIC # 57988

SHEET NUMBER 9 OF 12

8502 – CENTRAL CREDIT UNION OF FLORIDA

WATER DISTRIBUTION SYSTEM

PRODUCTS: PROVIDE ELLS, TEES, REDUCING TEES, WYES, COUPLINGS, AND OTHER REQUIRED PIPING ACCESSORIES OF SAME TYPE AND CLASS OF MATERIALS AS CONDUIT, OR OF MATERIAL HAVING EQUAL OR SUPERIOR PHYSICAL AND CHEMICAL PROPERTIES AS ACCEPTABLE TO THE ENGINEER.

UNPLASTICIZED POLYVINYL CHLORIDE (PVC PIPE SHALL HAVE AN INTEGRATED BELL–TYPE JOINT DESIGNED FOR CONVEYING POTABLE WATER UNDER PRESSURE.

RING–TYPE NEOPRENE GASKETS SHALL BE PROVIDED IN RECESSED IN THE BELLS TO MAKE JOINTS WATER TIGHT. ALL PIPES SHALL BE SUITABLE FOR USE AT MAXIMUM HYDROSTATIC PRESSURES OF 200 PSI AT 75 DEGREES F AND MEETING AND/OR EXCEEDING THE MINIMUM REQUIREMENTS OF AWWA C–900–07 MADE TO (4"–8" DR18, 10" AND GREATER DR25) DIMENSIONS. MAXIMUM LAYING LENGTHS SHALL BE 40 FEET WITH MANUFACTURER'S OPTION TO SUPPLY UP TO 15 PERCENT RANDOMS (MINIMUM LENGTH EQUALS 10 FT.). ALL FITTINGS SHALL BE CAST IRON WITH MECHANICAL

PIPE FITTINGS SHALL BE ASSEMBLED WITH A NON–TOXIC LUBRICANT AS RECOMMENDED BY THE MANUFACTURER. PVC PIPE SHALL BE AS MANUFACTURED BY THE U.S. PIPE COMPANY, THE CERTAIN–TEED PRODUCTS CORPORATION, THE JOHNS–MANSVILLE COMPANY, THE ETHYL CORPORATION, OR APPROVED EQUAL.

PROVIDE VALVES AND FLOW CONTROL DEVICES AS INDICATED:

MINIMUM WORK PRESSURE, 160 PSI, UNLESS OTHERWISE INDICATED.

GATE VALVES: STANDARD SHUT–OFF VALVES WITH MAXIMUM WORK PRESSURE CAST INTO BODY, OUTSIDE–SCREW–AND–YOKE TYPE COMPLYING WITH AWWA C–500. ALL VALVES SHALL BE COUNTERCLOCKWISE.

FOUR–INCHES AND OVER: SHALL BE CAST–IRON BODY, FULLY BRONZE MOUNTED DOUBLE–DISC, PARALLEL SEAL VALVES WIDE FLANGE OR SPIGOT END DEPENDING ON INSTALLATION. FLANGED GATE VALVES SHALL BE PROVIDED WITH 125 POUND AMERICAN STANDARD FLANGES.

ALL VALVES TO BE INSTALLED ABOVE THE GROUND SHALL BE FITTED WITH WHEEL–TYPE HAND OPERATORS. ALL VALVES TO BE SET BELOW GRADE SHALL BE FITTED WITH HUB–TYPE OPERATORS AND SHALL HAVE A CAT–IRON VALVE BOX INSTALLED CONCENTRICALLY OVER THE VALVE.

UNDER FOUR–INCHES: GATE VALVES UNDER FOUR–INCHES SHALL BE IRON OR BRONZE BODY, SOLID WEDGE VALVES EQUIPPED WITH OPERATING HAND WHEELS.

ALL ECCENTRIC VALVES 10–INCHES OR LARGER SHALL BE GEAR OPERATED WITH HAND WHEELS FOR ABOVE GROUND VALVES AND HUB OPERATED FOR BELOW GROUND VALVES.

ALL ECCENTRIC VALVES 8–INCHES AND SMALLER SHALL BE LEVEL OPERATED FOR ABOVE GROUND VALVES AND HUB OPERATED FOR BELOW GROUND VALVES.

ALL HUB OPERATED UNITS SHALL BE PROVIDED A CAST–IRON VALVES BOX AND COVER.

CHECK VALVES: THE CHECK VALVES OVER THREE INCHES SHALL BE IRON BODY, BRONZE MOUNTED, HORIZONTAL SWING CHECK WITH FLANGED ENDS. ALL WORK PARTS SHALL BE SPRING LOCATED TO PREVENT SLAMMING. THE CHECK VALVES SHALL BE CLOW F–2955, OR APPROVED EQUAL.

CHECK VALVES UNDER THREE INCHES SHALL BE SCREWED END, BRONZE BODY, SILENT CHECK VALVES AS MANUFACTURED BY CRANE COMPANY, NO. 34 OR APPROVED EQUAL.

PROVIDE ANCHORAGES FOR TEE, PLUGS, CAPS, AND BENDS.

AFTER INSTALLATION, APPLY A FULL COAT OF ASPHALT OR OTHER ACCEPTABLE CORROSION–RETARDING MATERIAL TO SURFACES OF RODS AND CLAMPS.

CLAMPS, STRAPS AND WASHERS: STEEL ANSI/ASTM A–506

RODS: STEEL, ANSI/ASTM A–575

ROD COUPLINGS: MALLEABLE IRON, ANSI/ASTM A–197

BOLTS: STEEL, ANSI/ASTM A–307

CAST IRON WASHERS: ANSI/ASTM A–126, CLASS A

WATER SERVICE IDENTIFICATIONS: PLASTIC LINE MARKS, NOMENCLATURE "CAUTION, BURIED WATER LINE BELOW".

FLEXIBLE COUPLINGS: STEEL MIDDLE RING, TWO STEEL FOLLOWER RINGS, TWO RESILIENT GASKETS AND STEEL BOLTS. DRESSER TYPE 38 OR APPROVED EQUAL.

INSPECTION AND HYDROSTATIC TESTING: AFTER THE PIPE HAS BEEN LAID AND BACKFILLED AS SPECIFIED EACH VALVED SECTION OF NEWLY LAID PIPE SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE OF 150 PSI.

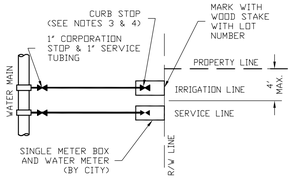
THE DURATION OF EACH PRESSURE TEST SHALL BE AT LEAST TWO HOURS OR UNTIL THE LINE HAS BEEN COMPLETELY INSPECTED FOR VISIBLE LEAKS.

PERMISSIBLE LEAKAGE: NO PIPE INSTALLATION WILL BE ACCEPTABLE UNTIL OR UNLESS THIS LEAKAGE (EVALUATED ON A PRESSURE BASIS OF 150 PSI) IS LESS THAN 4 U.S. GALLONS PER 24 HOURS PER THOUSAND FEET PER INCH NOMINAL DIAMETER IN ACCORDANCE WITH AWWA C600.

DISINFECTION SHALL BE AFTER THE DISTRIBUTION SYSTEM HAS BEEN TESTED TO THE SATISFACTION OF THE ENGINEER AND SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA SPECIFICATION C–651 WHICH PROVIDES FOR THE INJECTION OF A 50 PPM SOLUTION OF CHLORINE REMAINING FOR 24 HOURS.

IN THE PROCESS OF CHLORINATING WATER PIPE, ALL VALVES OR OTHER APPURTENANCES SHALL BE OPERATED WHILE THE PIPE LINE IS FILLED WITH CHLORINATING AGENT.

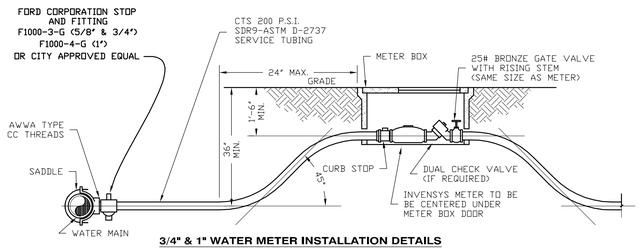
WATER VALVES 12" AND LESS SHALL BE EPOXY COATED RESILIENT SEAT GATE VALVE.



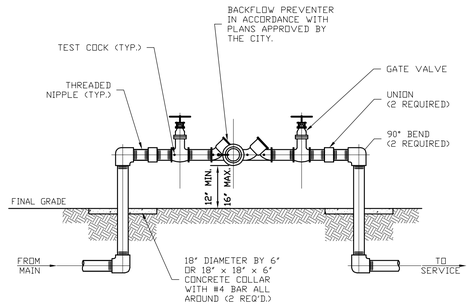
TYPICAL CITY SERVICE
(PER. LOT)

NOTES:

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK (GRIP) JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL BE CONSTRUCTED BENEATH OR TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE TABLE SHALL TERMINATE AT A CURB STOP IN A STANDARD CITY METER BOX.
4. CURB STOP SHALL BE A FORD BALL METER VALVE B43–332W–G, B43–444W–G OR CITY APPROVED EQUAL.
5. ALL SERVICE TAPS TO BE LOCATED IN FIELD. TAPS WILL NOT BE SET IN DRAINAGE SWALES, EASEMENTS OR SIDEWALKS.
6. METER BOX SHALL BE SOUTHERN METER BOX TH 1–1/2–B WITH C.I. LID W/ 2" HOLE (OR CITY APPROVED EQUAL)
7. ALL DUAL WATER SERVICES FOR LOTS ON THE OPPOSITE SIDE OF THE STREET FROM THE WATER MAIN SHALL BE INSTALLED IN A SINGLE 4" PVC OR HDPE CASING.



3/4" & 1" WATER METER INSTALLATION DETAILS
NOT TO SCALE



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.
2. PROVIDE PROTECTION AGAINST FREEZING.
3. TWO PIPE SUPPORTS REQUIRED.
4. ALL ITEMS ABOVE GRADE SHALL HAVE TWO COATS OF APPROVED RUST RESISTANT BLUE ENAMEL PAINT.

BACKFLOW PREVENTER
NOT TO SCALE

MAIN PIPE SIZE	HORIZ. BENDS			TEES						REDUCERS				PLUGS
				SIZE / LENGTH						SIZE / LENGTH				
24	90	38	18	X24 / 177	X20 / 139	X16 / 94	X12 / 40	X10 / 6		X20 / 64	X16 / 117	X12 / 158		214
20	78	32	15	X20 / 148	X16 / 105	X12 / 56	X10 / 25	X8 / 0		X16 / 65	X12 / 115	X10 / 149		184
16	66	27	13	X16 / 116	X12 / 70	X10 / 42	X8 / 12			X12 / 64	X10 / 90	X8 / 111		151
12	51	22	10	X12 / 83	X10 / 59	X8 / 32	X6 / 0			X10 / 34	X8 / 62	X6 / 86		118
10	44	18	9	X10 / 66	X8 / 41	X6 / 8				X8 / 33	X6 / 61	X4 / 81		100
8	37	15	7	X8 / 50	X6 / 21	X4 / 0				X6 / 35	X4 / 59			83
6	29	12	5	X6 / 30	X4 / 0					X4 / 32				63
4	21	8	4	X4 / 14										45

NOTES:

1.) RESTRAIN TO NEXT FULL JOINT BEYOND GIVEN LENGTH.

2.) RESTRAIN 11.25° BENDS 50% OF LENGTH FOR 22.5° BENDS.

3.) ALL VALVES AND FITTINGS SHALL BE RESTRAINED TO THE CONNECTING SECTIONS OF PIPE.

4.) ALL VALVES MUST BE PROPERLY ANCHORED OR RESTRAINED TO RESIST A 180 PSI TEST PRESSURE IN EITHER DIRECTION.

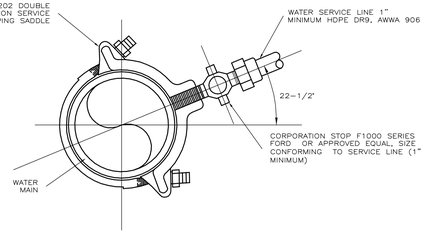
5.) PIPE SIZES ARE GIVEN IN INCHES.

6.) PIPE LENGTHS ARE GIVEN IN FEET.

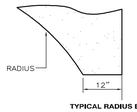
7.) LENGTHS SHOWN ARE FOR A TEST PRESSURE OF 180 PSI.

8.) THE RESTRAINED LENGTHS SHOWN IN THESE TABLES ARE BASED ON THE USE OF LIGHTLY COMPACTED CLEAN SAND WITH AT LEAST A 95% COARSE PARTICLE CONTENT. ACTUAL SOIL CONDITIONS MUST BE DETERMINED BY THE ENGINEER OF RECORD AND THE RESTRAINED LENGTHS MODIFIED ACCORDINGLY.

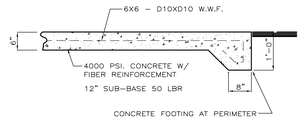
REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DR-18 PVC PIPE
NOT TO SCALE



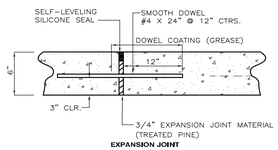
TYPICAL WATER SERVICE CONNECTION
N.T.S.



TYPICAL RADIUS END

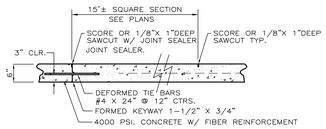


PERIMETER



EXPANSION JOINT

COMPACT TOP 12" OF EXISTING SOILS TO A DENSITY OF 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (ASTM D–1557) SEE GEO–TECH REPORT



CONSTRUCTION JOINT

CONSTRUCTION JOINTS MUST BE USED WHERE AN INCOMPLETE POUR IS MADE BETWEEN PLANNED EXPANSION JOINTS. THE MAXIMUM SQUARE MUST BE HALF THE DISTANCE BETWEEN EXPANSION JOINTS (SEE PLANS). WHERE A COMPLETE POUR IS MADE A SAW CUT OR SCORE SHALL BE PLACED IN LIEU OF CONSTRUCTION JOINTS.

WITHIN 4' OF SUBGRADE BOTTOM ALL SILTY AND PEATY SOILS OR ANY OTHER ORGANIC SOILS SHALL BE REMOVED. FILL SOILS SHALL BE SANDS TO SLIGHTLY SILTY SANDS CONTAINING NO MORE THAN 15% BY DRY WEIGHT, FINER THAN THE U.S. No. 200 MESH SIEVE AND COMPACTED TO A DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY THROUGHOUT ITS FULL DEPTH.

CONCRETE PAVEMENT DETAIL
NOT TO SCALE

MAIN PIPE SIZE	HORIZ. BENDS			TEES						REDUCERS				PLUGS
				SIZE / LENGTH						SIZE / LENGTH				
24	90	38	18	X24 / 177	X20 / 139	X16 / 94	X12 / 40	X10 / 6		X20 / 64	X16 / 117	X12 / 158		214
20	78	32	15	X20 / 148	X16 / 105	X12 / 56	X10 / 25	X8 / 0		X16 / 65	X12 / 115	X10 / 149		184
16	66	27	13	X16 / 116	X12 / 70	X10 / 42	X8 / 12			X12 / 64	X10 / 90	X8 / 111		151
12	51	22	10	X12 / 83	X10 / 59	X8 / 32	X6 / 0			X10 / 34	X8 / 62	X6 / 86		118
10	44	18	9	X10 / 66	X8 / 41	X6 / 8				X8 / 33	X6 / 61	X4 / 81		100
8	37	15	7	X8 / 50	X6 / 21	X4 / 0				X6 / 35	X4 / 59			83
6	29	12	5	X6 / 30	X4 / 0					X4 / 32				63
4	21	8	4	X4 / 14										45

NOTES:

1. RESTRAINED JOINT PIPING SHALL BE USED FOR ALL THRUST RESTRAINS. THE ADJACENT SCHEDULE GIVES MINIMUM PIPE LENGTHS (FT) TO BE RESTRAINED ON EACH SIDE OF ALL FITTINGS. ALL CALCULATIONS ARE BASED ON 20' PIPE LENGTHS. THIS INCLUDES ALL MAIN RUNS ON TEES.
2. CONCRETE THRUST BLOCKS SHALL NOT BE USED UNLESS DIRECTED BY THE ENGINEER.
3. SOME PIPE RESTRAINT REQUIREMENTS ARE SHOWN IN THE PLANS FOR SPECIFIC CIRCUMSTANCES.
4. ALL 45° AND 22–1/2° COMBINATIONS BENDS AND 22–1/2° AND 11–1/4° COMBINATION BENDS SHALL BE TREATED AS 90° BENDS AND 45° BENDS, RESPECTIVELY, FOR RESTRAINED LENTGHS.
5. ALL FITTINGS AND RESTRAINED JOINTS MUST BE VISUALLY INSPECTED AND APPROVED BY THE ENGINEER BEFORE COVERED.
6. CONTRACTOR SHALL INSTALL BELL HARNESS RESTRAINTS ON ALL EXISTING PIPE AT TIE IN LOCATIONS TO ACCOMMODATE THE THRUST RESTRAINT SCHEDULE.
7. ALL CAPS AND PLUGS SHALL BE RESTRAINED.
8. ALL TIE–INS TO EXISTING WATER MAINS AND FORCE MAINS, SHALL BE TREATED LIKE A 90° BEND (NOY LIKE TEES) AND SHALL BE RESTRAINED ACCORDINGLY.
9. CONTRACTOR SHALL INSTALL A MINIMUM OF 20' OF RESTRAINED JOINT PIPE ON EACH SIDE OF ALL VALVES, SMALL SIDE OF ALL REDUCERS AND ON THE MAIN RUN OF ALL TEES.

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DR-18 PVC PIPE
NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE:	SHOWN
DESIGNED BY:	JFP
DRAWN BY:	JFP
REVIEWED BY:	SDM
ISSUE DATE:	12/11/2012
C/D:	85502E02
NOT RELEASED FOR CONSTRUCTION DATE:	

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

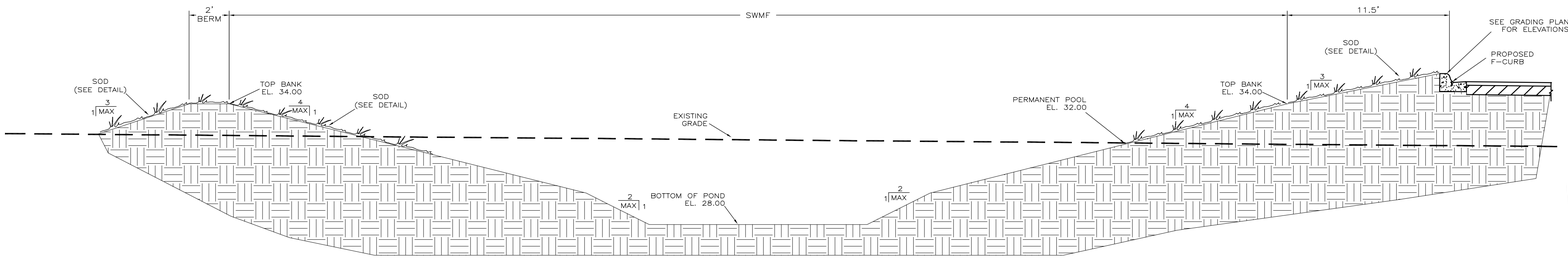
NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LIC # 49303

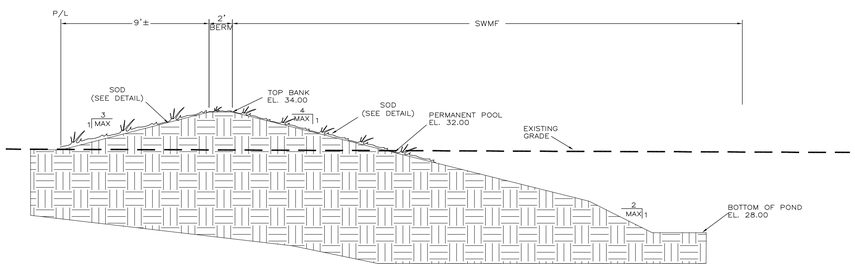
Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LIC # 57988

SHEET NUMBER 10 OF 12

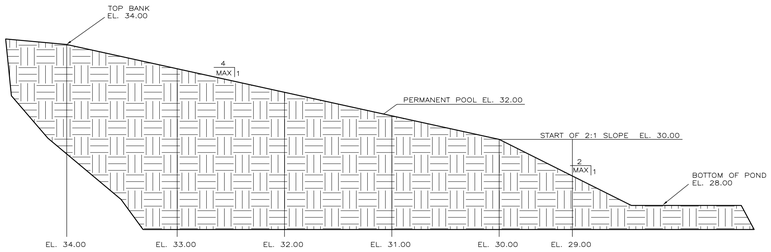
85502 – CENTRAL CREDIT UNION OF FLORIDA



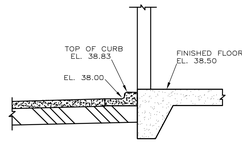
SECTION A
NOT TO SCALE



SECTION B
NOT TO SCALE



CROSS SECTION OF WET DETENTION POND
NOT TO SCALE



SECTION C
NOT TO SCALE

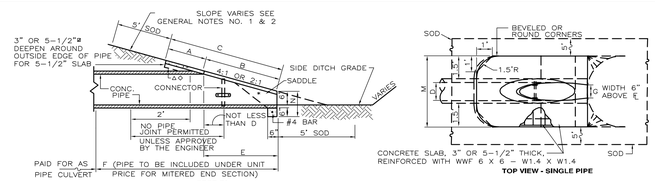
	D	X	A	B	C	E	F	G	M SINGLE PIPE	M DOUBLE PIPE	M TRIPLE PIPE	M QUAD. PIPE		5-1/2" CONCRETE SLAB (CY) ◻ SINGLE PIPE	5-1/2" CONCRETE SLAB (CY) ◻ DOUBLE PIPE	5-1/2" CONCRETE SLAB (CY) ◻ TRIPLE PIPE	5-1/2" CONCRETE SLAB (CY) ◻ QUAD. PIPE	SODDING (SQ. YDS.) SINGLE PIPE	SODDING (SQ. YDS.) DOUBLE PIPE	SODDING (SQ. YDS.) TRIPLE PIPE	SODDING (SQ. YDS.) QUAD. PIPE
2:1 SLOPE	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	4.63'	7.21'	9.79'	12.37'	1.19'	0.38	0.58	0.77	0.96	21	24	27	30
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	4.92'	7.75'	10.58	13.42'	1.21'	0.44	0.65	0.87	1.09	22	25	28	31
	24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	5.50'	8.92'	12.33	15.75'	1.25'	0.54	0.83	1.12	1.42	24	28	32	35
	30"	4'-3"	2.15'	4.95'	7.10'	4.56'	8"	2.00'	6.08'	10.33'	14.58	18.83'	1.29'	0.66	1.09	1.50	1.91	26	31	35	40
	36"	5'-1"	2.25'	6.08'	8.33'	5.56'	9"	2.24'	6.67'	11.75'	16.83	21.92'	1.33'	0.81	1.38	1.95	2.51	28	34	39	45
	42"	6'-0"	2.34'	7.21'	9.55'	6.56'	10"	2.45'	7.25'	13.25'	19.25	25.25'	1.38'	0.97	1.70	2.45	3.19	30	37	43	50
	48"	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	7.83'	14.58'	21.33	28.08'	1.42'	1.13	2.04	2.93	3.84	32	39	47	54
	54"	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	8.42'	16.08'	23.75	31.42'	1.46'	1.31	2.44	3.58	4.72	34	42	51	59
	60"	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	9.00'	17.50'	26.00	34.50'	1.50'	1.51	2.89	4.28	5.68	36	45	55	64
	66"	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	9.58'	18.75'	27.92	37.08'	1.54'	1.68	3.25	4.84	6.43	38	48	58	68
	72"	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	10.16'	20.16'	30.16	40.16'	1.58'	1.89	3.74	5.59	7.45	40	51	62	73
4:1 SLOPE	15"	2'-7"	2.23'	4.09'	6.36'	4.03'	8"	1.22'	4.63'	7.21'	9.79	12.37'	1.19'	0.57	0.87	1.15	1.44	23	26	29	32
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9"	1.41'	4.92'	7.75'	10.58	13.42'	1.21'	0.66	0.99	1.31	1.65	25	28	31	35
	24"	3'-5"	2.53'	7.18△	9.71'	7.03△	11"	1.73'	5.50'	8.92'	12.33	15.75'	1.25'	0.85	1.30	1.75	2.20	28	32	36	40
	30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58	18.83'	1.29'	1.10	1.74	2.39	3.05	31	36	41	46
	36"	5'-1"	2.87'	11.31◇	14.18'	11.03◇	15'	2.24'	6.67'	11.75'	16.83	21.92'	1.33'	1.32	2.21	3.08	3.96	34	40	46	52
	42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	13.25'	19.25	25.25'	1.38'	1.58	2.76	3.91	5.19	38	44	51	58
	48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	14.58'	21.33	28.08'	1.42'	1.85	3.30	4.73	6.17	41	48	56	63
	54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	16.08'	23.75	31.42'	1.46'	2.14	3.95	5.77	7.58	44	52	61	69
	60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	17.50'	26.00	34.50'	1.50'	2.45	4.66	6.87	9.07	47	56	66	75
	66"	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	9.58'	18.75'	27.92	37.08'	1.54'	2.88	5.54	8.18	10.84	49	59	69	80
	72"	10'-0"	3.91'	23.68'	27.59'	23.03'	27'	3.30'	10.16'	20.16'	30.16	40.16'	1.58'	3.54	6.61	9.87	13.13	52	63	74	85

SEE GENERAL NOTE NO. 3 -
SEE SHEET 5 OF 6 FOR 3" SLAB QUANTITIES

△ 6.42" △ 6.25" DIMENSIONS PERMITTED TO ALLOW USE OF 8" STANDARD PIPE LENGTHS.

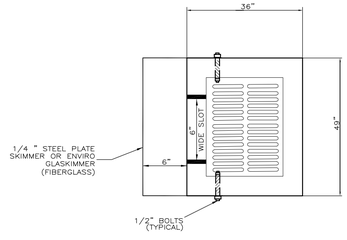
◻ 10.40" ◻ 10.10" DIMENSIONS PERMITTED TO ALLOW USE OF 12" STANDARD PIPE LENGTHS.

△ ◻ CONCRETE SLAB SHALL BE DEEMED TO FORM BRIDGE ACROSS CROWN OF PIPE. SEE SECTION BELOW.

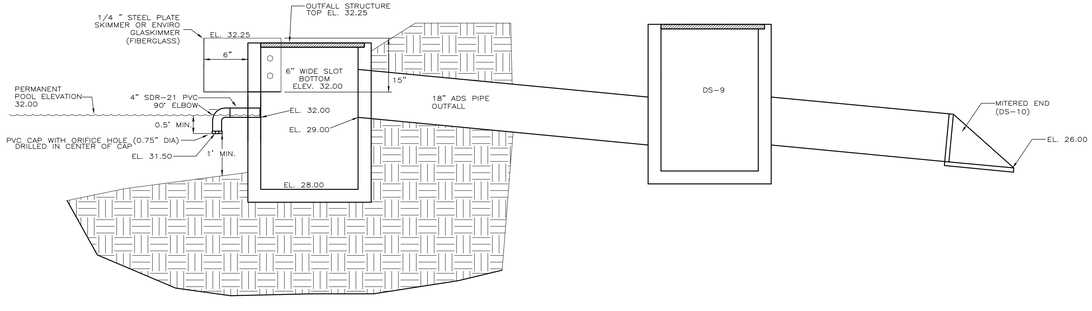


* SLOPE: 4:1 MITER: TO ℄ PIPE FOR PIPES 18" AND SMALLER
2:1 FOR PIPES 24" AND LARGER
2:1 MITER: TO ℄ PIPE FOR PIPES 18" AND SMALLER.
1:1 FOR PIPES 24" AND LARGER.

FDOT MITERED END DETAIL
NOT TO SCALE



FDOT TYPE C INLET



SEE INLET DETAIL FOR INLET CONSTRUCTION.

OUTFALL STRUCTURE DETAIL (DS-8)
NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE:	SHOWN
DESIGNED BY:	JFP
DRAWN BY:	JFP
REVIEWED BY:	SDM
ISSUE DATE:	12/11/2012
C/D:	85502D2
NOT RELEASED FOR CONSTRUCTION BY: DATE:	

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LIC # 49303

Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LIC # 57988

SHEET NUMBER 11 OF 12

85502 – CENTRAL CREDIT UNION OF FLORIDA

ASPHALTIC CONCRETE PAVING

PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES, ETC. NECESSARY AND INCIDENTAL TO THE COMPLETION OF ALL PAVEMENT AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN:

SUBMIT A "LETTER OF INTENT" FOR THE FOLLOWING:

ASPHALT PAVING MATERIAL AND MIX DESIGN. PROVIDE COPIES OF MATERIALS CERTIFICATES SIGNED BY MATERIAL PRODUCER AND CONTRACTOR, CERTIFYING THAT EACH MATERIAL ITEM COMPLIES WITH, OR EXCEEDS, SPECIFIED REQUIREMENTS.

WEATHER LIMITATIONS: APPLY PRIME AND TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES F. (10 DEGREES C), AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES F. (1 DEGREE C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS AN EXCESS OF MOISTURE.

CONSTRUCT ASPHALT CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40 DEGREES F. (4 DEGREES C), AND WHEN BASE IS DRY. SURFACE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES F. (–1 DEGREE C) AND RISING.

GRADE CONTROL: ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS.

THE SUBCONTRACTOR SHALL WARRANT ALL ASPHALT PAVING AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF TWO YEARS.

PRODUCTS: USE LOCALLY AVAILABLE MATERIALS AND GRADATIONS WHICH EXHIBIT A SATISFACTORY RECORD OF PREVIOUS INSTALLATIONS.

AGGREGATE: CRUSHED STONE, CRUSHED GRAVEL, AND SHARP–EDGED NATURAL SAND.

MAXIMUM AGGREGATE SIZE SHALL BE NO GREATER THAN ONE–HALF OF THE DESIGN THICKNESS OF THE WEARING OR BINDER COURSE.

SURFACE PREPARATION: PROOF ROLL PREPARED BASE SURFACE TO CHECK FOR UNSTABLE AREAS AND AREAS REQUIRING ADDITIONAL COMPACTION.

NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT BASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.

PRIME COAT: APPLY AT RATE OF 0.2 TO 0.5 GAL. PER SQ. YD., OVER COMPACTED BASE. APPLY MATERIAL TO PENETRATE AND SEAL, BUT NOT FLOOD SURFACE. CURE AND DRY AS LONG AS NECESSARY TO ATTAIN PENETRATION AND EVAPORATION OF VOLATILE.

TACK COAT: APPLY TO CONTACT SURFACE OF PREVIOUSLY CONSTRUCTED ASPHALT OR PORTLAND CEMENT CONCRETE AND SURFACES ABUTTING OR PROJECTING INTO ASPHALT CONCRETE PAVEMENT. DISTRIBUTE AT RATE OF 0.05 TO 0.51 GAL. PER SQ. YD. OF SURFACE.

ALLOW TO DRY UNTIL AT PROPER CONDITION TO RECEIVE PAVING.

ASPHALT CONCRETE MIX: THIS ITEM SHALL CONSIST OF A WEARING SURFACE CONSTRUCTED OF ASPHALTIC CONCRETE ON A PREPARED BASE.

THE MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THOSE SET FORTH FOR ASPHALTIC CONCRETE IN THE LATEST F.D.O.T. EDITION OF THE STANDARD SPECIFICATIONS.

THE ASPHALTIC CEMENT SHALL MEET THE REQUIREMENTS OF AASHTO SPECIFICATIONS M–20, VISCOSITY GRADE AC–20 (PENETRATION GRADE 60–70).

JOB MIX FORMULA: THE MARSHALL TESTING WILL BE USED IN ESTABLISHING THE JOB MIX FORMULA AND FOR CONTROL TESTING THROUGHOUT THE WORK.

THE DENSITY OF FIELD SAMPLES SHALL NOT BE LESS THAN 95% OF THE MARSHALL LABORATORY COMPACTED MIXTURE COMPOSED OF THE SAME MATERIALS IN LIKE PROPORTIONS.

THE THICKNESS OF THE SURFACE SHALL BE AS SPECIFIED IN THE SITE WORK PLANS. THIS REQUIREMENT SHALL BE CHECKED BY CORES AND WHERE A DEFICIENCY OF MORE THAN 1/4" EXISTS, THE CONTRACTOR SHALL BE REQUIRED TO CORRECT THE DEFICIENCY EITHER BY REPLACING THE FULL THICKNESS OR OVERLAYING THE AREAS TO THE SATISFACTION OF THE ENGINEER.

SAND ASPHALT BASE

PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE, SPREAD AND STRIKE–OFF. SPREAD MIXTURE AT MINIMUM TEMPERATURE OF 225 DEGREES F. (107 DEGREES C).

PLACE IN STRIPS NOT LESS THAN 10' WIDE, UNLESS OTHERWISE ACCEPTABLE TO THE ENGINEER. AFTER FIRST STRIP HAS BEEN PLACED AND ROLLED, PLACE SUCCEEDING STRIPS AND EXTENDED ROLLING TO OVERLAP PREVIOUS STRIPS. COMPLETE BASE COURSE FOR A SECTION BEFORE PLACING SURFACE COURSE.

MAKE JOINTS BETWEEN OLD AND NEW PAVEMENTS, OR BETWEEN SUCCESSIVE DAYS' WORK, TO ENSURE CONTINUOUS BOND BETWEEN ADJOINING WORK. CLEAN CONTACT SURFACES AND APPLY TACK COAT.

BEGIN ROLLING WHEN MIXTURE WILL BEAR ROLLER WEIGHT WITHOUT EXCESSIVE DISPLACEMENT.

ACCOMPLISH BREAKDOWN OR INITIAL ROLLING IMMEDIATELY FOLLOWING ROLLING OF JOINTS AND OUTSIDE EDGE. CHECK SURFACE AFTER BREAKDOWN ROLLING, AND REPAIR DISPLACED AREAS BY LOOSENING AND FILLING, IF REQUIRED, WITH HOT MATERIAL. CONTINUE SECOND ROLLING UNTIL MIXTURE HAS BEEN THOROUGHLY COMPACTED.

PERFORM FINISH ROLLING WHILE MIXTURE IS STILL WARM ENOUGH FOR REMOVAL OF ROLLER MARKS. CONTINUE ROLLING UNTIL ROLLER MARKS ARE ELIMINATED AND COURSE HAS ATTAINED MAXIMUM DENSITY. AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.

TEST IN–PLACE ASPHALT CONCRETE COURSES FOR PAVING AS DIRECTED BY ENGINEER FOR SMOOTHNESS.

THICKNESS: IN–PLACE COMPACTED THICKNESS WILL NOT BE ACCEPTABLE IF EXCEEDING FOLLOWING ALLOWABLE VARIATION FROM REQUIRED THICKNESS:

BASE COURSE: 1/2" PLUS OR MINUS
SURFACE COURSE: 1/4" PLUS OR MINUS

SURFACE SMOOTHNESS: TEST FINISHED SURFACE OF EACH ASPHALT CONCRETE COURSE FOR SMOOTHNESS, USING 10' STRAIGHT EDGE APPLIED PARALLEL WITH, AND AT RIGHT ANGLES TO CENTER OF PAVED AREAS. SURFACES WILL NOT BE ACCEPTABLE IF EXCEEDING THE FOLLOWING TOLERANCES FOR SMOOTHNESS:

BASE COURSE SURFACE: 1/4"
WEARING COURSE SURFACE: 3/16"
CHECK SURFACED AREAS AT INTERVALS AS DIRECTED BY ENGINEER.

FIELD DENSITY AND SOIL BEARING CAPACITY TESTS SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER. PROVIDE INSPECTION CERTIFICATION OF PAVEMENT CONSTRUCTION, FIELD TESTS AND CORE SAMPLES OF THE COMPLETE PAVEMENT CONSTRUCTION.

MISCELLANEOUS PAVEMENT

WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING:

CONCRETE SIDEWALKS, CURBS, CURB AND GUTTER, INCLUDING POROUS FILL.

CONCRETE LIGHT POLE BASES.

SUBMIT A "LETTER OF INTENT" FOR THE FOLLOWING:

CONCRETE MIX DESIGN.

THIS SUBCONTRACTOR SHALL WARRANT ALL ASPHALT PAVING AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF TWO (2) YEARS.

POROUS FILL SHALL BE CLEAN COARSE SAND, FREE DRAINING GRAVEL, OR CRUSHED ROCK ALL AS APPROVED BY THE GEOTECHNICAL ENGINEER.

POROUS FILL UNDER SIDEWALKS, ETC., SHALL BE GRADED BETWEEN 3/8" AND NO. 200 SIEVE.

POROUS FILL SHALL BE CAPABLE OF BEING COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM–1557.

STEEL REINFORCING BARS SHALL CONFORM TO "SPECIFICATIONS FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT", ASTM A–615 GRADE NO. 60, HAVING A MINIMUM YIELD STRENGTH OF 60,000 PSI.

TIE WIRE SHALL BE BLACK ANNEALED WIRE, 16 GAUGE MINIMUM. BAR SUPPORTS SHALL CONFORM TO THE "BAR SUPPORT SPECIFICATIONS" CONTAINED IN "MANUAL OF STANDARD PRACTICE" AS PUBLISHED BY CRSI AND WCRSI. BAR SUPPORTS AND ACCESSORIES WITHIN 1/2" OF SURFACE OF CONCRETE EXPOSED TO WEATHER SHALL BE NON–CORROSIVE.

CEMENT SHALL BE GRAY PORTLAND CEMENT, TYPE I OR II, CONFORMING TO ASTM C–150 OR ASTM C–175 FOR AIR–ENTRAINING PORTLAND CEMENT.

CONCRETE AGGREGATES SHALL CONFORM TO ASTM C–33.

FINE AND COARSE AGGREGATES SHALL BE REGARDED AS SEPARATE INGREDIENTS AND EACH SHALL CONFORM TO THE APPROPRIATE GRADING REQUIREMENTS OF ASTM C–33.

AIR–ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C–260. EXPANSION JOINTS SHALL BE 1/2" THICK CANE FIBER EXPANSION JOINTS, CONFORMING TO ASTM D–1751.

EXPANSION JOINT SEALANT SHALL BE TRAFFIC GRADE, SELF LEVELING TREMCO THC–900 OR PERCORA CORPORATION "NF–200". COLOR SHALL BE BLACK. SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER.

CURING COMPOUND SHALL BE CLEAR, CONFORMING TO ASTM C–309. CURING COMPOUND SHALL BE COMPATIBLE WITH PAINTS, ETC., SCHEDULED OR SPECIFIED FOR APPLICATION TO CONCRETE SURFACE.

ALL CONCRETE, UNLESS OTHERWISE NOTED, SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS. MIX DESIGN SHALL BE SO PROPORTIONED TO PROVIDE A MINIMUM OF 517 POUNDS OF CEMENT PER CUBIC YARD.

ALL CONCRETE SHALL BE PROPORTIONED TO HAVE A SLUMP OF 4" MAXIMUM. TOLERANCE IN SLUMP SHALL NOT EXCEED ACI RECOMMENDATIONS.

READY–MIXED CONCRETE SHALL CONFORM TO ASTM C–94 AND THE NATIONAL READY MIX CONCRETE ASSOCIATION.

POROUS FILL SHALL BE LAID AND COMPACTED TO A MINIMUM DEPTH OF 3", UNLESS OTHERWISE INDICATED, UNDER ALL SIDEWALKS, ETC.,

POROUS FILL SHALL BE COMPACTED TO NOT LESS THAN 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D–1557.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY ALL MATERIALS NECESSARY TO COMPLETE PAVING.

SITE IMPROVEMENTS

ALL OFF–SITE WORK INCLUDED CONSISTS OF BUT IS NOT LIMITED TO THE FOLLOWING:

SITE RELATED FENCING.
GUARD POSTS, GUARD RAIL AND POSTS AND SIGN POSTS LOCATED ON THE SITE.
TRAFFIC CONTROL SIGNS, GUARD POSTS,

GUARD RAIL AND POSTS AND SIGN POSTS:

STEEL SHAPES SHALL CONFORM TO ASTM A–36.
STEEL PIPE SHALL CONFORM TO ASTM A–53, E OR S, TYPE B.
STEEL PIPE SHALL CONFORM TO ASTM A–501.

SHOP COAT SHALL BE RUST INHIBITING RED OXIDE, RED LEAD OR LEAD CHROMATE OR EQUAL. IT IS THE INTENT TO PERMIT THE USE OF THE FABRICATORS STANDARD PRIME COATING.

ASPHALT BASED COATING IS NOT PERMITTED.

CONCRETE FOR SETTING FENCE AND GUARD RAIL POSTS AND SETTING AND FILLING OF SIGN AND GUARD POSTS SHALL BE PORTLAND CEMENT COMPLYING WITH ASTM C–150, AGGREGATES COMPLYING WITH ASTM C–33, AND CLEAN WATER. MIX MATERIALS TO OBTAIN CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI. USING AT LEAST 4 SACKS OF CEMENT PER CU. YD., 1" MAXIMUM SIZE AGGREGATES, MAXIMUM 3" SLUMP, AND 2% TO 4% ENTRAINED AIR. PREPARE TO CONFORM TO ASTM C–94

MISCELLANEOUS NOTES

THE CONTRACTOR IS CAUTIONED TO VISIT THE SITE AND FAMILIARIZE HIMSELF WITH THE PROJECT PRIOR TO BIDDING.

THE ENGINEER HAS ATTEMPTED TO LOCATE EXISTING STRUCTURES AND EXISTING UTILITIES IN THE PROJECT AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS OF THESE STRUCTURES OR UTILITIES AND TO DETERMINE IF OTHER STRUCTURES OR UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION AND RELOCATION OF UTILITIES IN CONFLICT WITH NEW CONSTRUCTION BY APPROPRIATE UTILITY COMPANY.

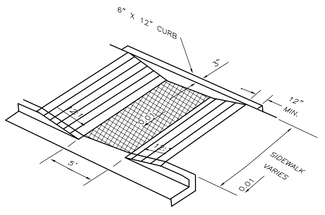
THE CONTRACTOR SHALL PLACE AND MAINTAIN ADEQUATE BARRICADES, CONSTRUCTION SIGNS, FLASHING LIGHTS, TORCHES, RED LANTERNS AND GUARDS DURING PROGRESS OF CONSTRUCTION WORK IN ACCORDANCE WITH STATE STANDARDS AND UNTIL IT IS SAFE FOR BOTH PEDESTRIAN AND VEHICULAR TRAFFIC.

CONTRACTOR IS RESPONSIBLE FOR REPLACING EXISTING SURROUNDINGS (I.E., ASPHALT, SIDEWALKS, CURBS, ETC.) THAT ARE DAMAGED DURING CONSTRUCTION. REPLACEMENT SHALL MATCH EXISTING.

ALL SITE WORK MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

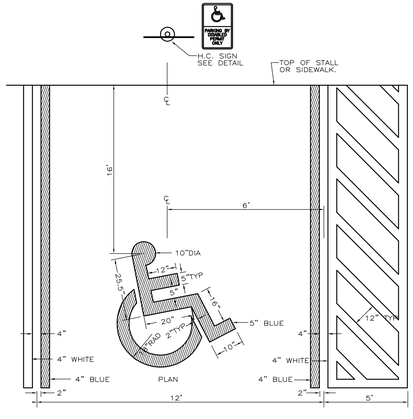
CONTRACTOR SHALL HAVE ALL PERMITS PRIOR TO CONSTRUCTION IN WETLANDS, COUNTY RIGHT OF WAY, ETC.

CONSTRUCTION PLANS ARE BASED ON FIELD SURVEY AND OTHER DATA AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL LOCATIONS OF NEW AND EXISTING CONNECTIONS NECESSARY TO COMPLETE THE INTENT OF THE PLANS. IN THE EVENT THERE IS A CONFLICT DUE TO UNFORESEEN OBSTRUCTIONS OR SHORT FALLS TO CONNECTIONS (WHICH DOES NOT MEET THE INTENT OF THE CONSTRUCTION PLANS), THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION. THE CONTRACTOR SHALL RELOCATE OR REMOVE OBSTACLES AS DIRECTED BY OWNER.

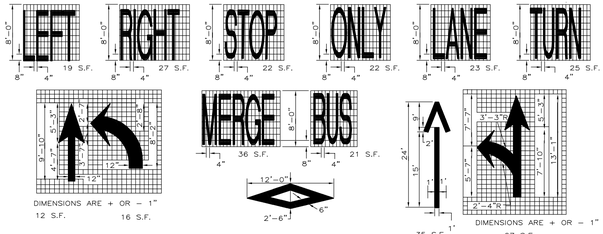


1. PEDESTRIAN PATHWAYS WITH RUNNING SLOPES STEEPER THAN 20:1 ARE CONSIDERED RAMPS. RAMP RUNNING SLOPES SHALL NOT EXCEED 12:1. RAMP CROSS SLOPES SHALL NOT EXCEED 0.02.
2. THE LOCATION AND ORIENTATION OF CURB CUT RAMPS SHALL BE AS SHOWN IN THE PLANS.
3. RAMPS RUNS SHALL HAVE A TACTILE SURFACE. RAMP LANDINGS ADJOINING VEHICULAR WAYS SHALL HAVE A TACTILE SURFACE 36" WIDE BORDERING THE VEHICULAR WAY. TACTILE SURFACES SHALL BE CONSTRUCTED BY TEXTURING TO A DEPTH NOT EXCEEDING 1/8" BY USE OF A TAMP OR ROLLER FABRICATED WITH AN IMPRINTING SURFACE OF EITHER MESH 0.250 WIRE CLOTH (PLAIN WEAVE, CONVENTIONAL CRIMP), #6 EXPANDED METAL (STANDARD) OR 3 LB. EXPANDED METAL GRATING. TRANSITION SLOPES ARE NOT TO HAVE TACTILE SURFACES.
4. WHERE A CURB CUT RAMP IS CONSTRUCTED WITHIN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OF CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE DROP CURB OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE OR WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5' LONG.

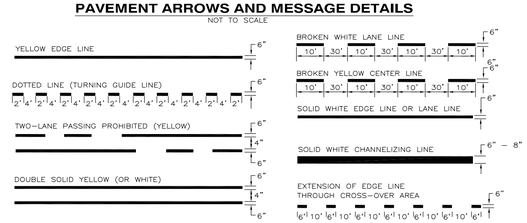
HANDICAP RAMP DETAIL
NOT TO SCALE



HANDICAP STRIPING DETAIL
NOT TO SCALE



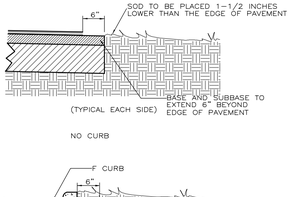
PAVEMENT ARROWS AND MESSAGE DETAILS
NOT TO SCALE



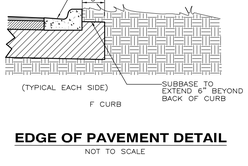
BASIC COLOR RULE

WHITE LINES SEPARATE FLOWS IN SAME DIRECTION
YELLOW LINES SEPARATE FLOWS IN OTHER OPPOSITE DIRECTION
YELLOW DOTTED LINES MAY BE USED IN SPECIAL CASES

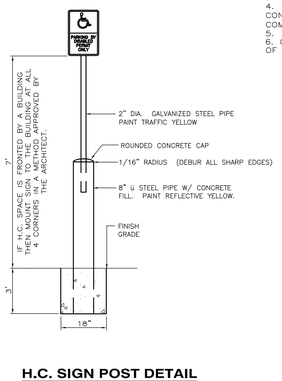
TYPES OF PERMANENT LONGITUDINAL LINES
NOT TO SCALE



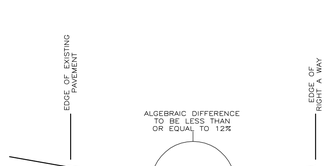
NO CURB



EDGE OF PAVEMENT DETAIL
NOT TO SCALE

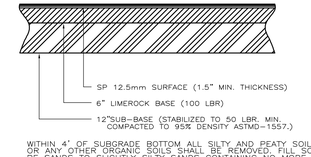


H.C. SIGN POST DETAIL
NOT TO SCALE



NOTES:
1. SLOPE STABILIZATION REQUIREMENTS (SLOPES NOTED AS VER:HOR);
   - FLAT TO 1:3 – SEED AND MULCH, HYDRO–SEED, SOD (TYPE AND APPLICATION RATE PER F.D.O.T. INDEX 105)
   - 1:3 TO 1:2 – SOD LAPPED AND PINNED
   - 1:2 TO 1:1 – EROSION CONTROL BLANKET WITH SEEDING
   - 1:1 OR GREATER – RETAINING WALL OR ARMORFORM
2. OVERSEED ALL SOD WITH QUICK GROWING GRASS SEED DURING NOVEMBER TO MARCH. ALL SOD TO BE STAGGERED PER F.D.O.T. INDEX 105 PATTERN DETAIL.
3. LIMITED USE OPTIONAL BASE GROUPS TRAFFIC LIMITS SHOWN IN INDEX 514 APPLY.
4. SURFACE COURSE TO BE 1½" MINIMUM THICKNESS TYPE S OR SUPERPAVE (FINE MIX) ASPHALTIC CONCRETE, OR F.D.O.T. SPECIFICATION CLASS I PORTLAND CEMENT CONCRETE THAT IS 6" THICK FOR COMMERCIAL DRIVEWAYS OR 4" THICK FOR RESIDENTIAL DRIVEWAYS.
5. EXISTING ROADSIDE DRAINAGE FLOW TO BE MAINTAINED.
6. ONLY ASPHALTIC CONCRETE, MILLED ASPHALT OR BAHAMA BASES ARE ACCEPTABLE IN COUNTY RIGHT OF WAY FOR CONNECTION TO DIRT ROADS. PCC DRIVEWAYS TO TERMINATE AT PROPERTY LINES.

SWALED DRIVEWAY CROSS SECTION
NOT TO SCALE



WITHIN 4' OF SUBGRADE BOTTOM ALL SILTY AND PEATY SOILS OR ANY OTHER ORGANIC SOILS SHALL BE REMOVED. FILL SOILS SHALL BE SANDS TO SLIGHTLY SILTY SANDS CONTAINING NO MORE THAN 15% BY DRY WEIGHT, FINER THAN THE U.S. No. 200 MESH SIEVE AND COMPACTED TO A DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY THROUGHOUT ITS FULL DEPTH.

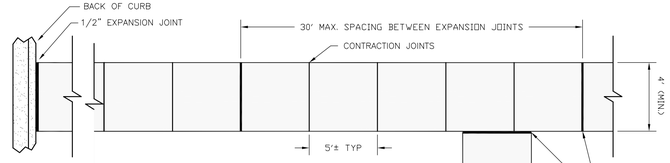
ASPHALTIC PAVEMENT DETAIL
NOT TO SCALE

TEST SCHEDULE

ITEM	TEST	TEST IDENTIFICATION	TEST REQUIREMENT	TEST FREQUENCY
UTILITY TRENCH FILL & BACKFILL	MAXIMUM DENSITY OPTIMUM MOISTURE	AASHTO T–180 ASTM D–1557	N/A	PER SOIL TYPE
	FIELD DENSITY	AASHTO T–191,T–204 ASTM D–1556,D–2937	95% OF MAXIMUM DENSITY	ONE PER 500 LF HORIZONTAL OR ONE PER 750SY WITH A MINIMUM OF 3 TESTS, ALTERNATING LIFTS (12")
	GRADATION	AASHTO M–92	< 15% PASSING NO. 200	ONE PER SOIL TYPE
FILL & BACKFILL UNDER ROADWAYS AND STRUCTURES	MAXIMUM DENSITY OPTIMUM MOISTURE	AASHTO T–180 ASTM D–1557	N/A	PER SOIL TYPE
	FIELD DENSITY	AASHTO T–191,T–204, ASTM D–1556, D–2937	98% OF MAXIMUM DENSITY	ONE PER 500 LF HORIZONTAL OR ONE PER 750SY WITH A MINIMUM OF 3 TESTS, ALTERNATING LIFTS (12")
	GRADATION	AASHTO M–92	<15% PASSING NO. 200	PER SOIL TYPE
SUBGRADE	BEARING VALUES	LBR–F.D.O.T.	40 (MIN.)	ONE PER SITE OR AT MATERIAL CHANGES
	MAXIMUM DENSITY OPTIMUM MOISTURE	AASHTO T–180 ASTM D–1557	N/A	PER SOIL TYPE
	FIELD DENSITY & THICKNESS	AASHTO T–191,T–204, ASTM D–1556, D–2937	98% OF MAXIMUM DENSITY	ONE PER 500 LF HORIZONTAL OR ONE PER 750SY WITH A MINIMUM OF 3 TESTS
BASE (SAND–ASPHALT)	MARSHALL STABILITY TESTS	F.D.O.T. FM 5–511	500 LBS. (MIN.)	ONE PER SOURCE OF AS MATERIAL CHANGES
	FIELD DENSITY & THICKNESS	ASTM D–1559	95% OF LAB DENSITY AS DETERMINED BY MARSHALL METHOD	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
ASPHALT	MATERIALS QUALITY BITUMEN CONTENT & GRADATION	AASHTO T–164, T–30 ASTM D–2172	FDOT SPEC 330,331,916	FDOT SPEC 331,916 ONE PER DAY FOR GRADATION
	FIELD DENSITY & THICKNESS	ASTM D–2950	95% OF LAB DENSITY	ONE PER 500 L.F. HORIZONTAL OR ONE PER 750 S.Y. WITH A MINIMUM OF 3 TESTS
	AGGREGATE CERTIFICATION	N/A	FDOT SPEC 901,902	ONE PER SUPPLIER
	MARSHALL STABILITY & DENSITY	ASTM D–1559	FDOT SPEC 330, 331	ONE PER DAY
CONCRETE (MISC. SITE WORK)	SLUMP TEST	AASHTO T–119 ASTM C–143	2" TO 3"	AS REQUIRED BY SOILS ENGINEER OR ONE PER SET OF CYLINDERS
	COMPRESSIVE STRENGTH	AASHTO T–23 ASTM C–31	3000 PSI	ONE SET OF 3 CYLINDERS PER 50 C.Y. PER DAY
	AIR CONTENT	AASHTO T–199	3% TO 6%	ONE PER SET OF CYLINDERS

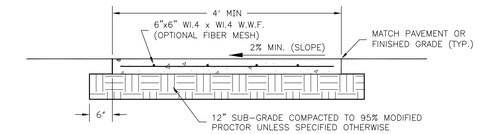
NOTE: 1. CONCRETE FOR SITE WORK INCLUDES BUT IS NOT LIMITED TO CURB, CURB & GUTTER, SIDEWALKS, CONCRETE PAVING, ETC.
2. THIS TEST SCHEDULE APPLIES TO SITE WORK ONLY. SEE ARCHITECT'S SPECIFICATIONS FOR FOUNDATION/BUILDING TESTING.
3. TEST FREQUENCY FOR HORIZONTAL DISTANCES ARE BASED ON AN AVERAGE 24 FOOT WIDE ROADWAY.

MATERIALS TEST SCHEDULE
NOT TO SCALE



NOTE:
1. SIDEWALKS SHALL BE 4" THICK. EXCEPT SIDEWALKS ACROSS DRIVEWAYS SHALL BE 6" THICK.
2. WALKS 8' AND NARROWER, SPACE TRANSVERSE CONTRACTION JOINTS AT INTERVAL EQUAL TO WIDTH OF WALK OR AS NOTED.
3. CONTRACTION JOINTS TO BE 1" DEEP SCORED. SAW–CUT, OR FORMED WITH INSERT AT CONTRACTORS OPTION UNLESS NOTED OTHERWISE. SCORED JOINTS TO USE AN APPROVED TOOL. INSERTS TO BE GREENSTREAK ZIPCAP #855 OR EQUAL. SCORED JOINTS TO BE EDGED WITH 1/8" RADIUS.
4. EXPANSION JOINT REQUIRED WHERE SHOWN. EXPANSION JOINT TO CONSIST OF 1/2" FIBER BOARD AND GREENSTREAK CAP SEAL #624 OR EQUAL.
5. A MINIMUM 2' CLEAR ZONE FROM BACK OF CURB TO SIDEWALK.
6. IF NO CURB EXISTS, PLACE BACK OF SIDEWALK AT THE RIGHT–OF–WAY.

STANDARD JOINT LAYOUT FOR CONCRETE WALKS



CONCRETE SIDEWALK DETAIL
NOT TO SCALE

PERMIT PURPOSES ONLY

CONSTRUCTION DETAILS
CENTRAL CREDIT UNION OF FLORIDA
STATE ROAD 77
PANAMA CITY, FLORIDA

SCALE: SHOWN
DESIGNED BY: JFP
DRAWN BY: JFP
REVIEWED BY: SDM
ISSUE DATE: 12/11/2012
CF/D: 85502E02
NOT RELEASED FOR CONSTRUCTION BY:
DATE:

McNEIL CARROLL ENGINEERING, INC.
Professional Engineering Consultants
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 7288
475 Harrison Avenue, Suite 200
Panama City, Florida 32401
Phone: 850-763-5730
Fax: 850-763-5744

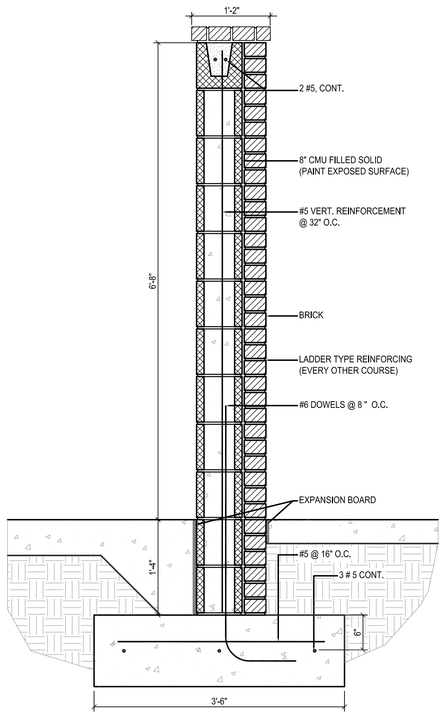
NO.	DATE	BY	REVISIONS
01			
02			
03			
04			
05			

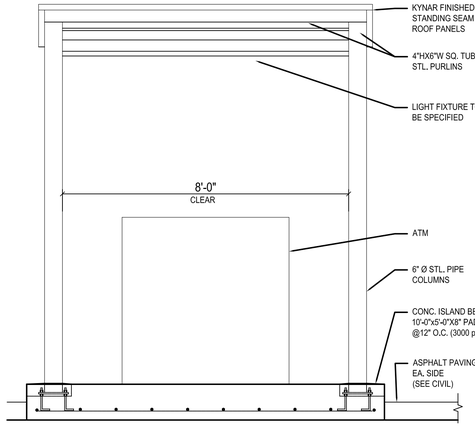
Sean D. McNeil, P.E.
PROFESSIONAL ENGINEER
FL LIC # 49305

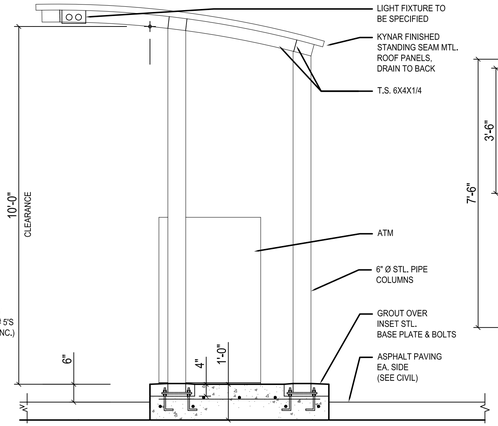
Robert L. Carroll, P.E.
PROFESSIONAL ENGINEER
FL LIC # 57988

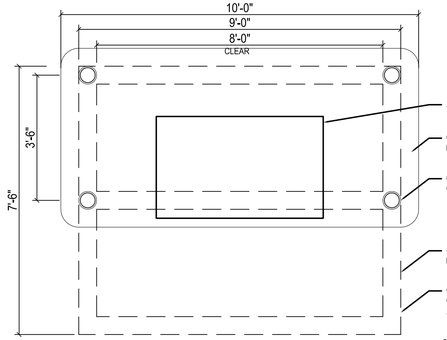
SHEET NUMBER 12 OF 12

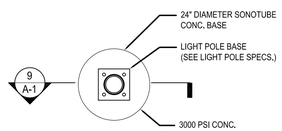
85502 – CENTRAL CREDIT UNION OF FLORIDA

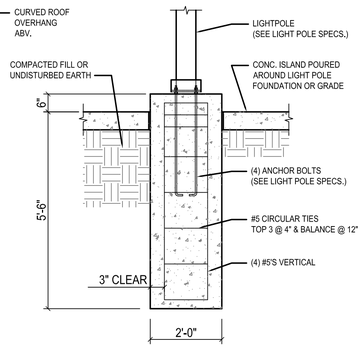


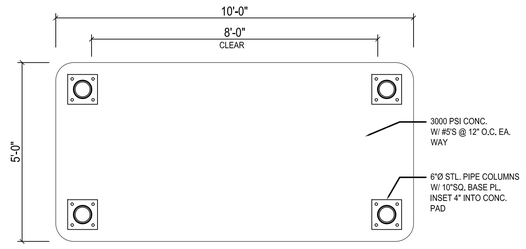


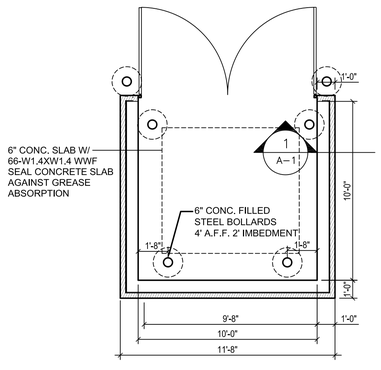


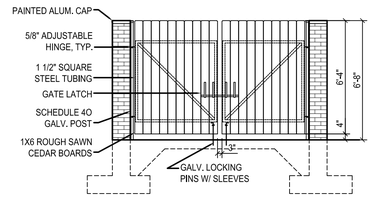


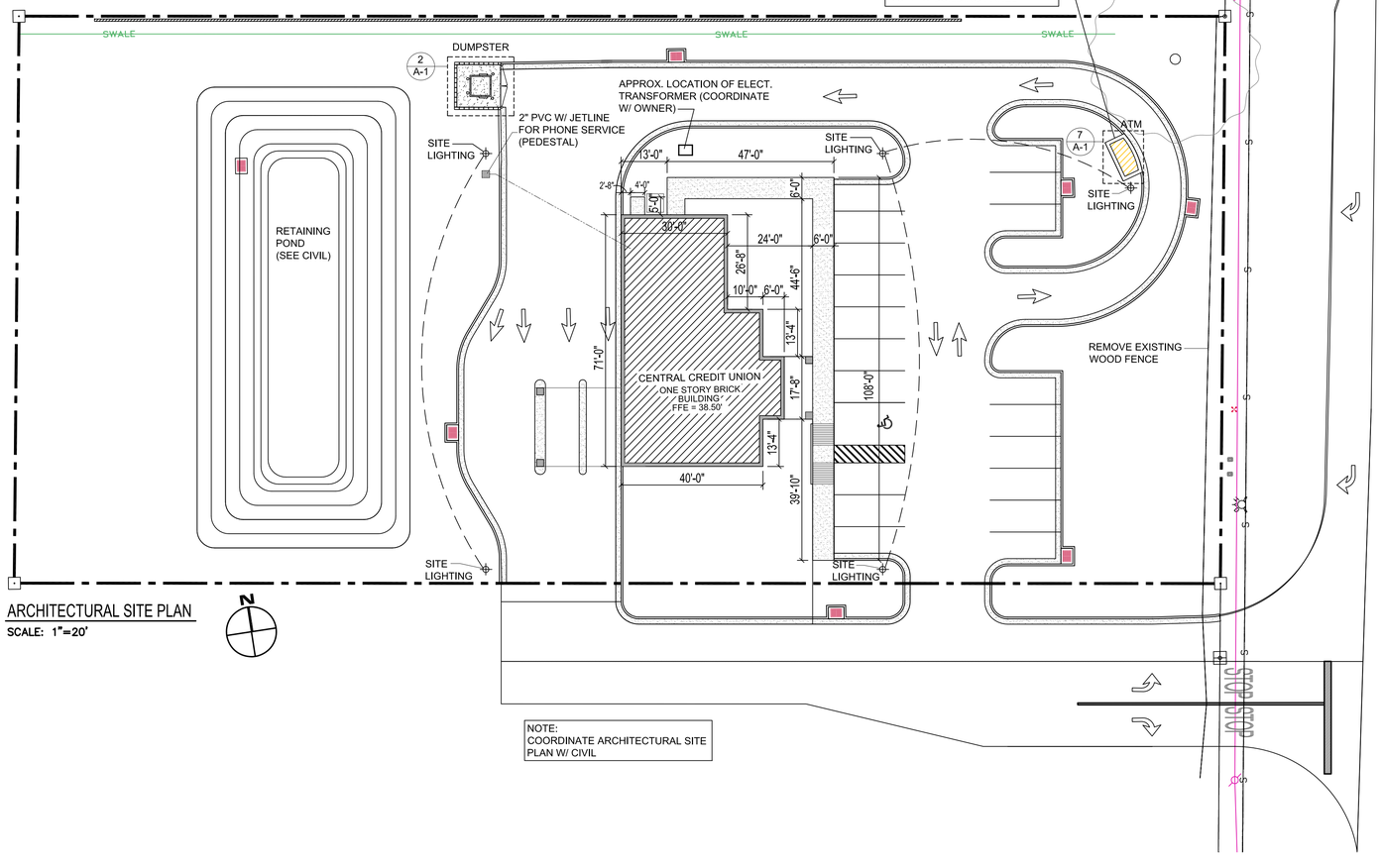












1 / A-1 SCREEN WALL SECTION
SCALE: 1"=1'–0"

4 / A-1 ATM ELEVATION
SCALE: 1"=1'–0"

6 / A-1 ATM ELEVATION
SCALE: 1"=1'–0"

7 / A-1 ATM PLAN
SCALE: 1"=1'–0"

NOTE:
RADIUS CONC. BASE OF ATM TO FOLLOW CURB RADIUS. (COORDINATE W/ CIVIL)

8 / A-1 LIGHT POLE PLAN
SCALE: 1"=1'–0"

9 / A-1 LIGHT POLE SECTION
SCALE: 1"=1'–0"

5 / A-1 ATM FOUNDATION
SCALE: 1"=1'–0"

2 / A-1 SCREEN WALL PLAN
SCALE: 1/4"=1'–0"

3 / A-1 SCREEN WALL ELEVATION
SCALE: 1/4"=1'–0"

(4) 1" PVC CONDUITS FOR ATM POWER, POLE AND CANOPY LIGHTS, POWER, ATM COMMUNICATIONS, AND ATM SECURITY. EXTEND CONDUITS TO NEW BUILDING PANEL

ARCHITECTURAL SITE PLAN
SCALE: 1"=20'

NOTE:
COORDINATE ARCHITECTURAL SITE PLAN W/ CIVIL

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

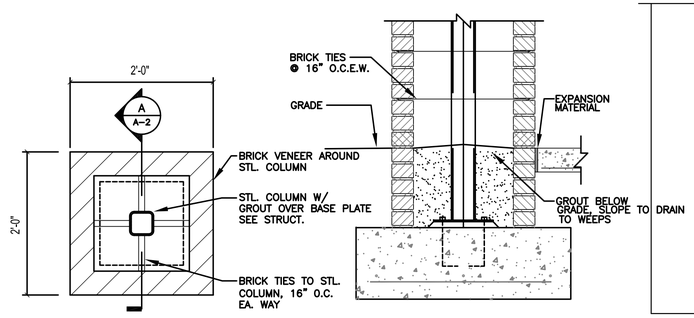
Title:
ARCHITECTURAL
SITE PLAN

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No.
A-1

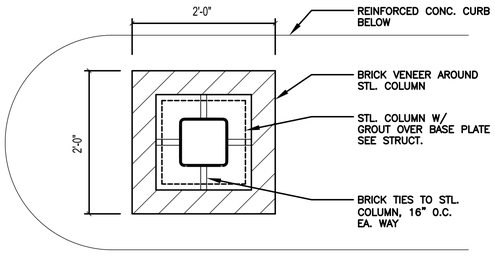
ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOORS: CARPET TILE #1	FLOORS: CARPET TILE #2	FLOORS: WALK-OFF CARPET	FLOORS: CERAMIC TILE	FLOORS: MARBLE THRESHOLD	FLOORS: WOOD/ CONCRETE	BASE: RUBBER	BASE: CERAMIC TILE	WALLS: GWB, PAINTED	WALLS: GLASS	WALLS: WOOD	CEILING: ACOUSTICAL	CEILING: SUSP. GWB, PAINTED	NOTES
100	LOBBY	●	●	●				●		●	●	●	●	●	RUBBER TRANSITION STRIPS
101	OFFICE 'A'	●						●		●	●	●	●		
102	OFFICE 'B'	●						●		●	●	●	●		
103	OFFICE 'C'	●						●		●	●	●	●		
104	TELLERS	●						●		●	●	●	●	●	
105	WORK AREA	●						●		●			●		
106	VAULT	●						●		●				●	
107	OFFICE 'D'	●						●		●	●	●	●		
108	HALL	●						●		●	●	●	●		
109	MEN					●	●			●	●			●	
110	WOMEN					●	●			●	●			●	
111	HALL	●						●		●	●				
112	BREAK ROOM	●						●		●	●		●		
113	STORAGE	●						●		●	●				
114	ELEC. / TELCOM ROOM						●	●		●			●		
115	MECHANICAL ROOM						●	●		●				●	

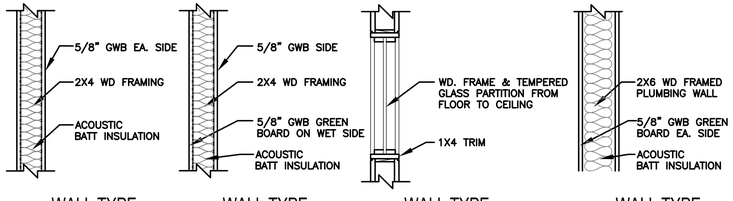


2 A–2 DETAIL @ DBL. COLUMNS
SCALE: 1" = 1'-0"

A A–2 DETAIL @ DBL. COLUMNS
SCALE: 1" = 1'-0"

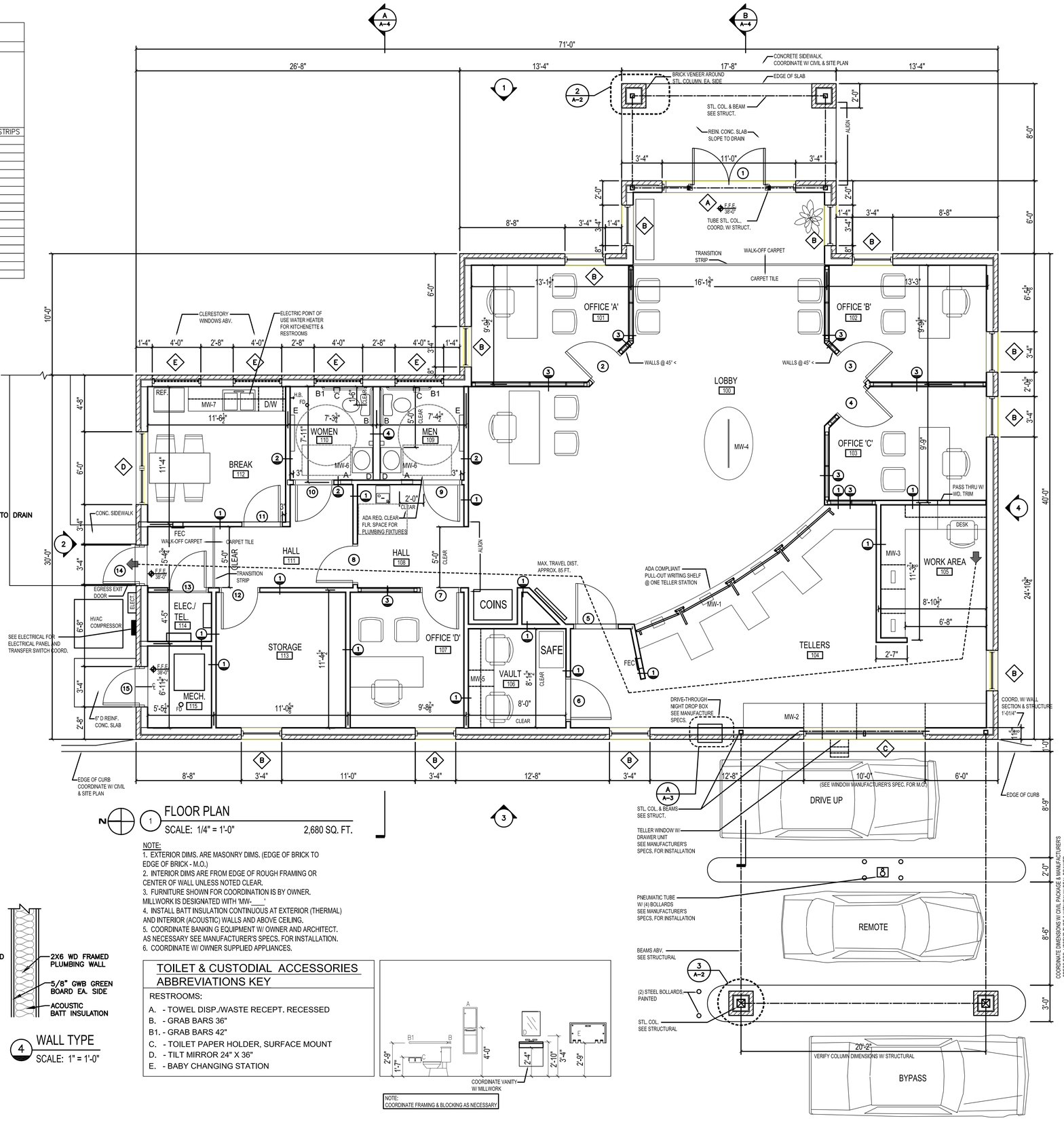


3 A–2 DETAIL @ DRIVE-THROUGH COLUMN
SCALE: 1" = 1'-0"



1 WALL TYPE SCALE: 1" = 1'-0"
2 WALL TYPE SCALE: 1" = 1'-0"
3 WALL TYPE SCALE: 1" = 1'-0"
4 WALL TYPE SCALE: 1" = 1'-0"

NOTE:
COOR. WALL TYPES W/ FINISH SCHEDULE, WINDOW AND DOOR SCHEDULE, AND MILLWORK.



N 1 FLOOR PLAN
SCALE: 1/4" = 1'-0" 2,680 SQ. FT.

NOTE:
1. EXTERIOR DIMS. ARE MASONRY DIMS. (EDGE OF BRICK TO EDGE OF BRICK - M.O.)
2. INTERIOR DIMS ARE FROM EDGE OF ROUGH FRAMING OR CENTER OF WALL UNLESS NOTED CLEAR.
3. FURNITURE SHOWN FOR COORDINATION IS BY OWNER. MILLWORK IS DESIGNATED WITH 'MW-___'
4. INSTALL BATT INSULATION CONTINUOUS AT EXTERIOR (THERMAL) AND INTERIOR (ACOUSTIC) WALLS AND ABOVE CEILING.
5. COORDINATE BANKIN G EQUIPMENT W/ OWNER AND ARCHITECT. AS NECESSARY SEE MANUFACTURER'S SPECS. FOR INSTALLATION.
6. COORDINATE W/ OWNER SUPPLIED APPLIANCES.

TOILET & CUSTODIAL ACCESSORIES ABBREVIATIONS KEY

RESTROOMS:

A. - TOWEL DISP./WASTE RECEPT. RECESSED
B. - GRAB BARS 36"
B1. - GRAB BARS 42"
C. - TOILET PAPER HOLDER, SURFACE MOUNT
D. - TILT MIRROR 24" X 36"
E. - BABY CHANGING STATION

NOTE:
COORDINATE FRAMING & BLOCKING AS NECESSARY

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

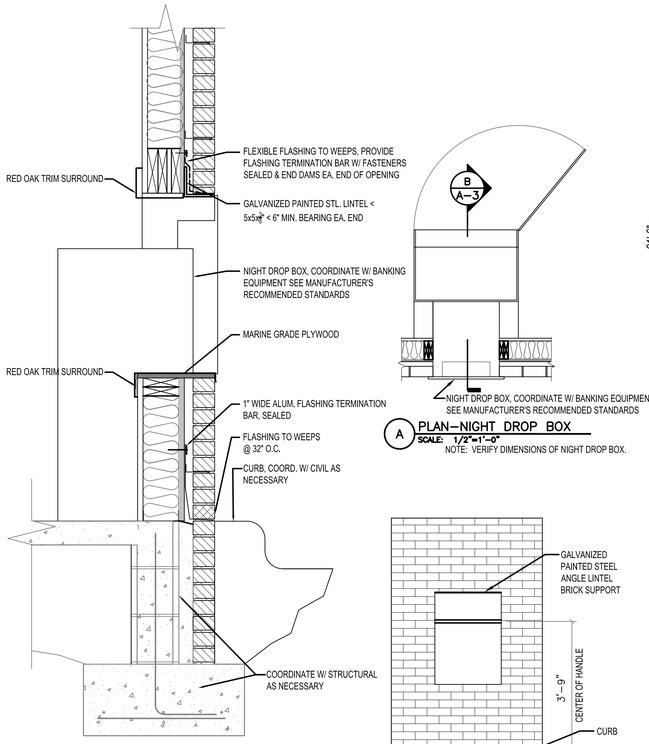
REVISIONS

No.	Description	Date

Title: FLOOR PLAN

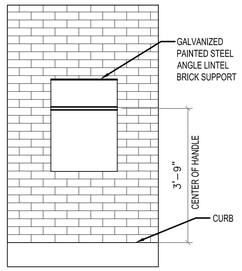
Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No. A-2

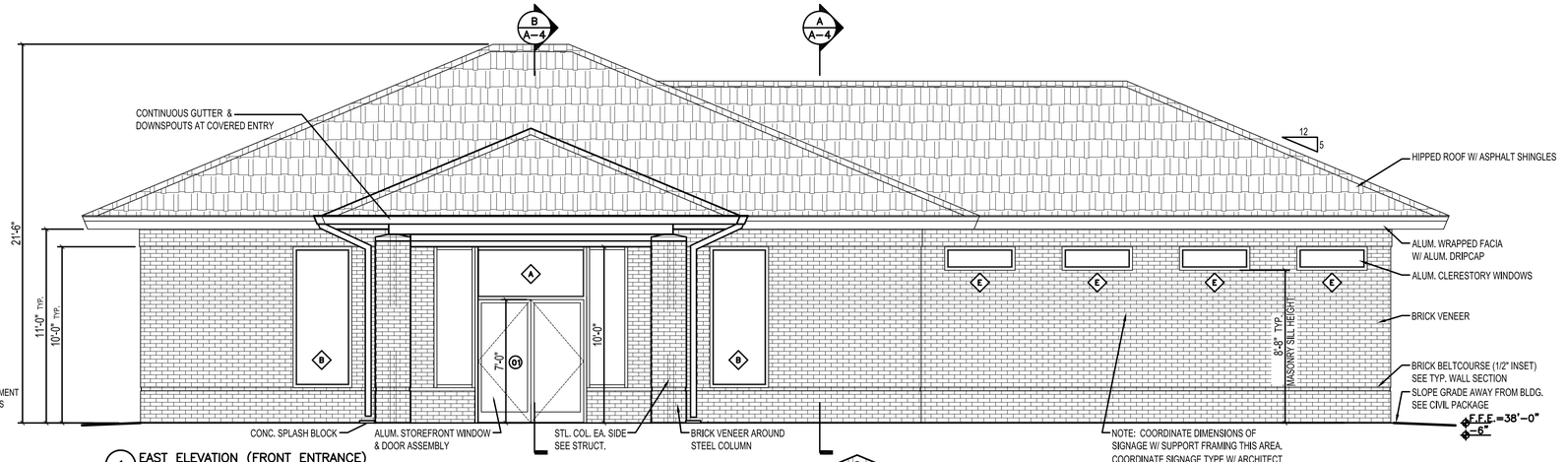


B SECTION–NIGHT DROP BOX
SCALE: 1"=1'–0"

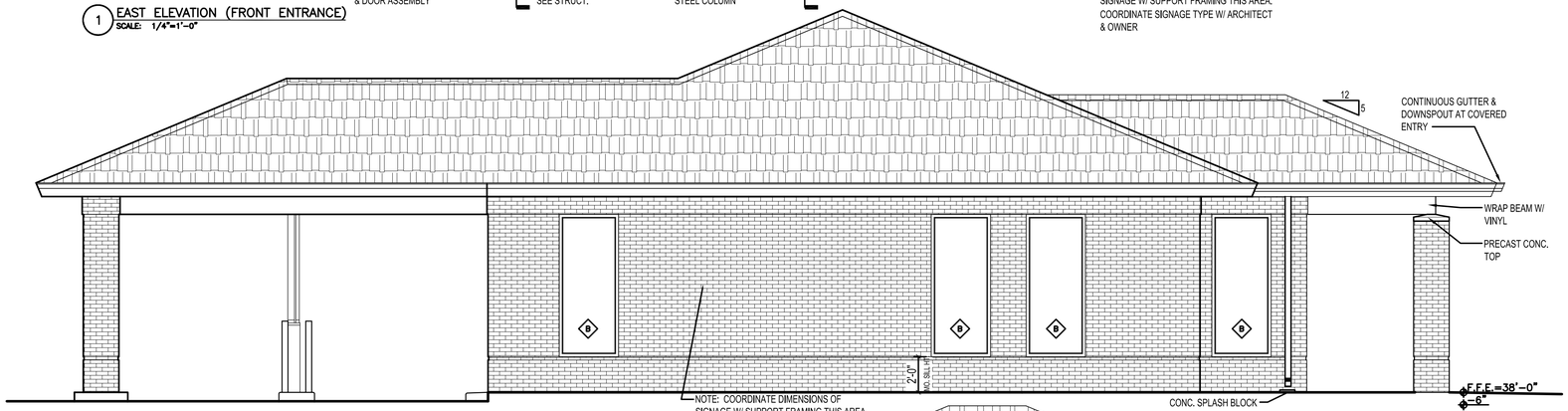
A PLAN–NIGHT DROP BOX
SCALE: 1/2"=1'–0"
NOTE: VERIFY DIMENSIONS OF NIGHT DROP BOX.



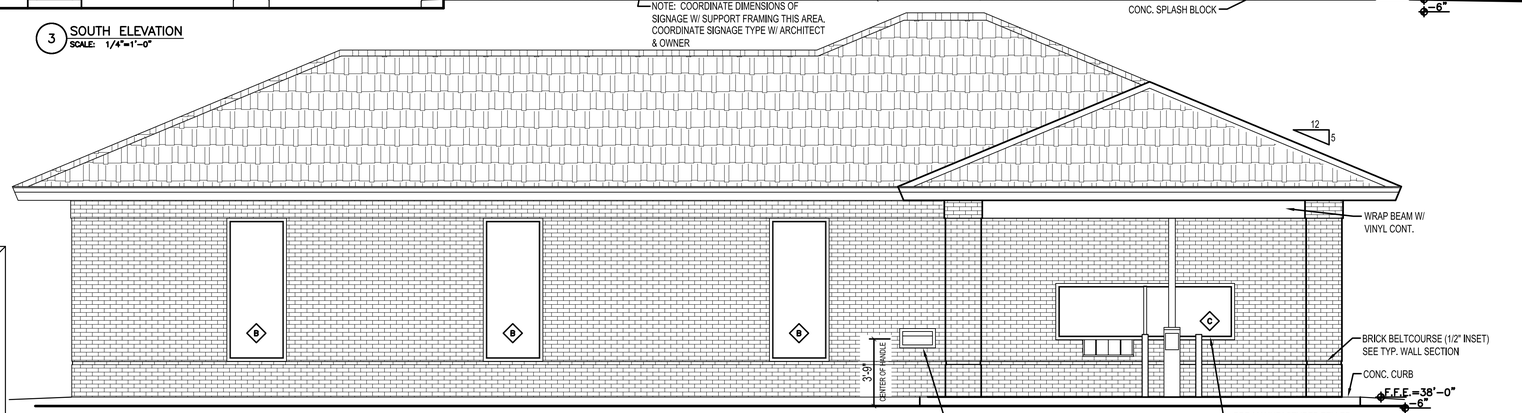
C ELEVATION–NIGHT DROP BOX
SCALE: 1/2"=1'–0"



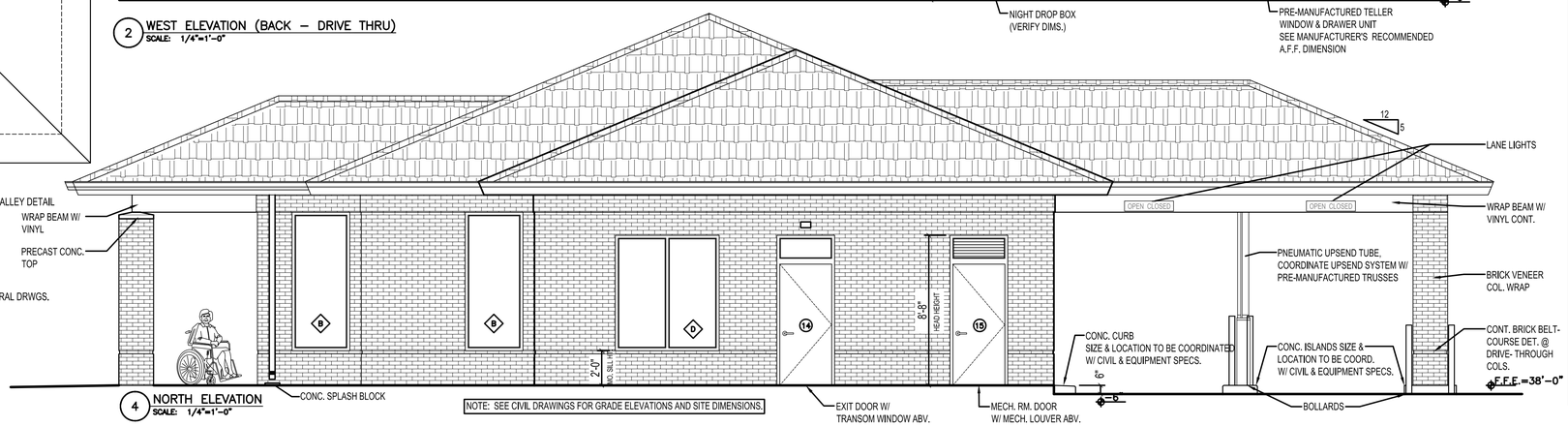
1 EAST ELEVATION (FRONT ENTRANCE)
SCALE: 1/4"=1'–0"



3 SOUTH ELEVATION
SCALE: 1/4"=1'–0"

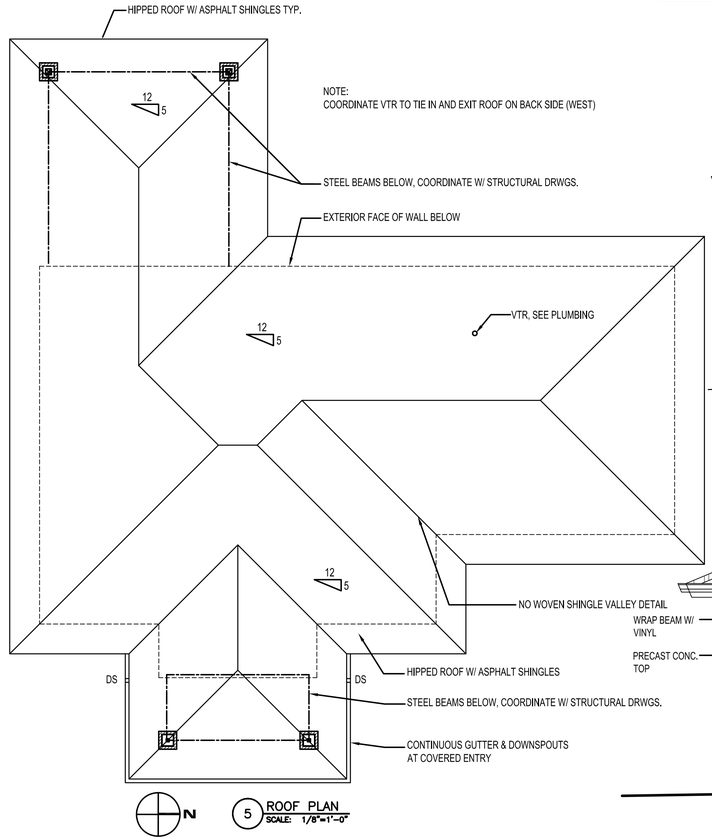


2 WEST ELEVATION (BACK – DRIVE THRU)
SCALE: 1/4"=1'–0"



4 NORTH ELEVATION
SCALE: 1/4"=1'–0"

NOTE: SEE CIVIL DRAWINGS FOR GRADE ELEVATIONS AND SITE DIMENSIONS.



5 ROOF PLAN
SCALE: 1/8"=1'–0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

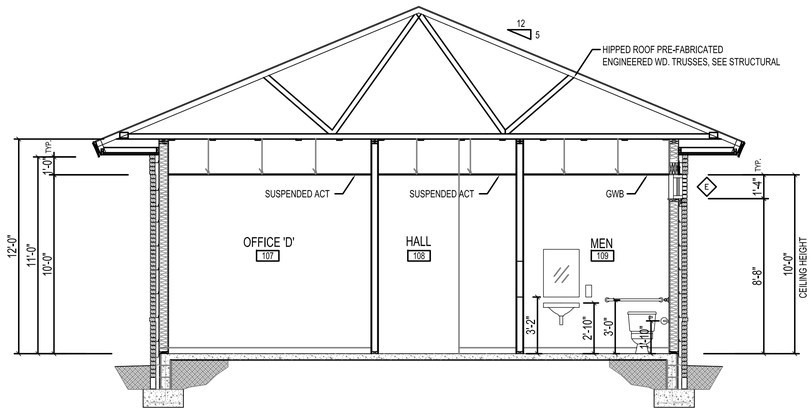
REVISIONS

No.	Description	Date

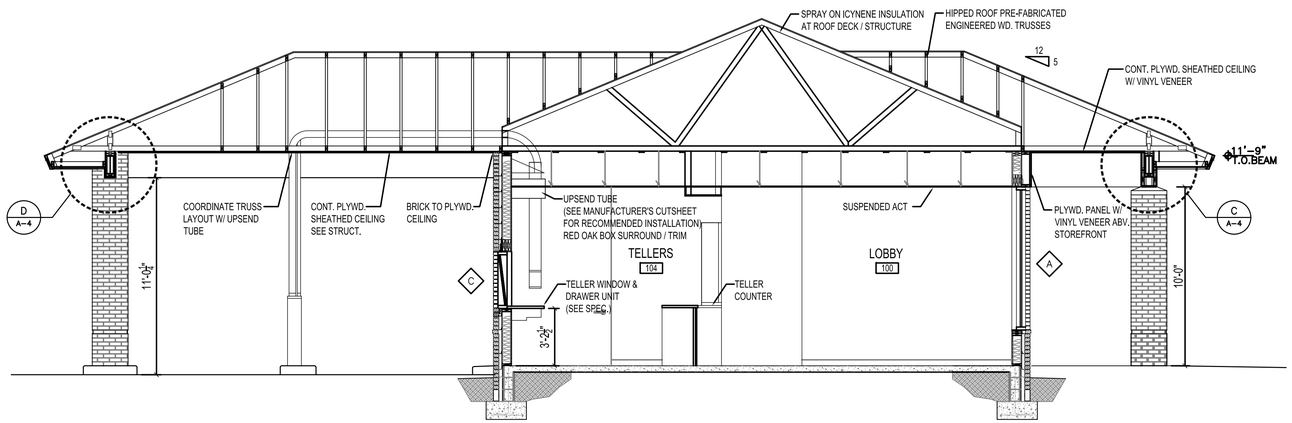
Title: BUILDING ELEVATIONS

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

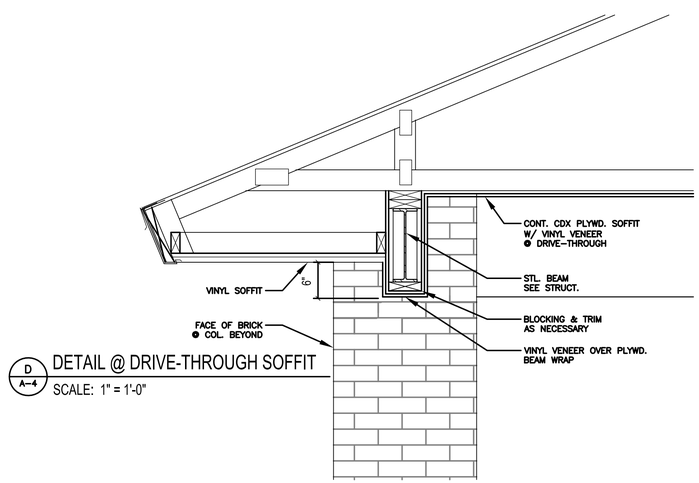
Dwg. No. A-3



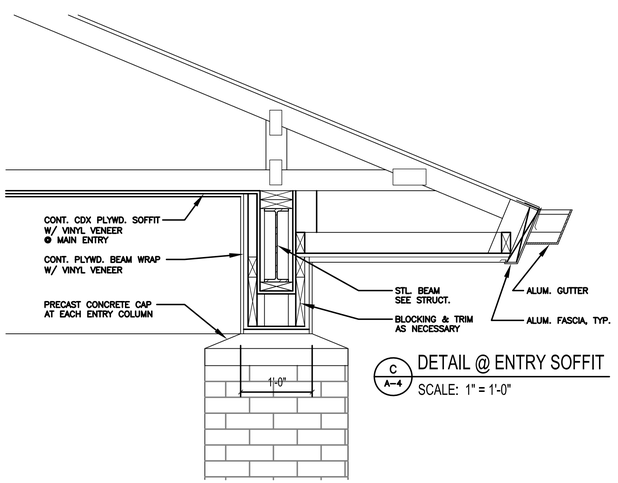
A BUILDING SECTION 'A'
SCALE: 1/4" = 1'-0"



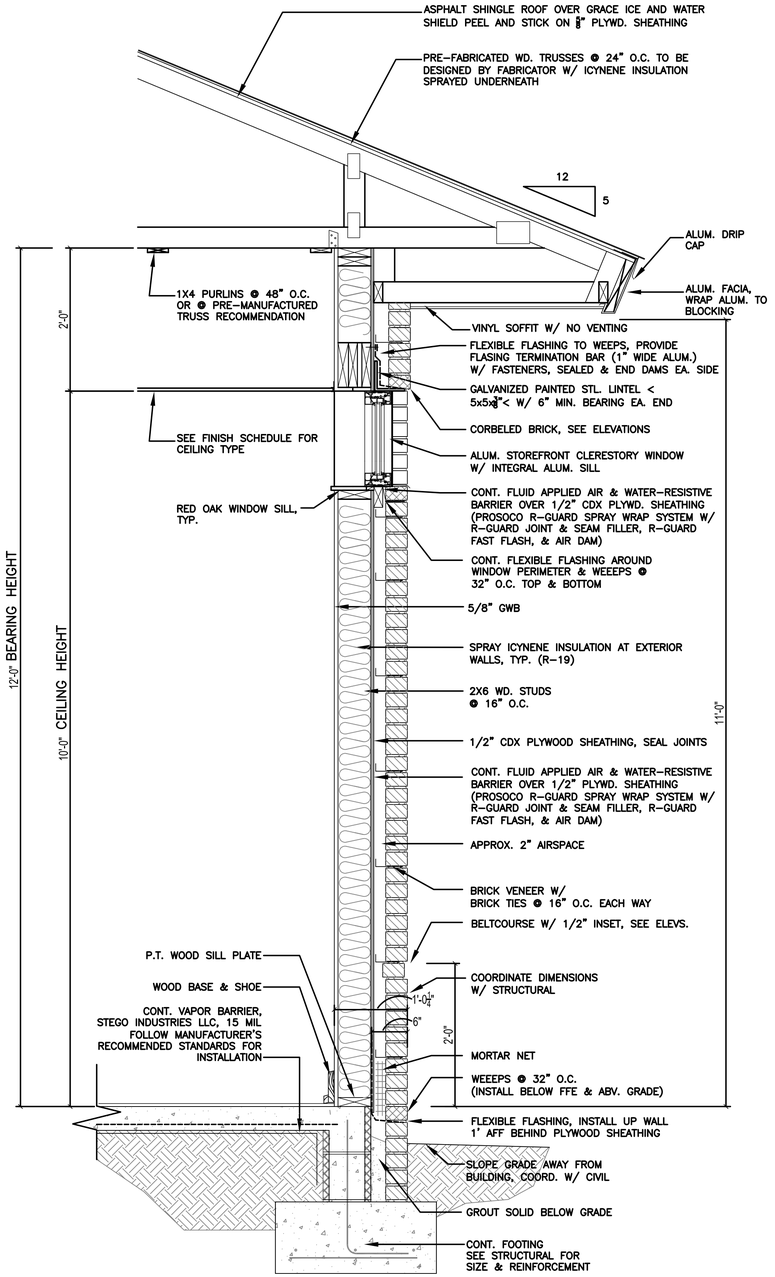
B BUILDING SECTION 'B'
SCALE: 1/4" = 1'-0"



D A-4 DETAIL @ DRIVE-THROUGH SOFFIT
SCALE: 1" = 1'-0"



C A-4 DETAIL @ ENTRY SOFFIT
SCALE: 1" = 1'-0"



1 TYP. EXTERIOR WALL SECTION
SCALE: 1" = 1'-0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

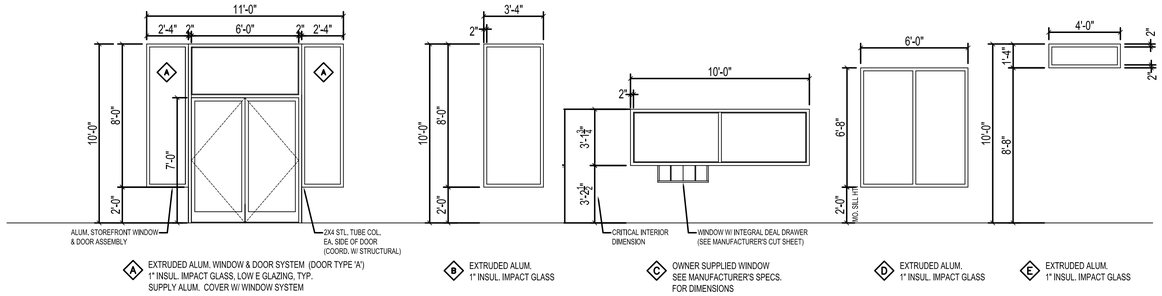
CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS		
No.	Description	Date

Title: BUILDING SECTIONS & WALL SECTIONS

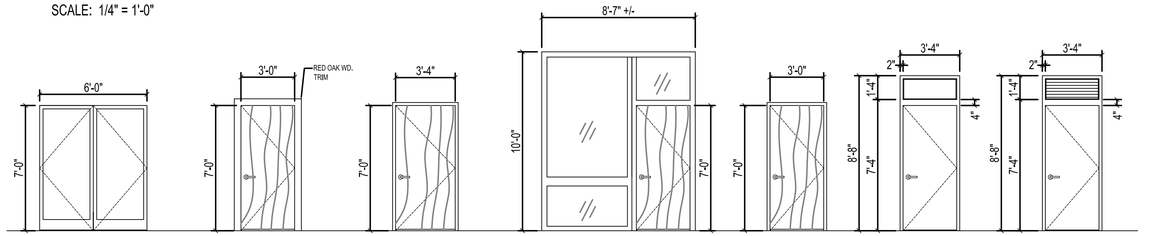
Scale:	As Noted
Date:	December 7, 2012
Drawn By:	JF
Checked By:	DA
Approved By:	DA

Dwg. No. A-4



WINDOW ELEVATIONS

SCALE: 1/4" = 1'-0"



DOOR TYPE 'A'
EXTRUDED ALUM. DOOR SYSTEM
1" INSUL. GLASS

DOOR TYPE 'B'
SOLID CORE WD. DOOR
WOOD FRAME & TRIM
(SEE PLAN FOR HANDING, SEE A-7 FOR DIMENSIONS & DETAILS)

DOOR TYPE 'C'
SOLID CORE WD. DOOR
HMF

DOOR TYPE 'D'
SOLID CORE WD. DOOR
WOOD FRAME & TRIM
TEMPERED GLASS

DOOR TYPE 'E'
SOLID CORE WD. DOOR
HMF - KNOCK-DOWN

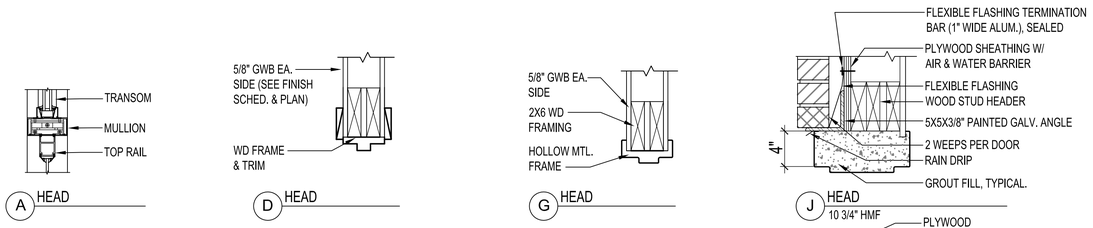
DOOR TYPE 'F'
HM DOOR
HMF
GALV. MTL. TRANSOM FRAME
W/ TEMPERED IMPACT GLASS

DOOR TYPE 'G'
HM DOOR
HMF
ALUM. EXTRUDED LOUVER
FASTENED TO GALV. MTL FRAME

DOOR ELEVATIONS

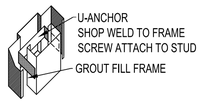
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE								
DOOR NO.	DOORS							
	TYPE	NOMINAL SIZE		DETAILS			HDW SET	REMARKS
		WIDTH	HEIGHT	HEAD	JAMB	SILL		
01	A	6'-0"	7'-0"	A	B	C	1	TEMP. GLASS
02	B	3'-0"	7'-0"	D	E	F	4	SEE A-7 FOR DETAILS
03	B	3'-0"	7'-0"	D	E	F	4	SEE A-7 FOR DETAILS
04	B	3'-0"	7'-0"	D	E	F	4	SEE A-7 FOR DETAILS
05	C	3'-4"	7'-0"	G	H	I	7	PEEP HOLE
06	C	3'-4"	7'-0"	G	H	I	9	PEEP HOLE
07	D	3'-0"	7'-0"				4	TEMP. GLASS
08	E	3'-0"	7'-0"	G	H	I	10	PEEP HOLE
09	E	3'-0"	7'-0"	G	H	I	6	
10	E	3'-0"	7'-0"	G	H	I	6	
11	E	3'-0"	7'-0"	G	H	I	5	
12	E	3'-0"	7'-0"	G	H	I	8	
13	E	3'-0"	7'-0"	G	H	I	8	
14	F	3'-0"	7'-0"	J	K	L	2	PEEP HOLE
15	G	3'-0"	7'-0"	J	K	L	3	

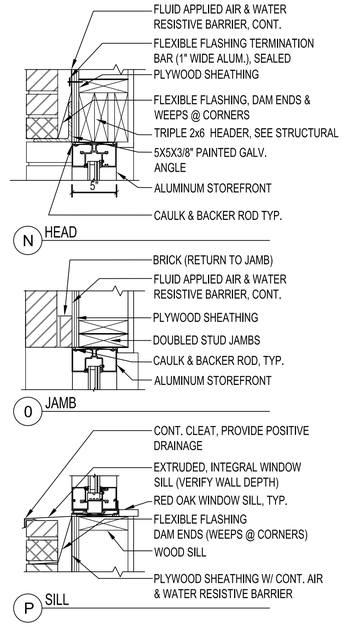


DOOR DETAILS

SCALE: 1 1/2" = 1'-0"



TYPICAL STUD WALL HMF ANCHOR



WINDOW DETAILS

SCALE: 1 1/2" = 1'-0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA

PANAMA CITY SERVICE BRANCH

REVISIONS

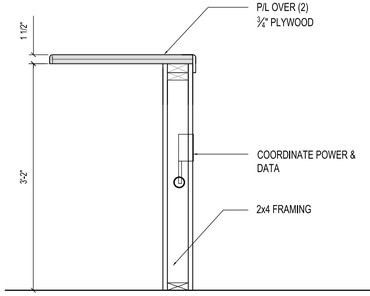
No.	Description	Date

Title: DOOR & WINDOW ELEVATIONS & SCHEDULES

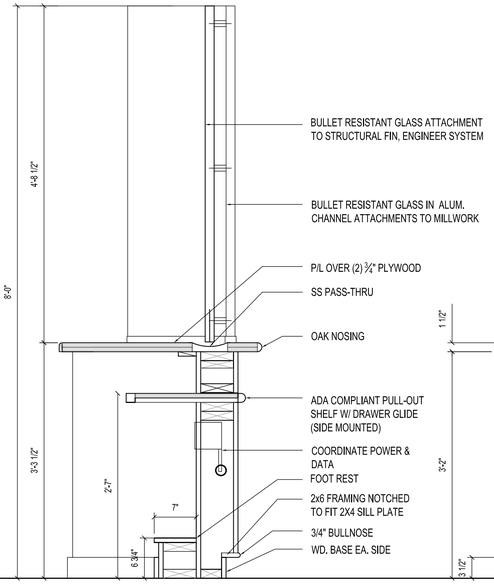
Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No. A-5

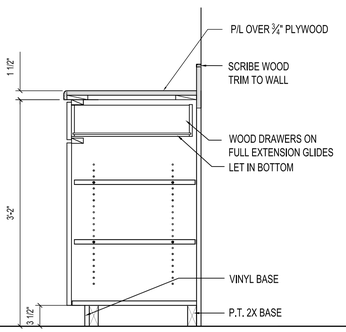
NOTE: PROVIDE RED OAK EASED EDGES @ COUNTER TOP CORNERS.
PROVIIDE GROMMETS FOR POWER OUTLET CABLES
DATA/TELECOM CABLES.



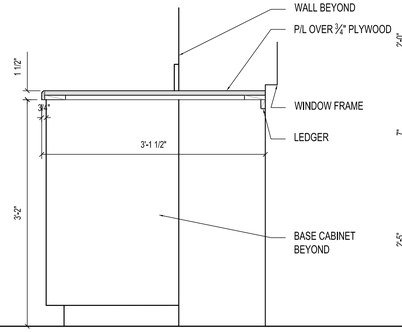
1 MILLWORK SECTION
SCALE: 1" = 1'-0"



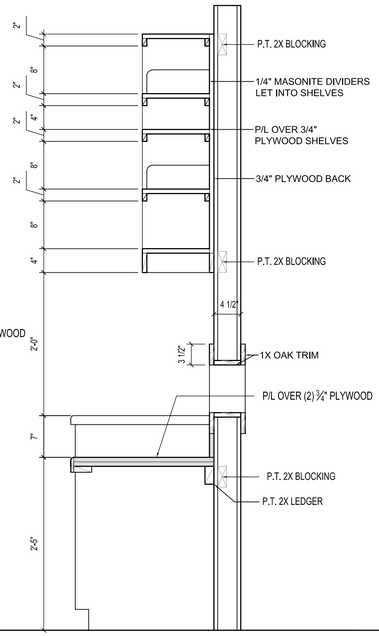
2 MILLWORK SECTION
SCALE: 1" = 1'-0"



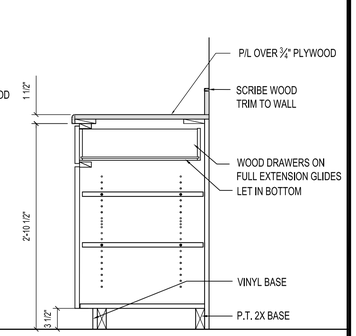
3 MILLWORK SECTION
SCALE: 1" = 1'-0"



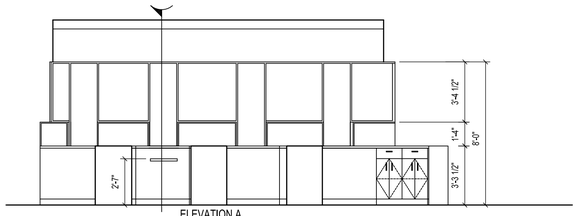
4 MILLWORK SECTION
SCALE: 1" = 1'-0"



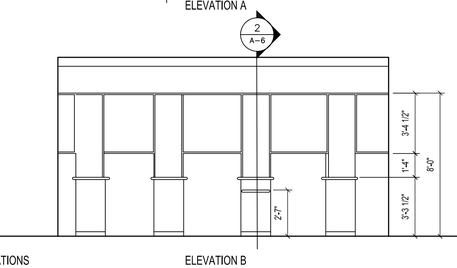
5 MILLWORK SECTION
SCALE: 1" = 1'-0"



6 MILLWORK SECTION
SCALE: 1" = 1'-0"

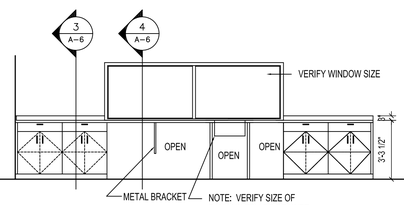


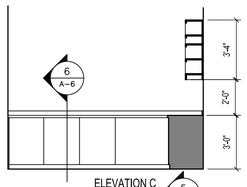
ELEVATION A



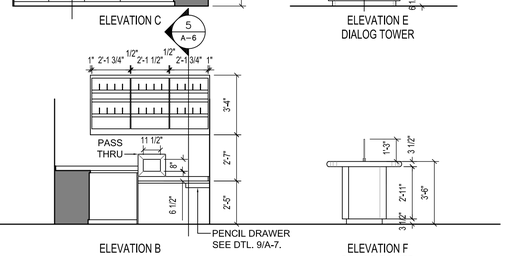
ELEVATIONS

ELEVATION B

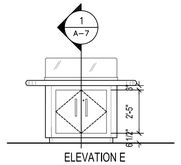




ELEVATION C

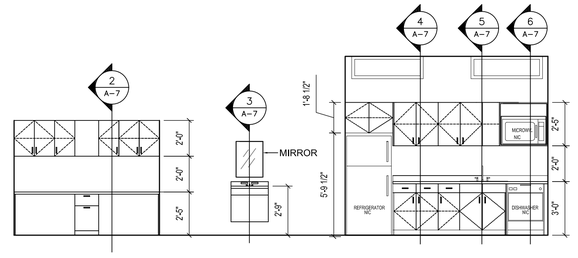


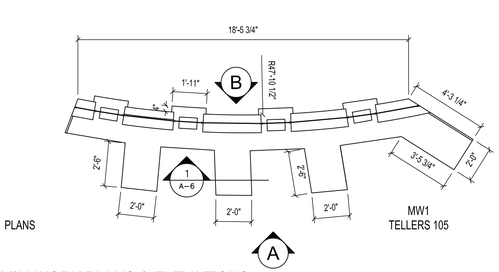
ELEVATION B



ELEVATION E
DIALOG TOWER

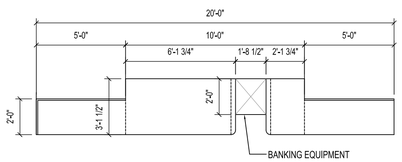
ELEVATION F
DIALOG TOWER



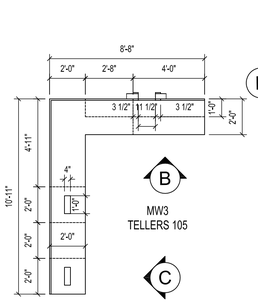


PLANS

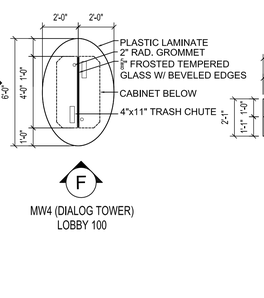
MW1
TELLERS 105



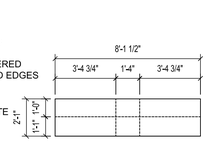
MW2
TELLERS 105



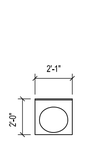
MW3
TELLERS 105



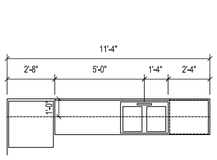
MW4 (DIALOG TOWER)
LOBBY 100



MW5
VAULT 107



MW6 (2 EA.)
WOMEN 109 & MEN 110



MW7
BREAK ROOM 108

1 MILLWORK PLANS & ELEVATIONS
SCALE: 1/4" = 1'-0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

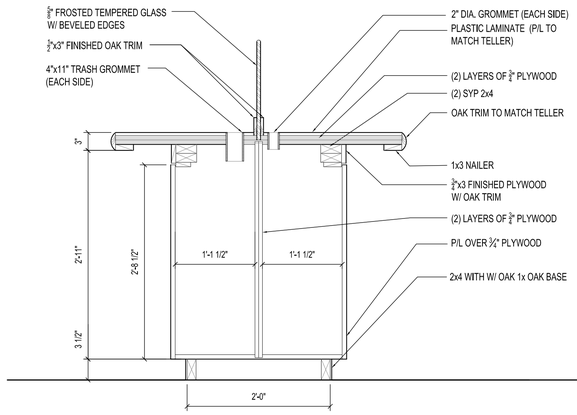
REVISIONS

No.	Description	Date

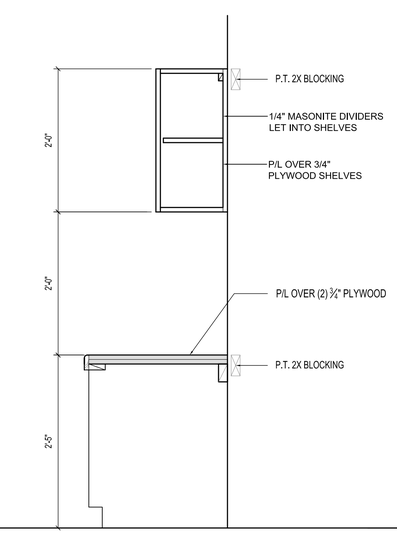
Title: MILLWORK

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

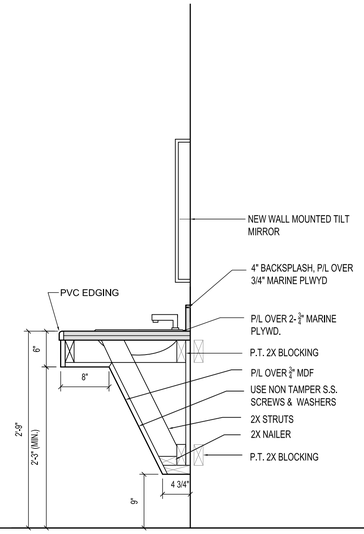
Dwg. No. A-6



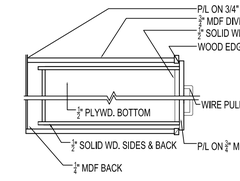
1 MILLWORK SECTION
SCALE: 1" = 1'-0"



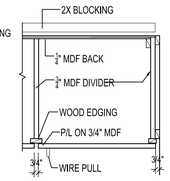
2 MILLWORK SECTION
SCALE: 1" = 1'-0"



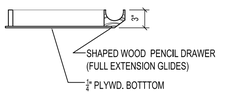
3 MILLWORK SECTION
SCALE: 1" = 1'-0"



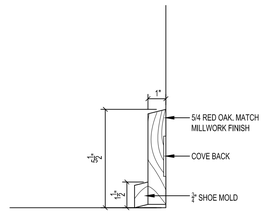
7 TYPICAL DRAWER DTL.
SCALE: 1" = 1'-0"



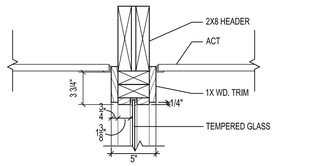
8 TYPICAL DOOR DTL.
SCALE: 1" = 1'-0"



9 PENCIL DRAWER DTL.
SCALE: 1" = 1'-0"

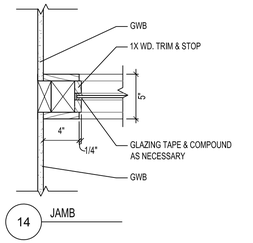


10 WOOD BASE DETAIL (TYP.)
SCALE: 3" = 1'-0"

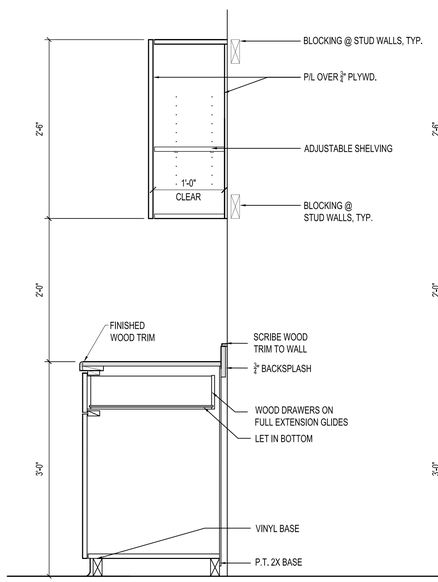


13 HEAD

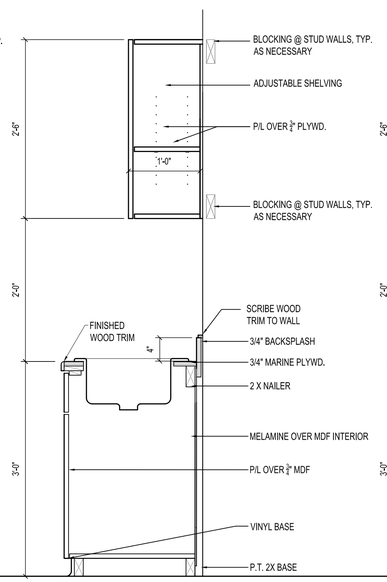
NOTE: 1X RED OAK TRIM TO MATCH STAINED OAK DOORS & WD. BASE.



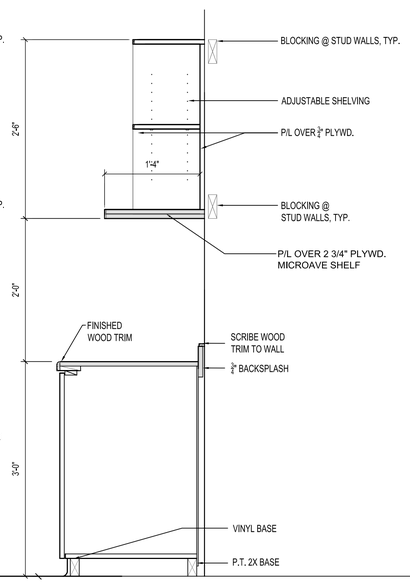
14 JAMB



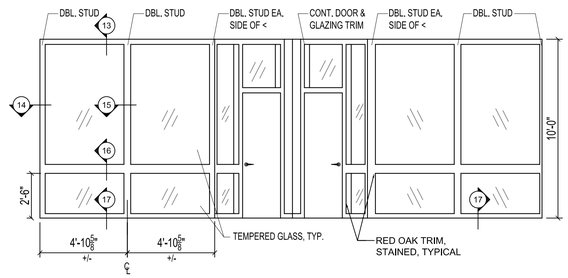
4 MILLWORK SECTION
SCALE: 1" = 1'-0"



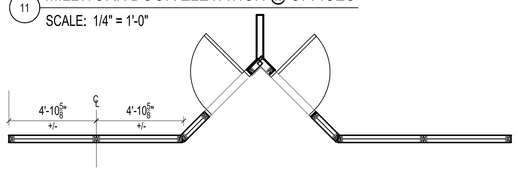
5 MILLWORK SECTION
SCALE: 1" = 1'-0"



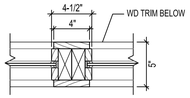
6 MILLWORK SECTION
SCALE: 1" = 1'-0"



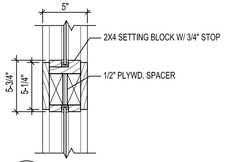
11 MILLWORK DOOR ELEVATION @ OFFICES
SCALE: 1/4" = 1'-0"



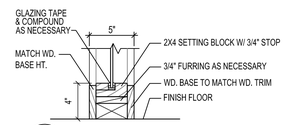
12 MILLWORK DOOR PLAN @ OFFICES
SCALE: 1/4" = 1'-0"



15 VERTICAL MULLION



16 HORIZONTAL MULLION



17 SILL

WOOD DOOR DETAILS
SCALE: 1 1/2" = 1'-0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title: MILLWORK

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No. A-7

SHOP–FABRICATED WOOD TRUSSES SPECS

PART 1 – GENERAL

1.1 SUMMARY

A. Section Includes:

1. Wood roof trusses.
2. Wood girder trusses.
3. Wood truss bracing.
4. Metal truss accessories.

1.2 ACTION SUBMITTALS

A. Product Data: For metal–plate connectors, metal truss accessories, and fasteners.

B. Shop Drawings: Show fabrication and installation details for trusses.

1. Show location, pitch, span, camber, configuration, and spacing for each type of truss required.
2. Indicate sizes, stress grades, and species of lumber.
3. Indicate locations, sizes, and materials for permanent bracing required to prevent buckling of individual truss members due to design loads.
4. Indicate type, size, material, finish, design values, orientation, and location of metal connector plates.
5. Show splice details and bearing details.

C. Delegated–Design Submittal: For metal–plate–connected wood trusses indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 INFORMATIONAL SUBMITTALS

A. Product certificates.

B. Evaluation Reports: For the following, from ICC–ES:

1. Metal–plate connectors.
2. Metal truss accessories.

1.4 QUALITY ASSURANCE

A. Metal Connector–Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with quality–control procedures in TPI 1 for manufacture of connector plates.

1. Manufacturer's responsibilities include providing professional engineering services needed to assume engineering responsibility.
2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

B. Fabricator Qualifications: Shop that participates in a recognized quality–assurance program that complies with quality–control procedures in TPI 1.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Handle and store trusses to comply with recommendations in TPI BCSI, "Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining, & Bracing Metal Plate Connected Wood Trusses."

PART 2 – PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer to design metal–plate–connected wood trusses.

B. Structural Performance: Provide metal–plate–connected wood trusses capable of withstanding design loads within limits and under conditions indicated. Comply with requirements in TPI 1 unless more stringent requirements are specified below.

2.2 DIMENSION LUMBER

A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Provide dry lumber with 19 percent maximum moisture content at time of dressing.

C. Permanent Bracing: Provide wood bracing that complies no. 2 grade southern yellow pine.

2.3 METAL CONNECTOR PLATES

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Alpine Engineered Products, Inc.; an ITW company.
2. Cherokee Metal Products, Inc.; Masengill Machinery Company.
3. CompuTrus, Inc.
4. Eagle Metal Products.
5. Jager Building Systems, Inc.; a Tembec/SGF Rexfor company.
6. MiTek Industries, Inc.; a subsidiary of Berkshire Hathaway Inc.
7. Robbins Engineering, Inc.
8. Truswal Systems Corporation; an ITW company.

B. General: Fabricate connector plates to comply with TPI 1.

C. Hot–Dip Galvanized–Steel Sheet: ASTM A 653/A 653M; Structural Steel (SS), high–strength low–alloy steel Type A (HSLAS Type A), or high–strength low–alloy steel Type B (HSLAS Type B); G60 (Z180) coating designation; and not less than 0.036 inch (0.9 mm) thick.

2.4 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.

1. Provide fasteners for use with metal framing anchors that comply with written recommendations of metal framing manufacturer.
2. Where trusses are exposed to weather, in ground contact, made from pressure–preservative treated wood, or in area of high relative humidity, provide fasteners with hot–dip zinc coating complying with ASTM A 153/A 153M.

B. Nails, Brads, and Staples: ASTM F 1667.

2.5 METAL FRAMING ANCHORS AND ACCESSORIES

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

B. Basis–of–Design Product: Subject to compliance with requirements, provide product by Simpson Strong–Tie Co., Inc. indicated on drawings or comparable product by USP Structural Connectors.

C. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those of basis–of–design products. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

D. Galvanized–Steel Sheet: Hot–dip, zinc–coated steel sheet complying with ASTM A 653/A 653M, G185 (1.85 oz per sq ft zinc) coating designation.

2.6 FABRICATION

A. Assemble truss members in design configuration indicated; use jigs or other means to ensure uniformity and accuracy of assembly with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design camber indicated.

1. Fabricate wood trusses within manufacturing tolerances in TPI 1.

B. Connect truss members by metal connector plates located and securely embedded simultaneously in both sides of wood members by air or hydraulic press.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Install wood trusses only after supporting construction is in place and is braced and secured.

B. If trusses are delivered to Project site in more than one piece, assemble trusses before installing.

C. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out–of–plane bending or other causes.

D. Install and brace trusses according to TPI recommendations and as indicated.

E. Anchor trusses securely at bearing points; use metal truss tie–downs or floor truss hangers as applicable. Install fasteners through each fastener hole in metal framing anchors according to manufacturer's fastening schedules and written instructions.

F. Securely connect each truss ply required for forming built–up girder trusses.

G. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.

H. Install wood trusses within installation tolerances in TPI 1.

I. Do not alter trusses in field. Do not cut, drill, notch, or remove truss members.

J. Replace wood trusses that are damaged or do not meet requirements.

ULTIMATE WIND LOAD PRESSURE TABLES

ROOF C&C ULTIMATE WIND PRESSURE (PSF)

EFFCTIVE AREA OF ROOF COMPONENT	ROOF ZONE 1		ROOF ZONE 2		ROOF ZONE 3		ROOF OVERHANG ZONE 2	ROOF OVERHANG ZONE 3
10 SQ FT	24	–38	24	–65	24	–65	–76	–76
20 SQ FT	22	–37	22	–60	22	–60	–76	–76
50 SQ FT	19	–35	19	–53	19	–53	–76	–76
100 SQ FT	17	–34	17	–48	17	–48	–76	–76

WALL C&C ULTIMATE WIND PRESSURE (PSF)

EFFECTIVE AREA OF DOOR/ WINDOW	INTERIOR ZONE 4		END ZONE 5	
	PRESSURE	SUCTION	PRESSURE	SUCTION
10 SQ FT	41	–45	41	–55
20 SQ FT	40	–43	40	–51
50 SQ FT	37	–41	37	–46
100 SQ FT	35	–39	35	–43
200 SQ FT	33	–37	33	–39
500 SQ FT	31	–34	31	–34

NOTES:

LINEAR INTERPOLATION FOR INTERMEDIATE VALUES OF EFFECTIVE AREAS IS ACCEPTABLE. OTHERWISE, USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREA.

ULTIMATE WIND LOAD PRESSURES ARE FOR USE IN LOAD COMBINATIONS LISTED IN FBC 2010 AND ASCE 7–10. THESE COMBINATIONS INCLUDE A WIND LOAD FACTOR OF 0.6 USING ALLOWABLE STRESS DESIGN. AS A RESULT, ULTIMATE PRESSURES LISTED IN THE LOAD TABLES ABOVE ARE REDUCED 40% USING ALLOWABLE STRESS DESIGN. REDUCED LOADS ARE THE "WORKING LOADS."

WIND PRESSURE ZONES 2, 3 & 5 ARE EDGE AND CORNER ZONES. WALL ZONE 5 IS WITHIN 7'–0" OF CORNERS. ROOF ZONE 2 IS WITHIN 7'–0" OF ROOF EDGES AND RIDGES. ROOF ZONE 3 IS AT ROOF CORNERS WHERE ZONE 2 OVERLAPS.

GENERAL NOTES:

1. MATERIALS SPECIFICATIONS:

CONCRETE	3,000 PSI AT 28 DAYS
CONCRETE BLOCK (CMU)	ASTM C90 (f'm = 1,500 PSI)
BLOCK MORTAR	ASTM C270 TYPE S
REINFORCING STEEL	ASTM A615 GRADE 60
WELDED WIRE FABRIC	ASTM A185 (FLAT SHEETS)
STR STEEL (W)	ASTM A992 GRADE 50
STR STEEL (HSS & TS)	ASTM A500 GRADE B
MISC STR STEEL	ASTM A36
THREADED RODS	ASTM A36, A307 OR A193 GRADE B7
HIGH STRENGTH BOLTS	ASTM A325
ANCHOR BOLTS	ASTM A307 OR F1554, GRADE 36
NUTS & WASHERS	ASTM A563 & F436
LUMBER	S4S #2 SOUTHERN YELLOW PINE
LVL	iLEVEL TRUS JOIST 1.9E MICROLAM (Fb = 2600 PSI)
ROOF DECKING	$\frac{5}{8}$" ($\frac{15}{32}$" MINIMUM) RATED PLYWOOD DECKING
WALL SHEATHING	$\frac{7}{16}$" ($\frac{15}{32}$" MINIMUM) RATED OSB OR PLYWOOD SHEATHING
PLYWOOD	APA RATED EXPOSURE 1, 2 OR EXTERIOR

2. STRUCTURE DESIGNED FOR WIND LOADING IN ACCORDANCE WITH ASCE 7–10 STANDARD CODE AS FOLLOWS:

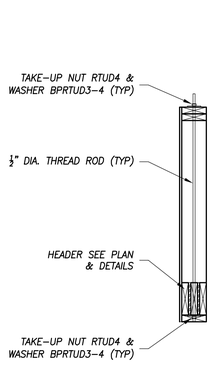
ULTIMATE DESIGN WIND SPEED = 135 MPH
NOMINAL DESIGN WIND SPEED = 105 MPH
BUILDING RISK CATEGORY II
EXPOSURE C
ENCLOSED BUILDING
INTERNAL PRESSURE COEFFICIENT = ±0.18

3. THE PRIMARY STRUCTURAL SYSTEM OF THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2010 FBC.

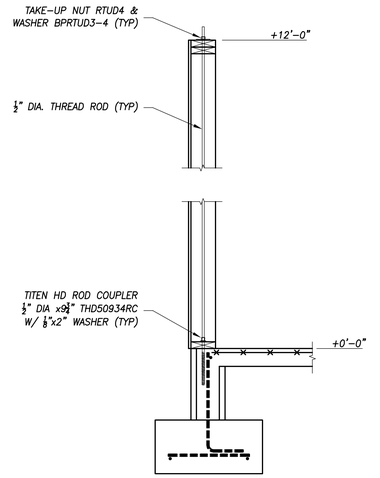
4. ASSUMED ALLOWABLE DESIGN SOIL BEARING PRESSURE IS 2000 PSF. FOUNDATIONS AND FLOOR SLABS SHALL BEAR ON NATURAL GROUND AND ENGINEERED FILL FREE OF ROOTS AND OTHER ORGANIC MATERIALS. ALL FILL MATERIAL SHALL BE SELECT CLEAN STRUCTURAL FILL. PREPARE SUBGRADE AND FILL MATERIAL SOIL IN ACCORDANCE WITH FBC. COMPACT SOIL TO 95% MODIFIED PROCTOR DENSITY MINIMUM. COMPACT FILL MATERIALS IN 6 TO 12 INCH LIFTS MAXIMUM. REFER TO GEOTECHNICAL REPORT PREPARED BY SOUTHERN EARTH SCIENCES, INC. DATED APRIL 27, 2008 FILE NO. P–08–0198.

5. PLACE REINFORCING IN CONCRETE WITH A MINIMUM OF 3" CLEAR COVER WHEN CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. PROVIDE CORNER BARS FOR ALL CONTINUOUS HORIZONTAL REINFORCING.

6. ELEVATIONS SHOWN ON STRUCTURAL DRAWINGS ARE REFERENCED ABOVE (+) OR BELOW (–) FIRST FINISHED FLOOR ELEVATION OF +0'–0". VERIFY ACTUAL FLOOR ELEVATION WITH CIVIL AND ARCHITECTURAL DRAWINGS.



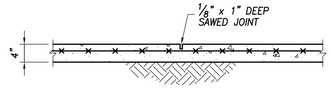
ROOF TO HEADER



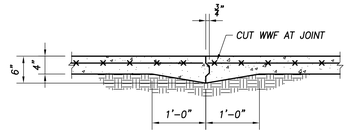
ROOF TO FOUNDATION

NOTE:
LOCATE THREADED ROD TIE–DOWNS AT 48" O.C. MAXIMUM, WITHIN 16" EACH SIDE OF CORNERS, AS INDICATED ON FOUNDATION PLAN AND AS SHOWN ON S–5 OPENING DETAILS.

THREADED ROD TIE–DOWN DETAILS
¾" = 1'–0"



TYPICAL CONTROL JOINT DETAIL
¾" = 1'–0"



TYPICAL CONSTRUCTION JOINT DETAIL
¾" = 1'–0"

LEONARD, LLC
STRUCTURAL ENGINEERS
3101 NORTH 12TH AVENUE
PENSACOLA, FLORIDA 32503
850.473.9955 phone/fax
FL #9468 AL #CA-2463-E
MS #E-0143 GA #PEF005473

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA

PANAMA CITY SERVICE BRANCH

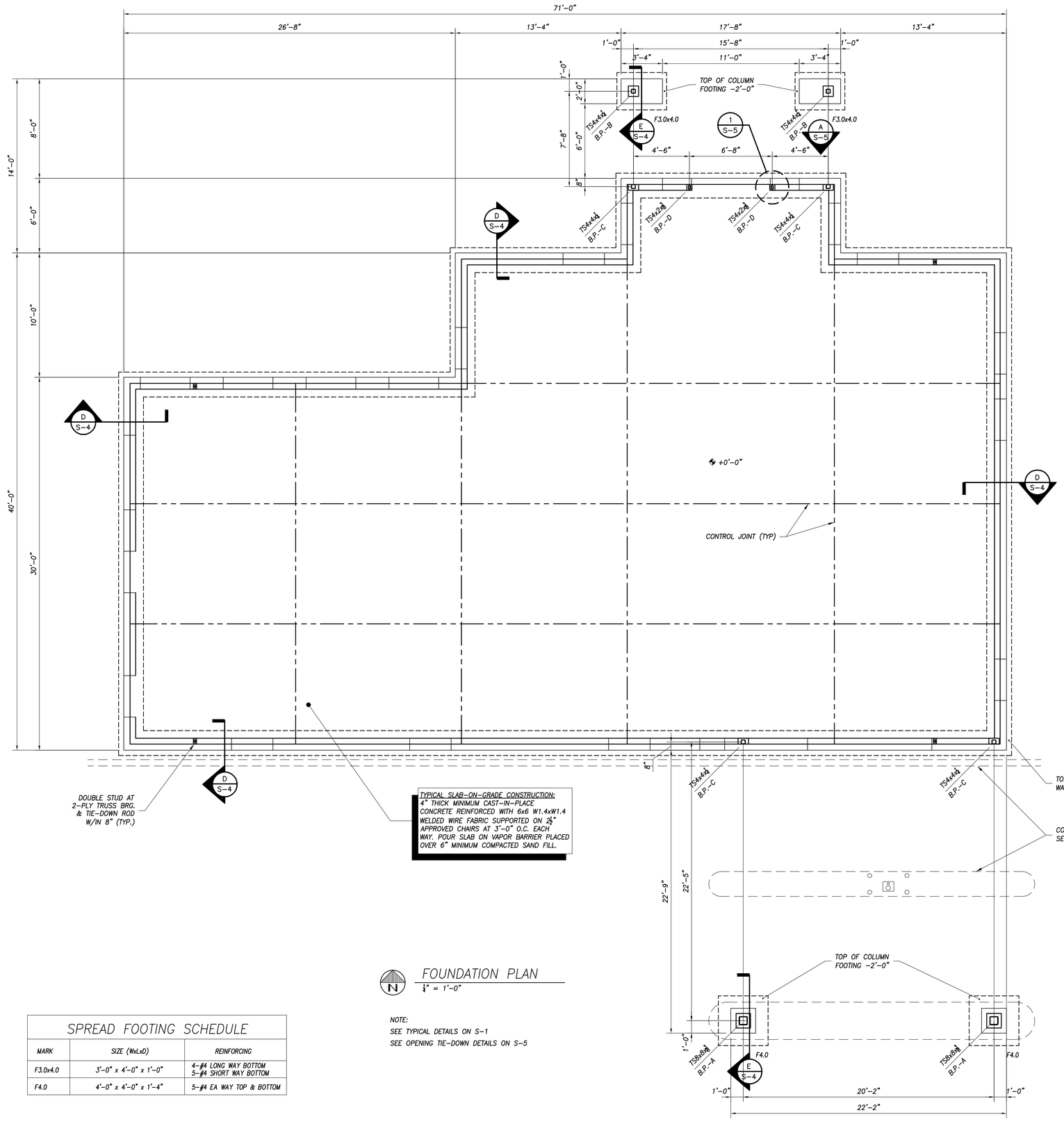
REVISIONS

No.	Description	Date

Title:
TRUSS SPECIFICATION
TYPICAL DETAILS
GENERAL NOTES &
WIND LOAD INFO

Scale:	As Noted
Date:	December 7, 2012
Drawn By:	SWL
Checked By:	SWL
Approved By:	BLSE

Dwg. No.
S-1



FOUNDATION PLAN

1/4" = 1'-0"

NOTE:
SEE TYPICAL DETAILS ON S-1
SEE OPENING TIE-DOWN DETAILS ON S-5

SPREAD FOOTING SCHEDULE

MARK	SIZE (WxLxD)	REINFORCING
F3.0x4.0	3'-0" x 4'-0" x 1'-0"	4-#4 LONG WAY BOTTOM 5-#4 SHORT WAY BOTTOM
F4.0	4'-0" x 4'-0" x 1'-4"	5-#4 EA WAY TOP & BOTTOM

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title: FOUNDATION PLAN

Scale: As Noted
Date: December 7, 2012
Drawn By: SWL
Checked By: SWL
Approved By: BLSE

Dwg. No. S-2

BRUBE LEONARD, LLC
STRUCTURAL ENGINEERS
3101 NORTH 12TH AVENUE
PENSACOLA, FLORIDA 32503
850.473.9955 phone/fax
FL #9468 AL #CA-2463-E
MS #E-0143 GA #PEF005473

ROOF FRAMING NOTES:

1. ROOF TRUSS DESIGN LOADS:

   TOP CHORD:
   LIVE LOAD 20 PSF (REDUIBLE PER THE FBC 2010)
   DEAD LOAD 10 PSF
   WIND LOAD (SEE ULTIMATE WIND LOAD PRESSURE TABLE & GENERAL NOTES S-1)

   BOTTOM CHORD:
   DEAD LOAD 10 PSF
   LIVE LOAD 0 PSF

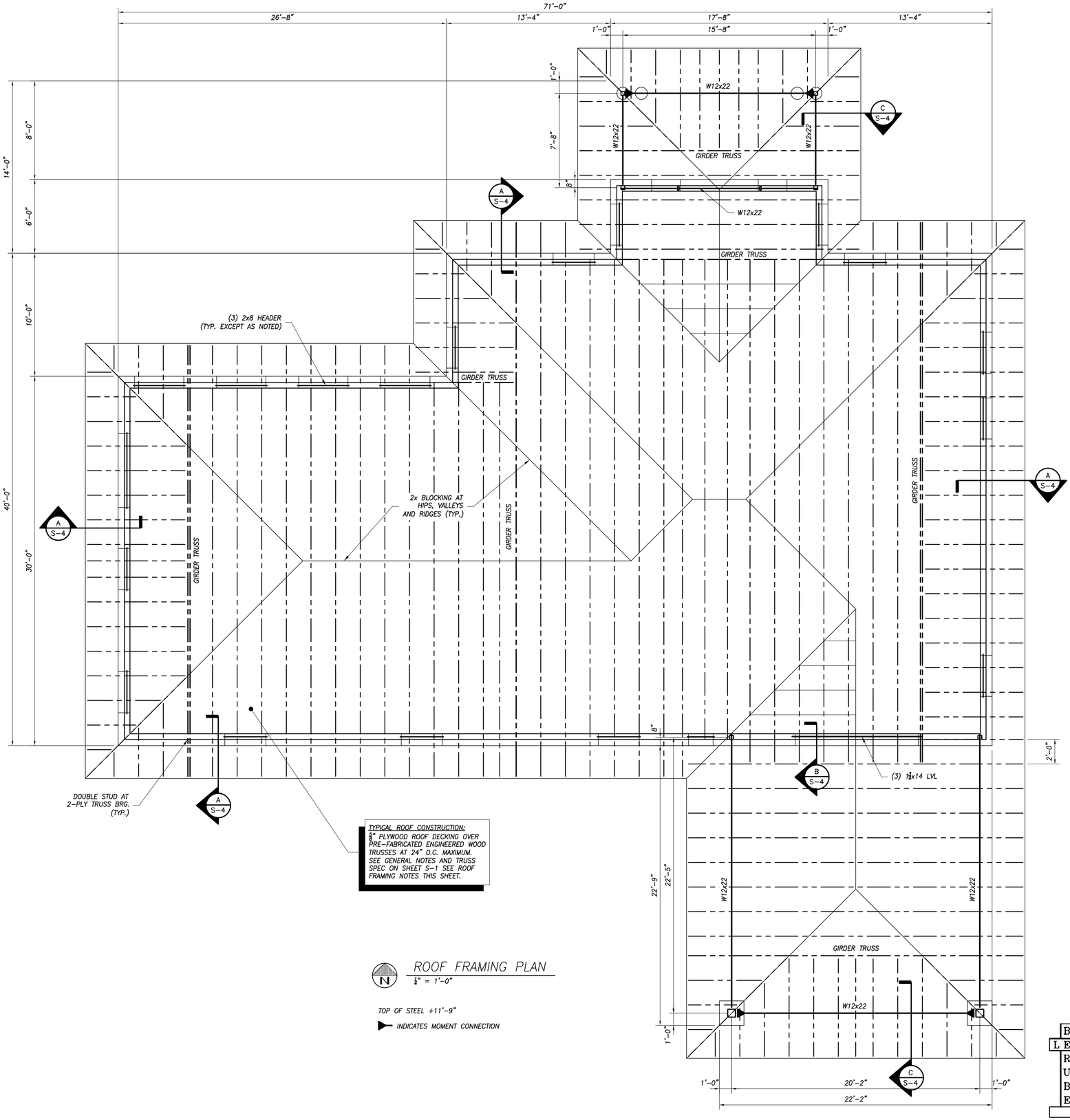
2. PREFABRICATED ENGINEERED ROOF TRUSSES: SEE SPECS ON SHEET S-1.

3. FRAMING CONNECTORS SHALL BE SIMPSON STRONG-TIE MODELS SPECIFIED OR EQUIVALENT INSTALLED ACCORDING TO THE MANUFACTURES RECOMMENDATIONS WITH THE SIZE AND QUANTITY OF FASTENERS REQUIRED TO ACHIEVE MAXIMUM LOAD CAPACITY. HOT-DIP GALVANIZE COATING MINIMUM FOR CONNECTORS AND FASTENERS ANCHORED TO PRESSURE TREATED (PT) WOOD.

4. FASTEN $\frac{5}{8}$" PLYWOOD ROOF DECKING TO TRUSSES WITH 10d COMMON NAILS AT 6" O.C. ALL SUPPORTS, EDGES AND INTERMEDIATE.

5. COMPLY WITH MINIMUM FASTENER REQUIREMENTS IN FBC 2010 SECTION 2304.9 CONNECTIONS AND FASTENERS FOR ALL WOOD FRAMING MEMBERS AND AS NOTED AND DETAILED ON PLANS.

6. CAPACITY OF HURRICANE ANCHORS SHOWN ON PLANS SHALL BE VERIFIED WITH TRUSS MANUFACTURER'S REACTIONS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONNECTORS MEETING UPLIFT REACTIONS PER TRUSS MANUFACTURER'S CALCULATIONS BUT NOT LESS THAN THE CONNECTORS SHOWN ON PLANS.



ROOF FRAMING CONNECTOR SCHEDULE

LOCATION	SIMPSON CONNECTOR	FASTENERS
TRUSS U.N.O.	H10A	9-10dx1½" TRUSS & PLATES
HIP (CORNER) TRUSS	HCP2	6-10dx1½" TRUSS & PLATES
JACK TRUSS	H1	6-8dX1½" TRUSS & 4-8d PLATES
BUILD OVER TRUSS	VTCR AT 24" O.C.	4-SD #9x2½" SUPPORT TRUSS BELOW & 3-SD #9x1½" VALLEY TRUSS
1-PLY GIRDER TRUSS	(2) H10A	9-10dx1½" TRUSS & PLATES EACH
2-PLY GIRDER TRUSS	LGT2 + H10-2	14-16d SINKERS PLATES/STUDS & 16-16d SINKERS TRUSS + 6-10d TRUSS & PLATES

ROOF FRAMING PLAN

$\frac{1}{4}$" = 1'-0"

TOP OF STEEL +11'-9"

INDICATES MOMENT CONNECTION

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

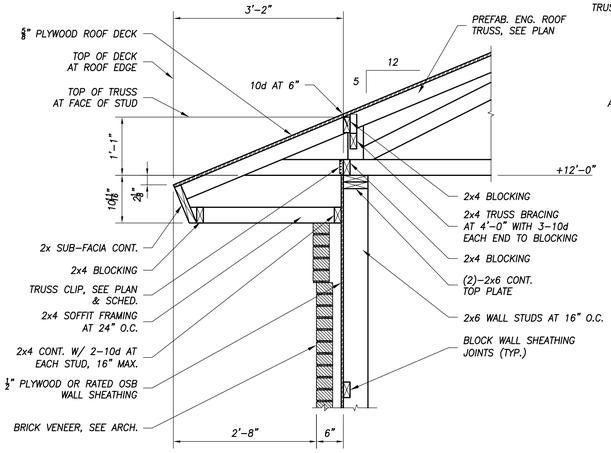
No.	Description	Date

Title: ROOF FRAMING PLAN

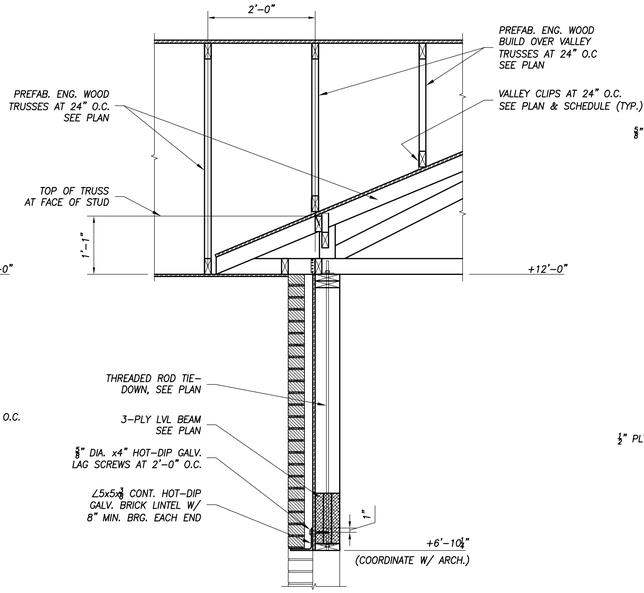
Scale: As Noted
Date: December 7, 2012
Drawn By: SWL
Checked By: SWL
Approved By: BLSE

Dwg. No. S-3

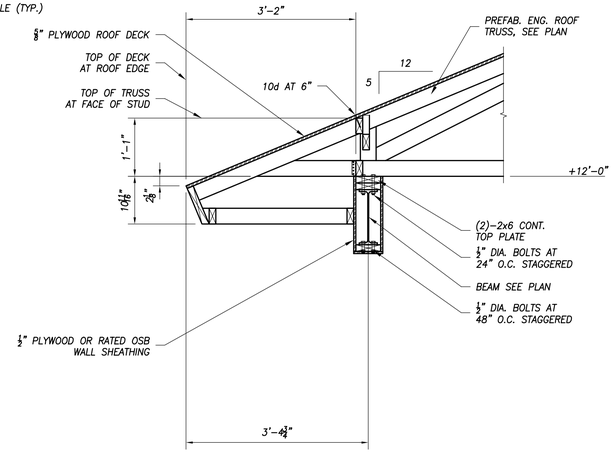
B L E O N A R D, L L C
STRUCTURAL ENGINEERS
3101 NORTH 12TH AVENUE
PENSACOLA, FLORIDA 32503
850.473.9955 phone/fax
FL #9488 AL #CA-2463-E
MS #E-0143 GA #PEF005473



SECTION A
3/4" = 1'-0" S-4

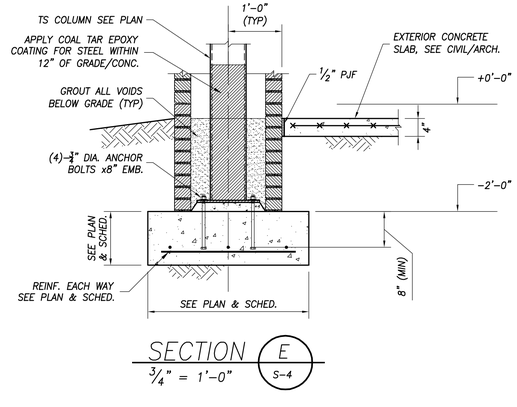


SECTION B
3/4" = 1'-0" S-4

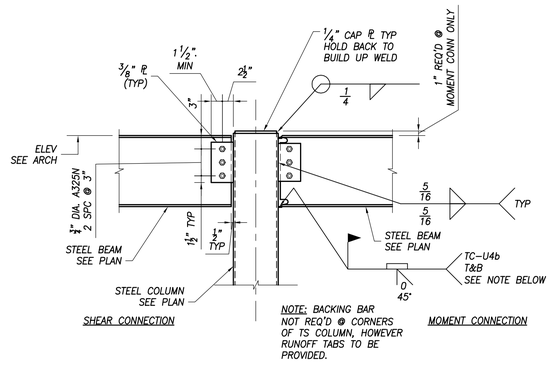


SECTION C
3/4" = 1'-0" S-4

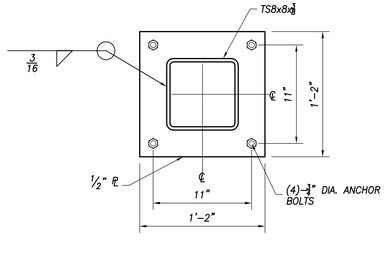
SECTION D
3/4" = 1'-0" S-4



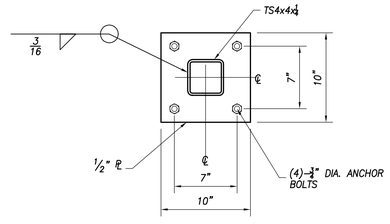
SECTION E
3/4" = 1'-0" S-4



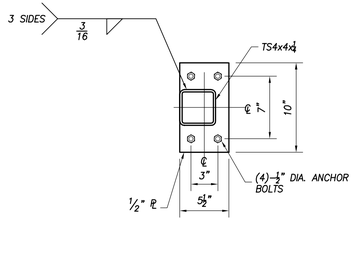
TYPICAL WF TO TS COL SHEAR & MOMENT DETAILS
3/4" = 1'-0"



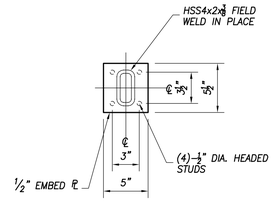
BASE PLATE B.P.-A DETAIL
1 1/2" = 1'-0"



BASE PLATE B.P.-B DETAIL
1 1/2" = 1'-0"



BASE PLATE B.P.-C DETAIL
1 1/2" = 1'-0"



BASE PLATE B.P.-D DETAIL
1 1/2" = 1'-0"

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

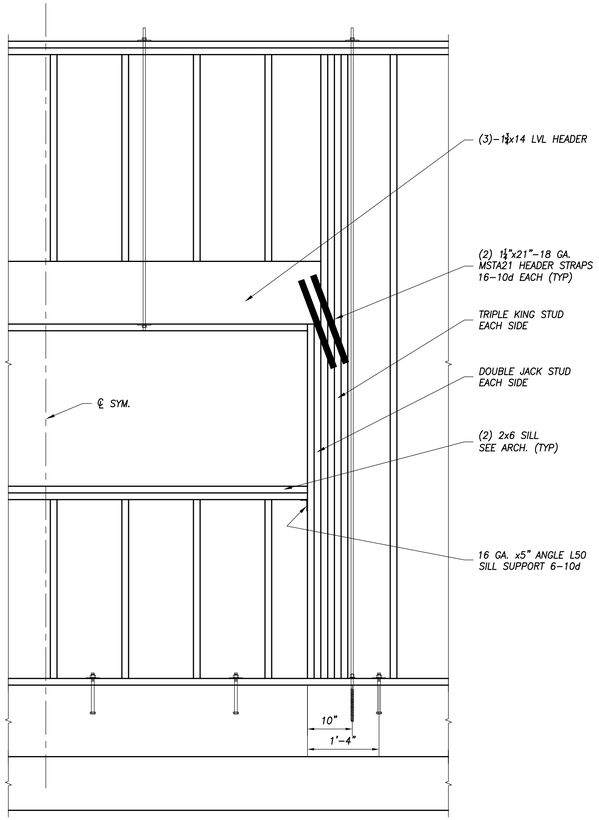
No.	Description	Date

Title: SECTIONS & DETAILS

Scale: As Noted
Date: December 7, 2012
Drawn By: SWL
Checked By: SWL
Approved By: BLSE

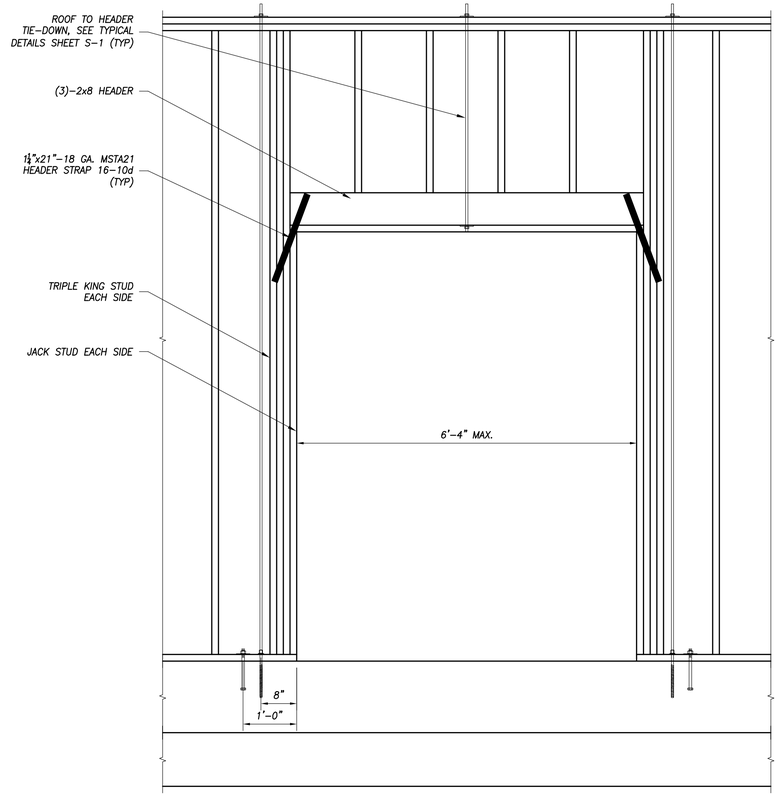
Dwg. No. S-4

B LEONARD, LLC
STRUCTURAL ENGINEERS
3101 NORTH 12TH AVENUE
PENSACOLA, FLORIDA 32503
850.473.9955 phone/fax
FL #9468 AL #CA-2463-E
MS #E-0143 GA #PEF005473
R U B E



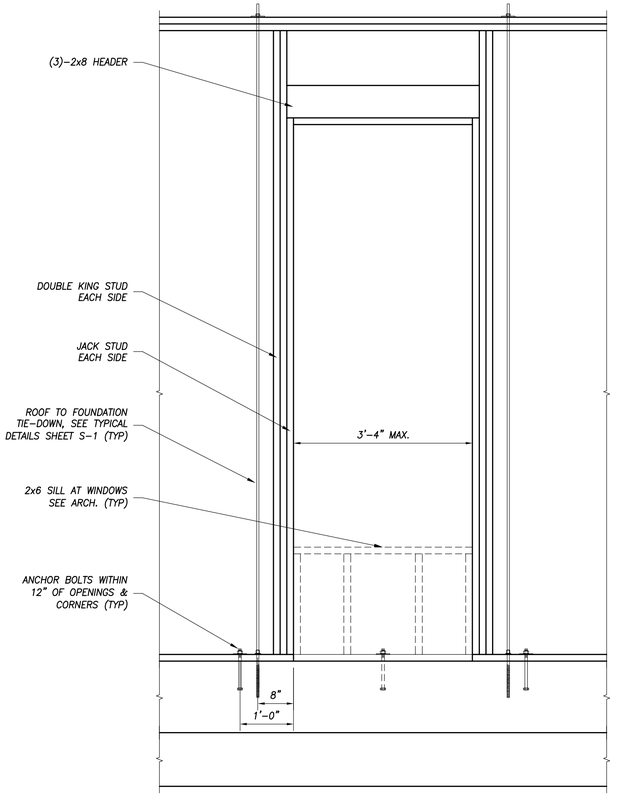
DRIVE UP BANKING WINDOW OPENING LOAD PATH DETAIL

¾" = 1'–0"



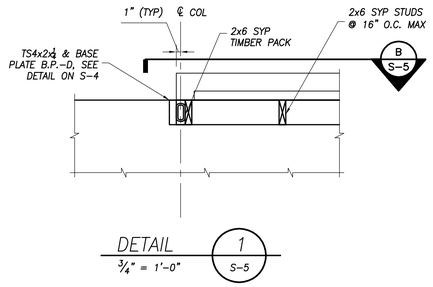
6'–4" OPENING LOAD PATH DETAIL

¾" = 1'–0"

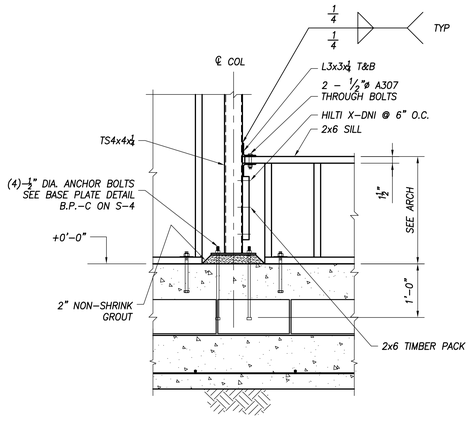


TYPICAL (3'–4") OPENING LOAD PATH DETAIL

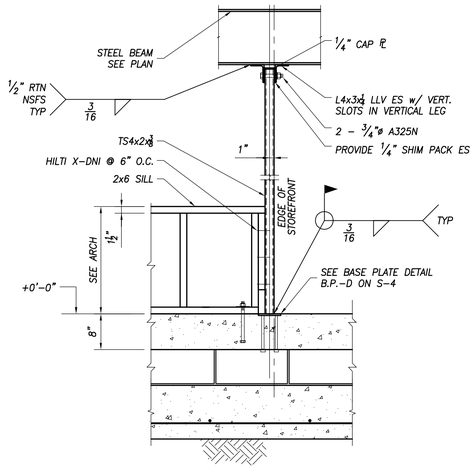
¾" = 1'–0"



DETAIL 1 — ¾" = 1'–0" — S–5



SECTION A — ¾" = 1'–0" — S–5



DETAIL B — ¾" = 1'–0" — S–5

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA

PANAMA CITY SERVICE BRANCH

REVISIONS		
No.	Description	Date

Title: SECTIONS & DETAILS

Scale: As Noted
Date: December 7, 2012
Drawn By: SWL
Checked By: SWL
Approved By: BLSE

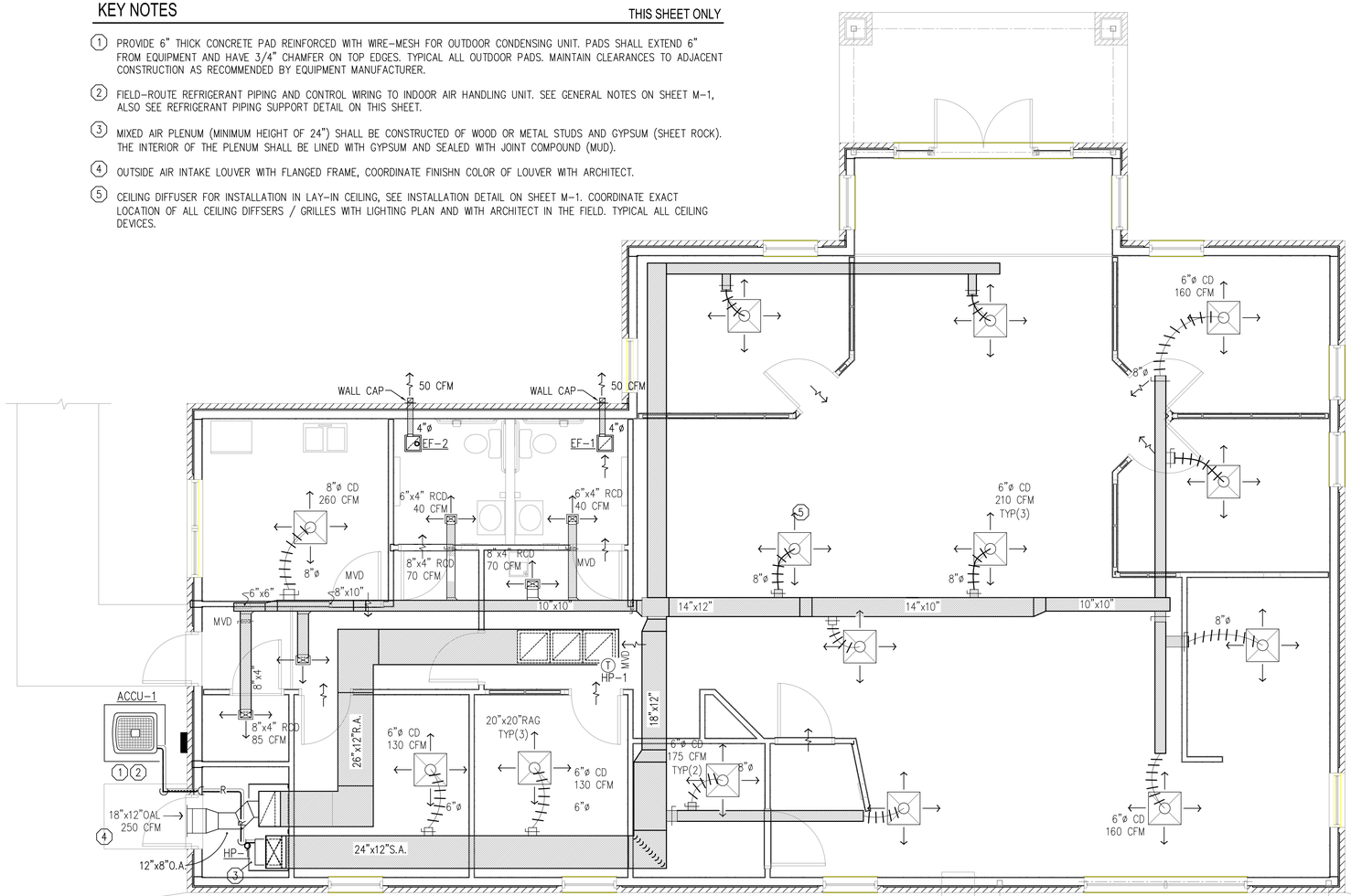
Dwg. No. S-5

BLEONARD, LLC
STRUCTURAL ENGINEERS
3101 NORTH 12TH AVENUE
PENSACOLA, FLORIDA 32503
850.473.9955 phone/fax
FL #9468 AL #CA-2463-E
MS #E-0143 GA #PEF005473

KEY NOTES

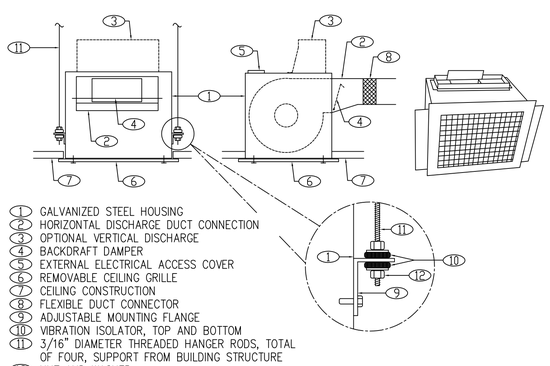
THIS SHEET ONLY

1. PROVIDE 6" THICK CONCRETE PAD REINFORCED WITH WIRE-MESH FOR OUTDOOR CONDENSING UNIT. PADS SHALL EXTEND 6" FROM EQUIPMENT AND HAVE 3/4" CHAMFER ON TOP EDGES. TYPICAL ALL OUTDOOR PADS. MAINTAIN CLEARANCES TO ADJACENT CONSTRUCTION AS RECOMMENDED BY EQUIPMENT MANUFACTURER.
2. FIELD-ROUTE REFRIGERANT PIPING AND CONTROL WIRING TO INDOOR AIR HANDLING UNIT. SEE GENERAL NOTES ON SHEET M-1, ALSO SEE REFRIGERANT PIPING SUPPORT DETAIL ON THIS SHEET.
3. MIXED AIR PLENUM (MINIMUM HEIGHT OF 24") SHALL BE CONSTRUCTED OF WOOD OR METAL STUDS AND GYPSUM (SHEET ROCK). THE INTERIOR OF THE PLENUM SHALL BE LINED WITH GYPSUM AND SEALED WITH JOINT COMPOUND (MUD).
4. OUTSIDE AIR INTAKE LOUVER WITH FLANGED FRAME, COORDINATE FINISHN COLOR OF LOUVER WITH ARCHITECT.
5. CEILING DIFFUSER FOR INSTALLATION IN LAY-IN CEILING, SEE INSTALLATION DETAIL ON SHEET M-1. COORDINATE EXACT LOCATION OF ALL CEILING DIFFSERS / GRILLES WITH LIGHTING PLAN AND WITH ARCHITECT IN THE FIELD. TYPICAL ALL CEILING DEVICES.



1 MECHANICAL PLAN

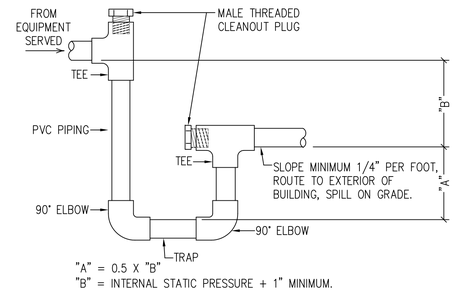
SCALE: 1/4" = 1'-0"



1. GALVANIZED STEEL HOUSING
2. HORIZONTAL DISCHARGE DUCT CONNECTION
3. OPTIONAL VERTICAL DISCHARGE
4. BACKDRAFT DAMPER
5. EXTERNAL ELECTRICAL ACCESS COVER
6. REMOVABLE CEILING GRILLE
7. CEILING CONSTRUCTION
8. FLEXIBLE DUCT CONNECTOR
9. ADJUSTABLE MOUNTING FLANGE
10. VIBRATION ISOLATOR, TOP AND BOTTOM
11. 3/16" DIAMETER THREADED HANGER RODS, TOTAL OF FOUR, SUPPORT FROM BUILDING STRUCTURE
12. NUT AND WASHER

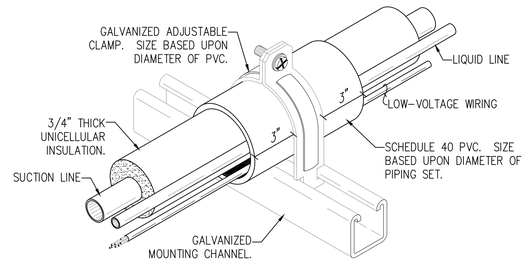
CEILING EXHAUST FAN INSTALLATION DETAIL

NOT TO SCALE



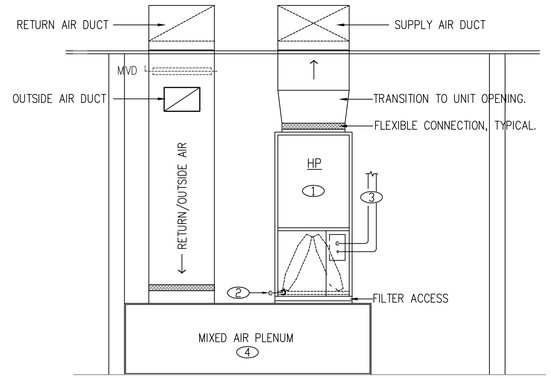
CONDENSATE DRAIN DETAIL

NOT TO SCALE



REFRIGERANT PIPE MOUNTING DETAIL

NOT TO SCALE



VERTICAL HEAT PUMP INSTALLATION DETAIL

NOT TO SCALE

1. HEIL MODEL EBP HEAT PUMP AIR HANDLING UNIT TO BE INSTALLED ON TOP OF NEW MIXED AIR PLENUM, SEE NOTES BELOW REGARDING PLENUM CONSTRUCTION.
2. CONDENSATE PIPING, TRAP AT UNIT AND ROUTE TO EXTERIOR OF BUILDING (NEAR CONDENSING UNIT LOCATION), SEE TRAP PIPING DETAIL ON THIS SHEET.
3. REFRIGERANT PIPING, ROUTE TO CORRESPONDING OUTDOOR UNIT, SEE GENERAL NOTES ON SHEET M-1. SEE REFRIGERANT PIPING SUPPORT INSTALLATION DETAIL ON THIS SHEET.
4. 24" HIGH MIXED AIR PLENUM CONSTRUCTED OF STUDS WITH SHEETROCK INSIDE AND OUT. SEAL INSIDE OF PLENUM AIR-TIGHT WITH SHEETROCK MUD AND/OR DUCT MASTIC.

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA

PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title: MECHANICAL PLAN

Scale:	As Noted
Date:	December 7, 2012
Drawn By:	JF
Checked By:	DA
Approved By:	DA

Dwg. No. M-1

GENERAL NOTES

1. DOMESTIC WATER NOT SHOWN FOR CLARITY. TYPE "L" SOFT COPPER PIPE TO BE USED.
2. CODE APPROVED PVCDWV PIPING TO BE USED ELSEWHERE.

FIXTURE SCHEDULE

P-1A HANDICAP WATER CLOSET
2386.012 CADET 3 RIGHT HEIGHT
295SSC WHITE SEAT
OCR1912E CLOS SUPPLY

P-2A ADA LAVATORY
0355.012 WHITE LAV
B-892 FAUCET
Z8743 GRID DRAIN
301CP 11/4 17G P-TRAP
CR-1912-A SY.KIT
102W WRAP

P-3 DOUBLE SINK
DSE23322-4 ELITE
DELTA 400
TT461-W STRAINER
305CP 11/2 17G P-TRAP
535SN 11/2X13 CONT WASTE
CR-1912-A SY. KIT
BADGER 5 DISPOSER

P-4 WATER COOLER
ELKAY LZ08
BARRIER FREE. SELF-CONTAINED, ELECTRIC REFRIGERATED, WALL MOUNTED WATER COOLE. 4.0 FLA, 115V, 60HZ.

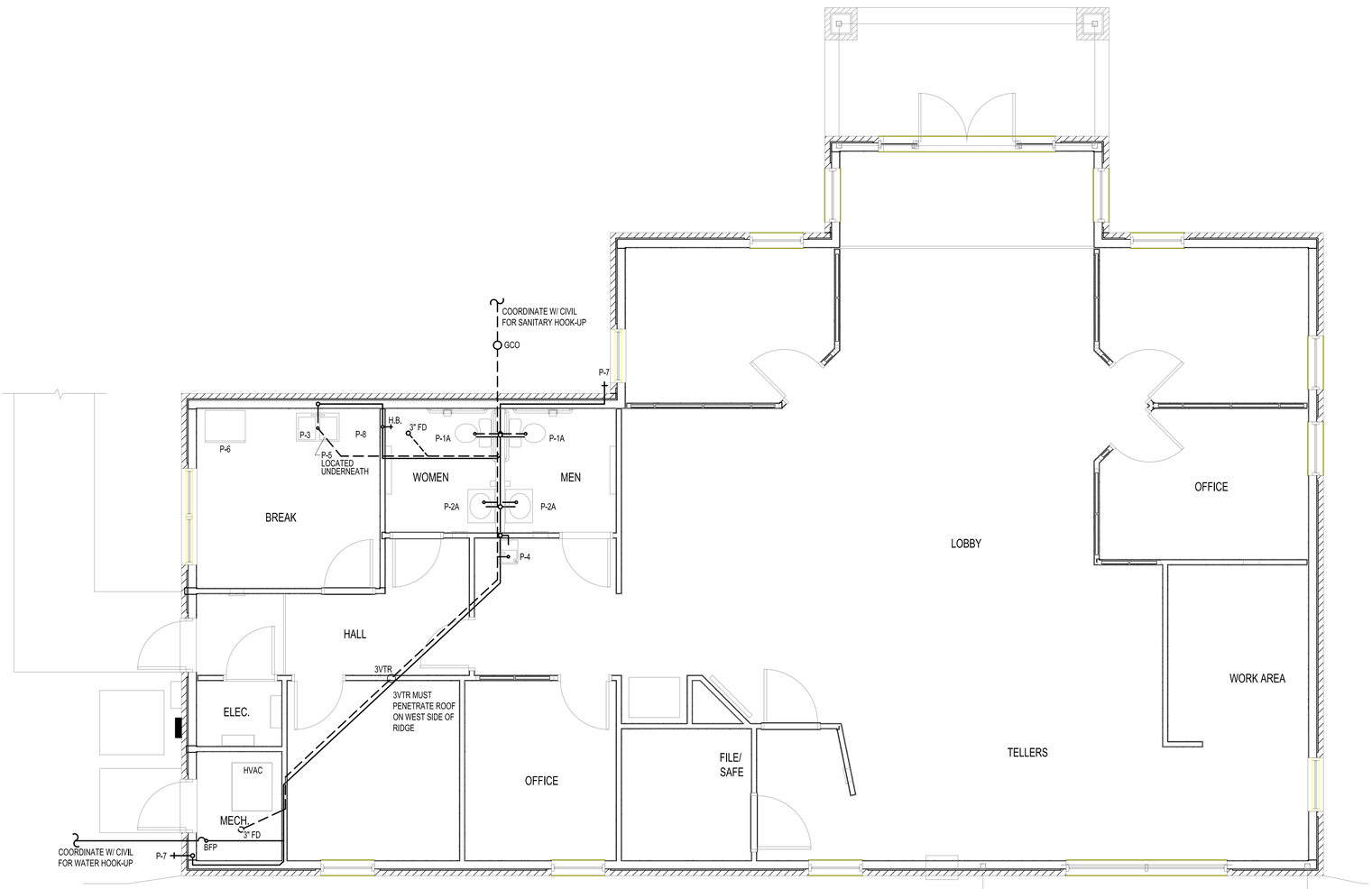
P-5 ELECTRIC HEATER
POINT OF USE , INSTANTANEOUS
EEMAX 3208. 3KW VAC, 208V/1PH/60HZ
TO HEAT 0.5 GPM @ TEMP RISE 41 DEG. F
SHALL HAVE ABS-UL 94VO RATED COVER
ELEMENT SHALL BE REPLACEABLE CART.
INSERT. SHALL HAVE REPLACEABLE FILTER
IN THE INLET CONNECTOR & A FLOW REG.
IN THE OUTLET CONNECTOR. ELEMENT
SHALL BE IRON FREE.

P-6 ICE MAKER BOX
W9700HA IPS BOX

P-7 WALL HYDRANT
Z1330-10 WALL HYDRANT

P-8 DISH WASHER
COORDINATE WITH OWNER

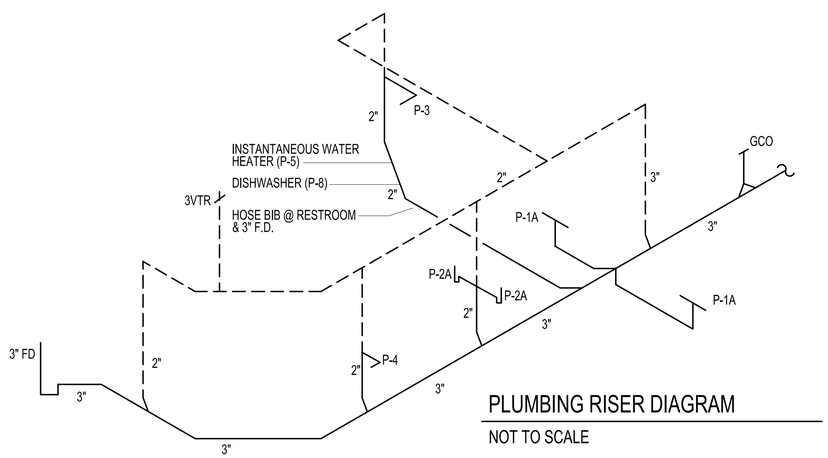
FD FLOOR DRAINS
AN-415P-5B 2-4"



NOTES:
COORDINATE AND TIE IN VTR'S AND EXIT BACK OF ROOF (WEST)
COORDINATE WITH CIVIL AND ELECTRICAL
CONFIRM PIPE SIZING WITH PLUMBING SUBCONTRACTOR

N

1 PLUMBING PLAN
SCALE: 1/4" = 1'-0"



PLUMBING RISER DIAGRAM
NOT TO SCALE

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title:
PLUMBING PLAN, RISER DIAGRAM, & FIXTURE SCHEDULE

Scale:	As Noted
Date:	December 7, 2012
Drawn By:	JF
Checked By:	DA
Approved By:	DA

Dwg. No.
P-1

ELECTRICAL LEGEND (SOME SYMBOLS MAY NOT BE USED)

- NOMINAL 2'X4' FLUORESCENT LIGHTING FIXTURE
- NOMINAL 2'X4' FLUORESCENT LIGHTING FIXTURE CONNECTED TO EMERGENCY CIRCUIT
- RECESSED COMPACT FLUORESCENT DOWN LIGHT
- RECESSED COMPACT FLUORESCENT DOWN LIGHT CONNECTED TO EMERGENCY CIRCUIT
- EXIT LIGHT — EXIT LIGHT
- SITE LIGHTING STANDARD
- $ — SINGLE POLE LIGHTING SWITCH MOUNT 48" AFF
- $3 — THREE-WAY LIGHTING SWITCH MOUNT 48" AFF
- D — FLUORESCENT DIMMER SWITCH
- DUPLEX RECEPTACLE MOUNT 18" AFF UNLESS NOTED OTHERWISE
- G — GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. MOUNTING HEIGHT AS NOTED
- TV — DUPLEX RECEPTACLE MOUNTED IN CEILING FOR TV
- CF — DUPLEX RECEPTACLE MOUNTED BELOW COMPUTER FLOOR
- G,WP — GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE WITH WEATHERPROOF COVERPLATE
- QUADRAPLEX RECEPTACLE MOUNT 18" AFF UNLESS NOTED OTHERWISE
- TV — CABLE TV OUTLET MOUNTED IN CEILING
- HTV — CABLE TV SYSTEM W ALL OUTLET. STUB 3/4"C TO ABOVE CEILING
- TELE/DATA OUTLET MOUNT 18" AFF UNLESS NOTED OTHERWISE. STUB 3/4"C TO ABOVE CEILING
- FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE
- FLUSH FLOOR MOUNTED TELE/DATA OUTLET
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
- G — GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE MOUNTED ABOVE COUNTER
- SURFACE MOUNTED MULTI-OUTLET RACEWAY MOUNTED ABOVE COUNTER WITH RECEPTACLES AS INDICATED
- SPECIAL OUTLET
- VFD — VARIABLE SPEED DRIVE
- COMBINATION MAGNETIC MOTOR STARTER
- JUNCTION BOX
- PANELBOARD
- MOTOR
- T — TRANSFORMER
- AHU — AIR HANDLING UNIT
- SS — SURGE SUPPRESSOR
- T — DRY TYPE TRANSFORMER
- FR — ALARM SYSTEM RELAY
- WP — ALARM SYSTEM WEATHERPROOF HORN MOUNT 8'-0" AFF
- TS — SPRINKLER SYSTEM TAMPER SWITCH
- FS — SPRINKLER SYSTEM FLOW SWITCH
- S — ALARM SYSTEM DUCT MOUNTED SMOKE DETECTOR MOUNTED IN SUPPLY AIR DUCT
- R — ALARM SYSTEM DUCT MOUNTED SMOKE DETECTOR MOUNTED IN RETURN AIR DUCT
- ALARM SYSTEM AREA SMOKE DETECTOR (PROVIDE POWER TO DETECTORS)
- CONDUIT RUN ABOVE CEILING OR IN WALLS
- CONDUIT RUN UNDERGROUND OR BELOW SLAB
- HOMERUN TO PANELBOARD ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2#12, 1#12 GRD, 1/2"C — 3#12, 1#12 GRD, 1/2"C ETC.

ELECT. TRANSFORMER

FIXTURE SCHEDULE

TYPE	PART DESCRIPTION
FB4	4' 2-LAMP 120V WALL MOUNT FLUORESCENT
FP3	2'X4' 3-LAMP 120V PARABOLIC TROFFER
FP3E	2'X4' 3-LAMP 120V PARABOLIC TROFFER W/ EM BALLAST
FT3	2'X4' 3-LAMP 120V PRISMATIC TROFFER
LL	LANE LIGHT - FURNISHED BY OTHERS
LS1	400W 120V MH FIXTURE ON 25' STEEL TAPERED POLE - MATCH EXISTING
RA	PL FLUORESCENT 120V RECESSED CAN
WP1	70W 120V MH WALL PACK
WP2	70W 120V MH SURFACE MOUNT

NOTE: CONTRACTOR TO COORDINATE PANEL WITH POWER

120/240 VOLT 1ø 3W
225 AMP MAIN BREAKER

CIRCUIT BREAKER PANEL SCHEDULE
PANEL P

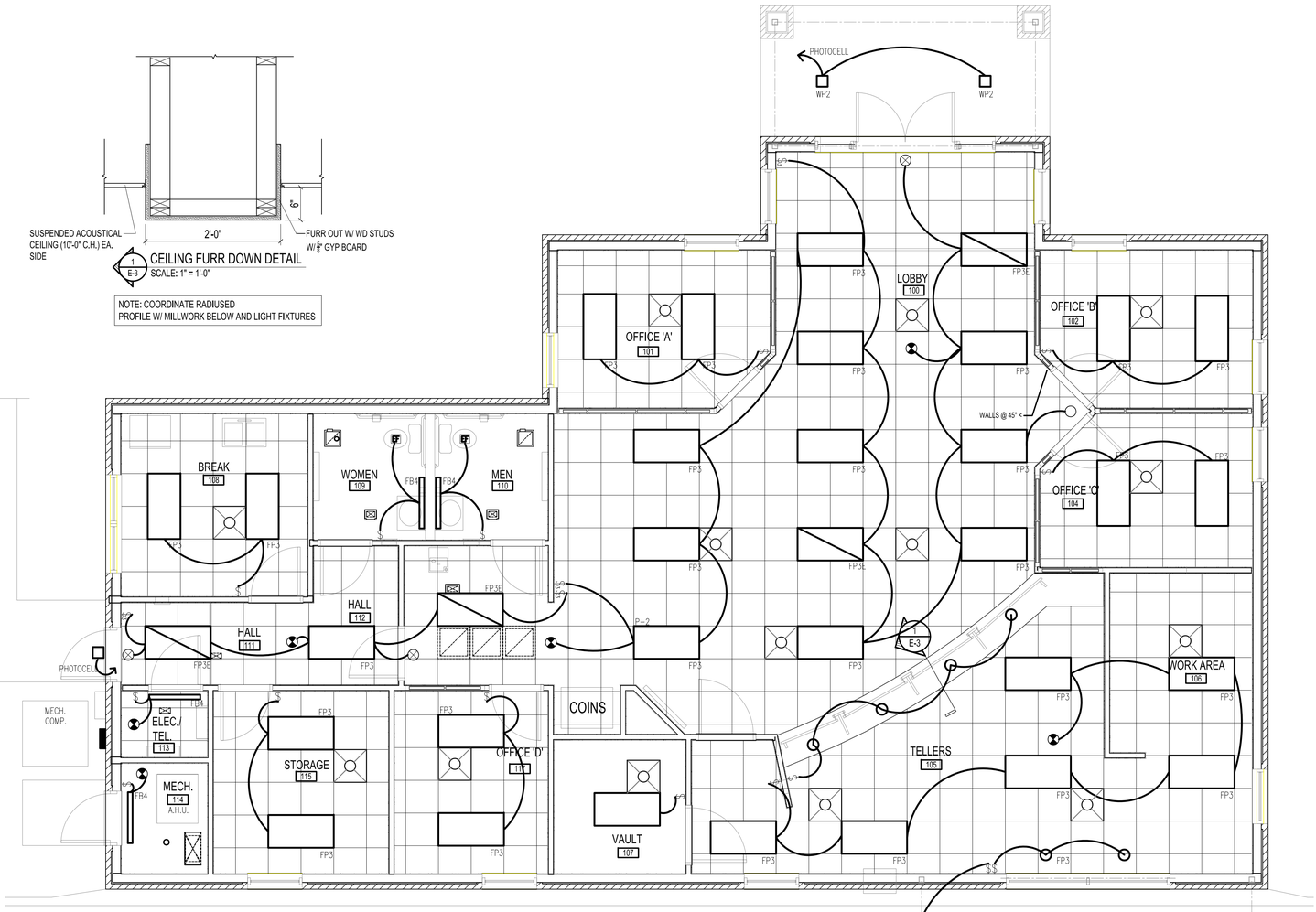
SURFACE MOUNTED

CKT	LOAD DESCRIPTION	BREAKER POLE	BREAKER AMP	LOAD KVA		BREAKER AMP	BREAKER POLE	LOAD DESCRIPTION	CKT
1	LIGHTING – INTERIOR	1	20	0.8	1.05	20	1	LIGHTING – INTERIOR	2
3	LIGHTING – INTERIOR	1	20	1.05	0.55	20	1	LIGHTING – EXTERIOR	4
5	LIGHTING – LANE LIGHTS	1	20	1.0	1.0	20	1	LIGHTING – SITE	6
7	LIGHTING – SITE	1	20	1.0	1.44	20	1	RECEPTACLES – REFRIG.	8
9	RECEPTACLES – KITCHEN	1	20	1.44	1.44	20	1	RECEPTACLES – KITCHEN	10
11	RECEPTACLES – EWC.	1	20	1.08	1.08	20	1	RECEPTACLES – OFFICES	12
13	INTERIOR – OFFICES	1	20	0.9	0.9	20	1	RECEPTACLES – TELLER	14
15	RECEPTACLES – TELLER	1	20	0.72	0.72	20	1	RECEPTACLES – TELLER	16
17	NIGHT DROP	1	20	0.9	0.9	20	1	RECEPTACLES – FILE RM.	18
19	RECEPTACLES – TBB	1	20	0.72	0.72	20	1	RECEPTACLES–ELEC./MECH.	20
21	HP–1	2	20	10.95	8.6	20	2	ACCU–1	22
23				10.95	8.6				24
25	WATER HEATER	2	20	4.5	2.88	30	1	DRIVE–THRU BLOWER UNIT	26
27				4.5	1.0	20	1	EXISTING LIGHTING–SITE	28
29	EXISTING ATM	1	20	1.92	1.0	20	1	EXISTING LIGHTING–SITE	30
31									32
33									34
35									36
37									38
39									40
41									42

TOTAL CONNECTED LOAD: 50.26 KVA
MINIMUM INTERRUPTING CAPACITY: 10,000 AMPS SYMMETRICAL

1 E-3 CEILING FURR DOWN DETAIL
SCALE: 1" = 1'-0"

NOTE: COORDINATE RADIUSED PROFILE W/ MILLWORK BELOW AND LIGHT FIXTURES



1 LIGHTING PLAN
SCALE: 1/4" = 1'-0" 2,680 SQ. FT.

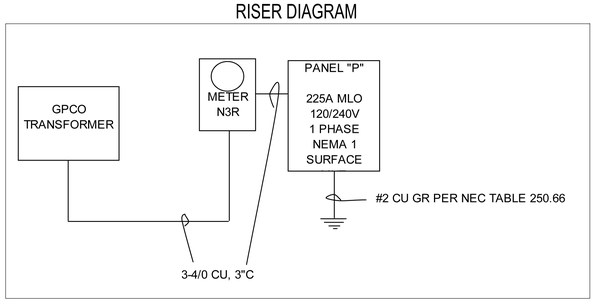
NOTES:

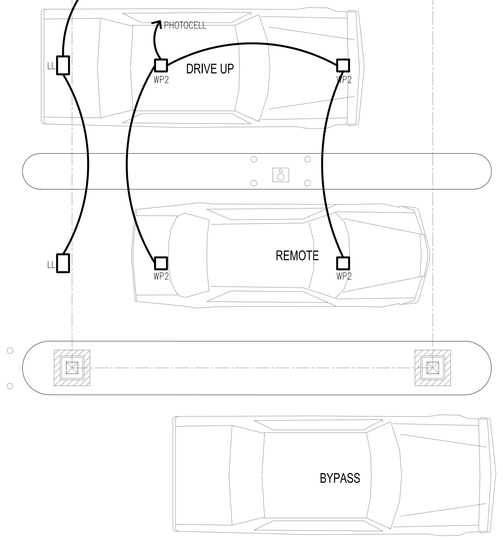
SEE ARCHITECTURAL SITE PLAN FOR ELECTRICAL SITE INFORMATION

COORDINATE SWITCHING IN WOOD FRAMED / TRIMMED WALLS W/ MILLWORK AS NECESSARY

CONTRACTOR TO COORDINATE WITH OWNER SECURITY VENDOR FOR SECURITY EQUIPMENT

RISER DIAGRAM





SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA
PANAMA CITY SERVICE BRANCH

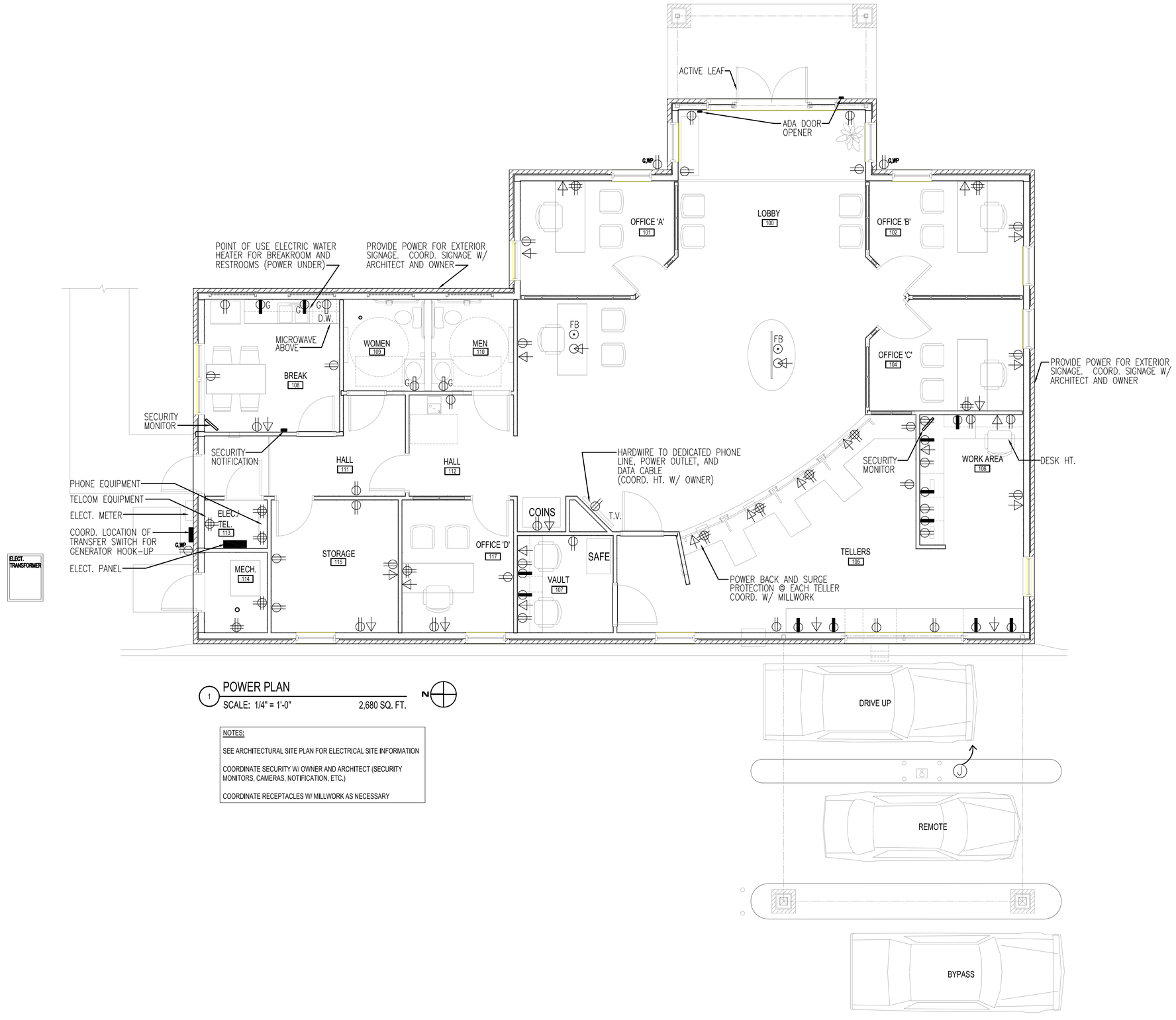
REVISIONS

No.	Description	Date

Title: ELECTRICAL LIGHTING PLAN

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No. E-1



1 POWER PLAN

SCALE: 1/4" = 1'-0" 2,680 SQ. FT.

N

NOTES:

SEE ARCHITECTURAL SITE PLAN FOR ELECTRICAL SITE INFORMATION

COORDINATE SECURITY W/ OWNER AND ARCHITECT (SECURITY MONITORS, CAMERAS, NOTIFICATION, ETC.)

COORDINATE RECEPTACLES W/ MILLWORK AS NECESSARY

SAM MARSHALL ARCHITECTS
325 S. PALAFOX STREET
PENSACOLA, FL 32502
(850) 433-7842
(850) 433-0510 fax

CENTRAL CREDIT UNION OF FLORIDA

PANAMA CITY SERVICE BRANCH

REVISIONS

No.	Description	Date

Title:

ELECTRICAL POWER PLAN

Scale: As Noted
Date: December 7, 2012
Drawn By: JF
Checked By: DA
Approved By: DA

Dwg. No.

E-2