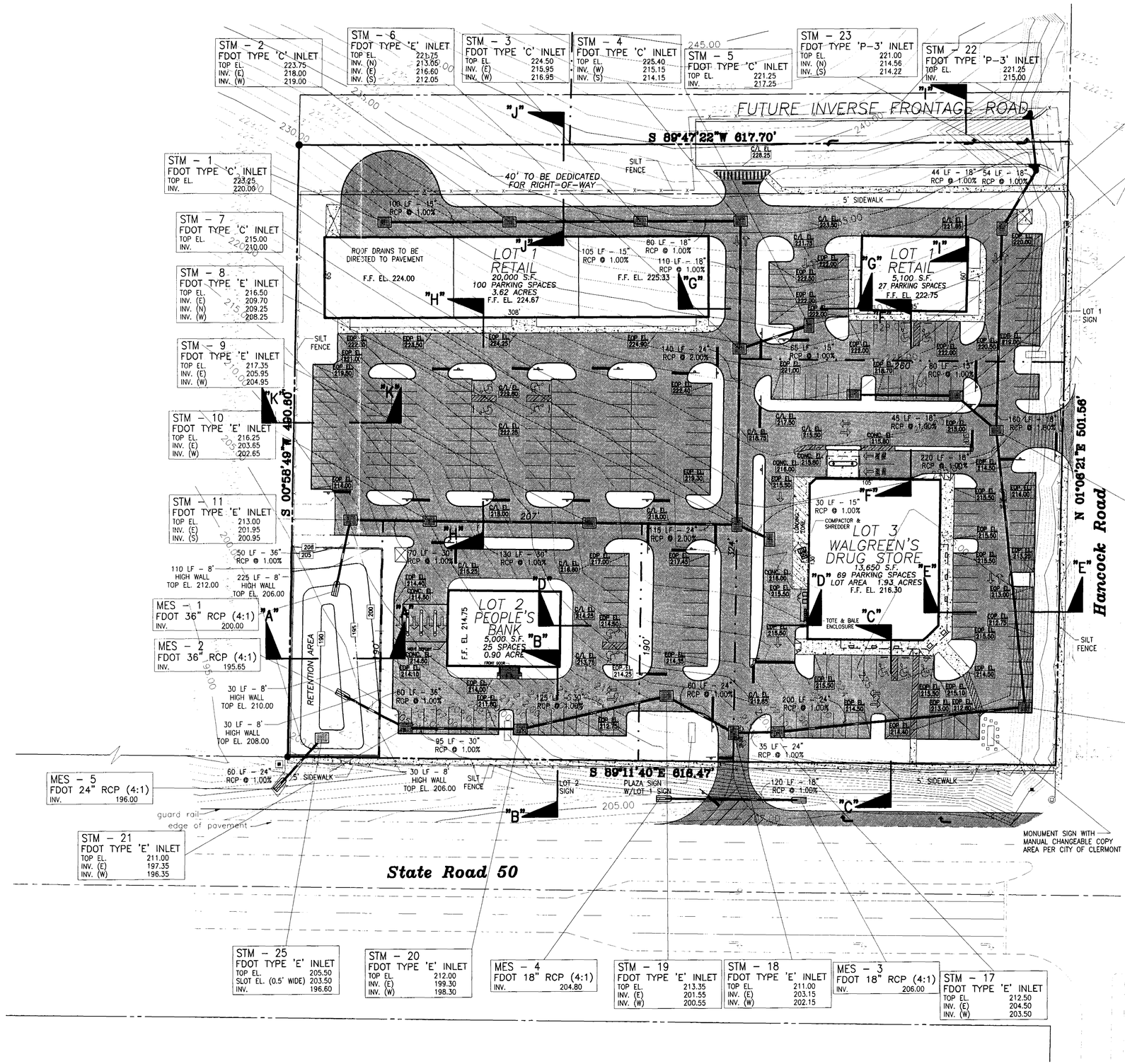
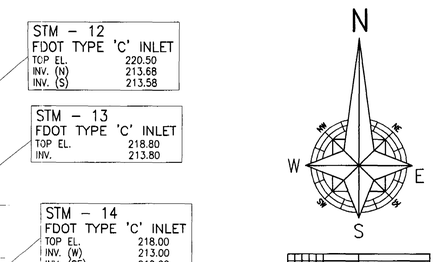
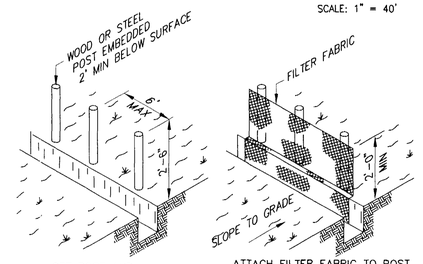
84428-1

Oversized Drawings

1723







SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

NOTES:

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FINAL PERMITTED PLANS

DATE 11/13/02

INITIAL AA

DATE:	JUNE 28, 2002
SCALE:	1" = 40'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO.:	99457
CAD FILE NO.:	99457PD6

DATE	REVISIONS	REVISED	CHECKED
11/12/02	REVISED PER ST. JOHNS RIVER WATER MANAGEMENT DIST.	SCM	THS

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

MASTER PAVING, GRADING & DRAINAGE PLAN

HANCOCK VILLAGE

CLERMONT, FLORIDA

RECEIVED

SHEET: 6 OF: 15

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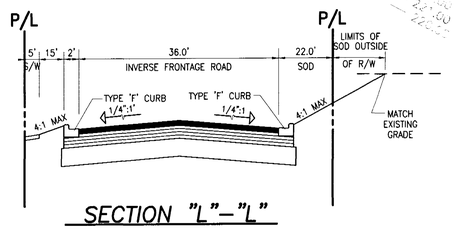
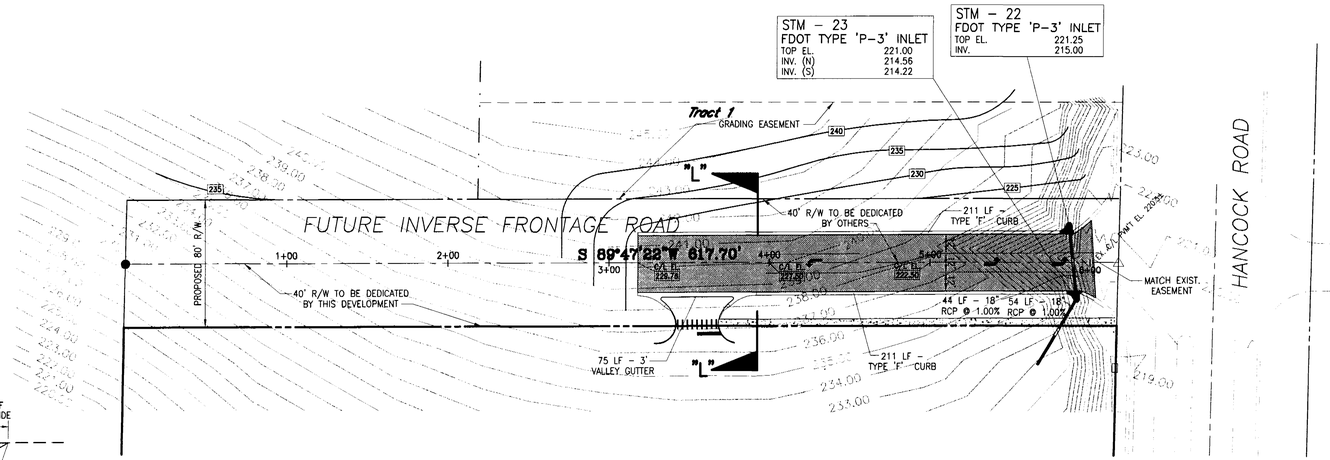
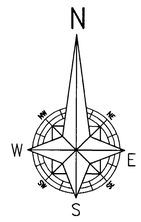


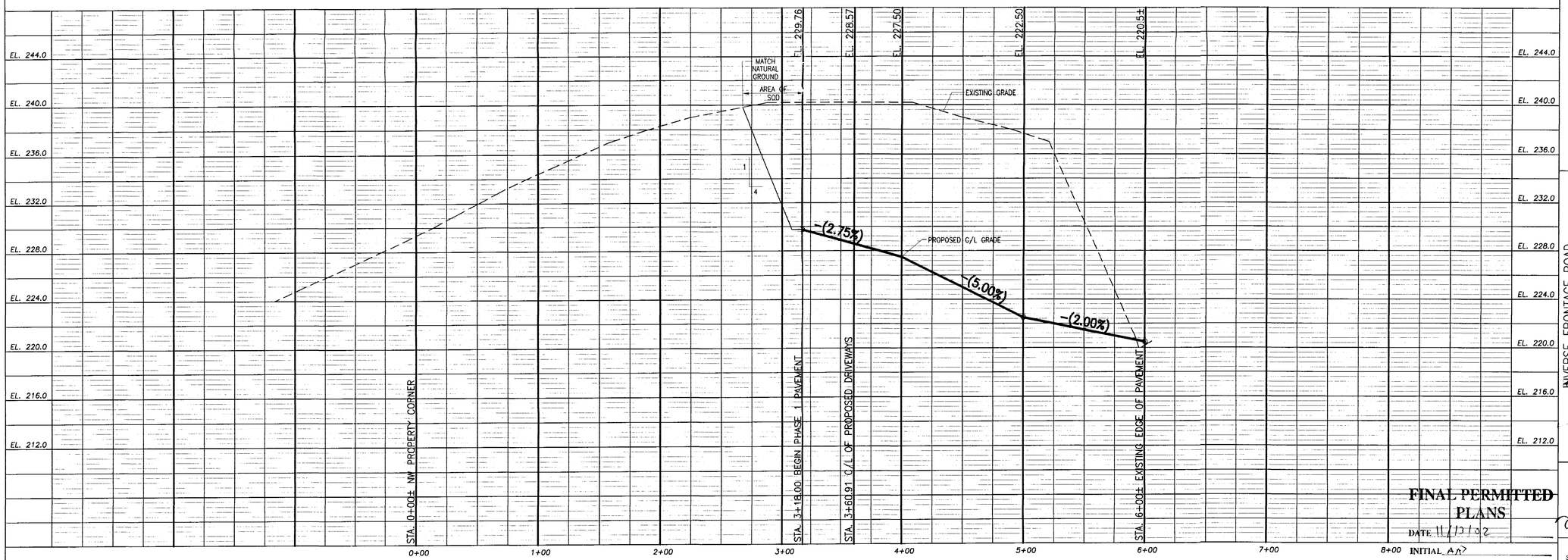
SECTION "L"–"L"





SCALE: 1" = 40', HORIZONTAL
1" = 4', VERTICAL

INVERSE FRONTAGE ROAD – 80' R/W



FINAL PERMITTED PLANS
DATE 11/12/02
INITIAL AR

	DATE	DESCRIPTION	BY
	11/12/02	REVISED PER ST. JOHNS RIVER WATER MANAGEMENT DIST.	SCM

DATE: OCTOBER 14, 2002
SCALE: 1"=40' H, 1"=4' V
DESIGNED: THS
DRAWN: SCM
CHECKED BY: THS
JOB NO.: 99457
CAD FILE NO.: 99457PP8

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

INVERSE FRONTAGE ROAD
PLAN & PROFILE
HANCOCK VILLAGE
CLERMONT, FLORIDA

SHEET: 8 OF: 15

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DATE	REVISIONS	REVISED	CHECKED

DATE: AUGUST 29, 2002
SCALE: 1" = 100'
DESIGNED: THS
DRAWN: SCM
CHECKED BY: THS
JOB NO.: 99455
CAD FILE NO.: 99455pre-basin

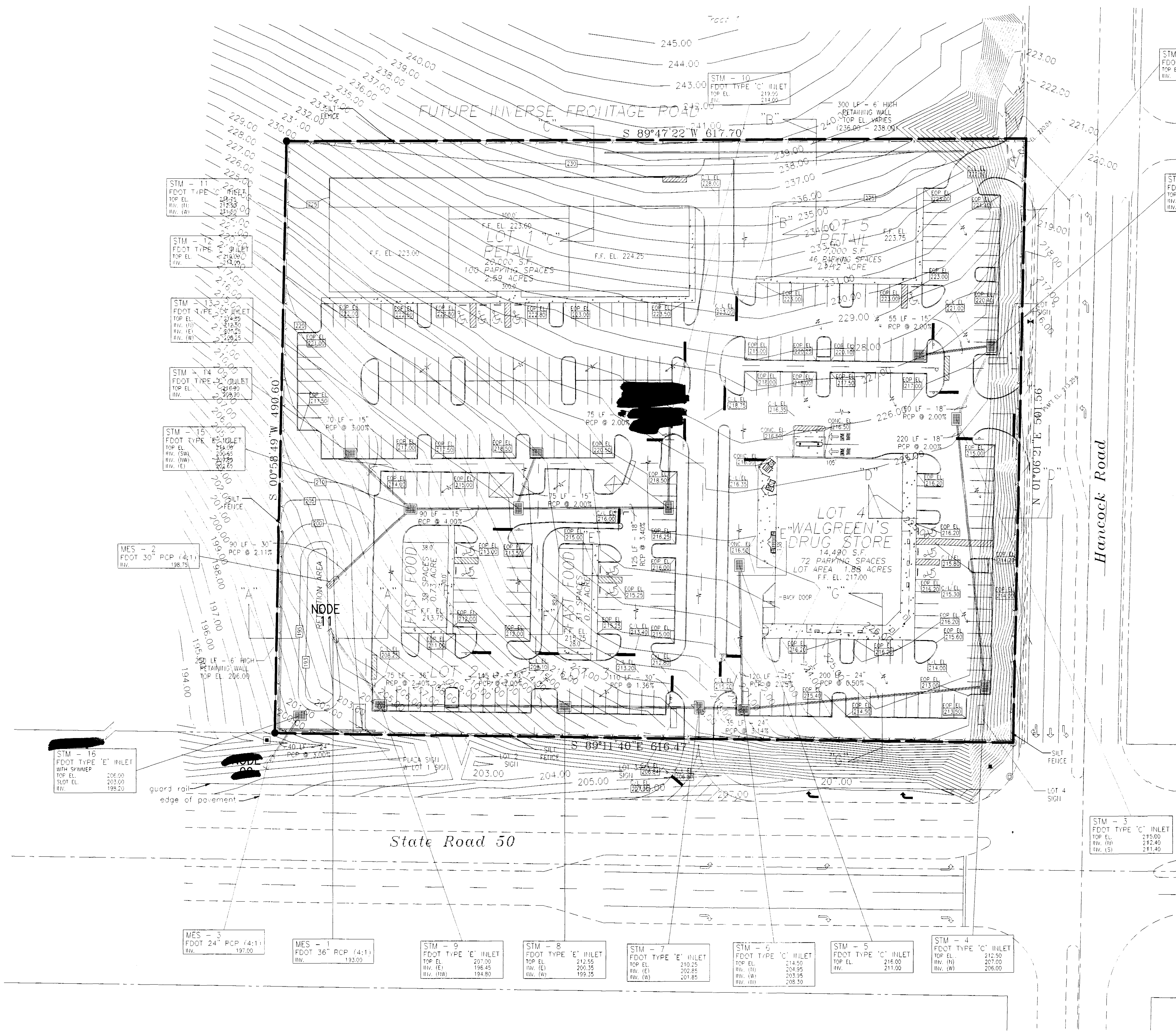
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

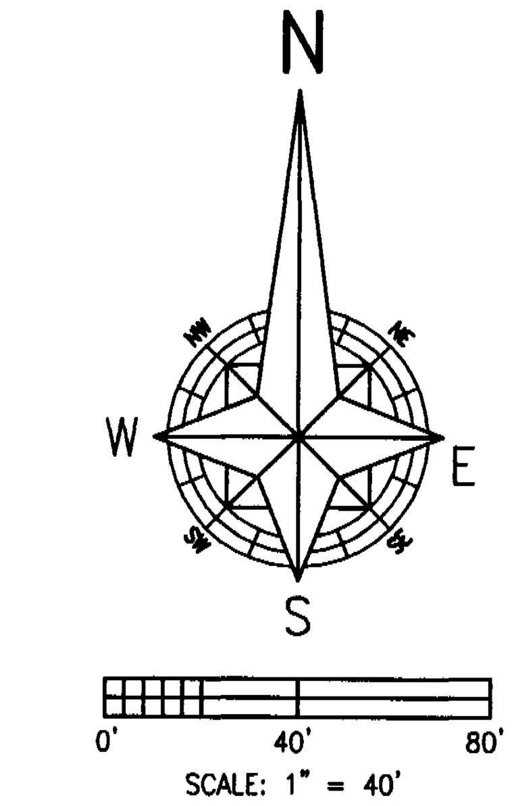
PRE-DEVELOPMENT BASIN MAP

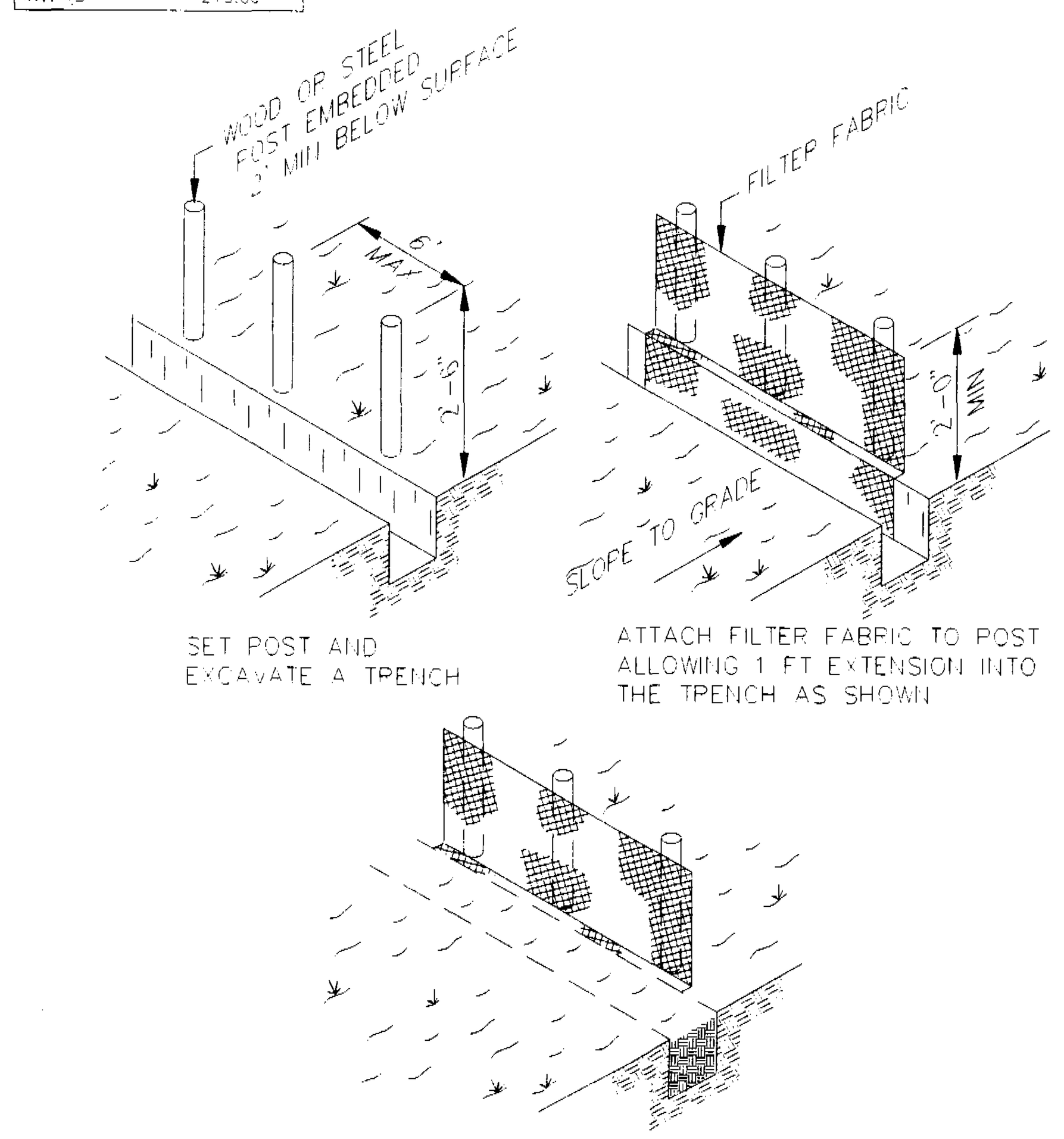
HANCOCK VILLAGE

CLERMONT, FLORIDA

SHEET: 1 OF: 1







SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

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DATE:	JUNE 28, 2002
SCALE:	1" = 40'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO.:	99455
CAD FILE NO.:	99455POST

DATE	REVISIONS	REVISED	CHECKED

AMERICAN CIVIL ENGINEERING CO.

207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

POST DEVELOPMENT BASIN MAP

HANCOCK VILLAGE

CLERMONT, FLORIDA

84428-1
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JUL 0 2 2002
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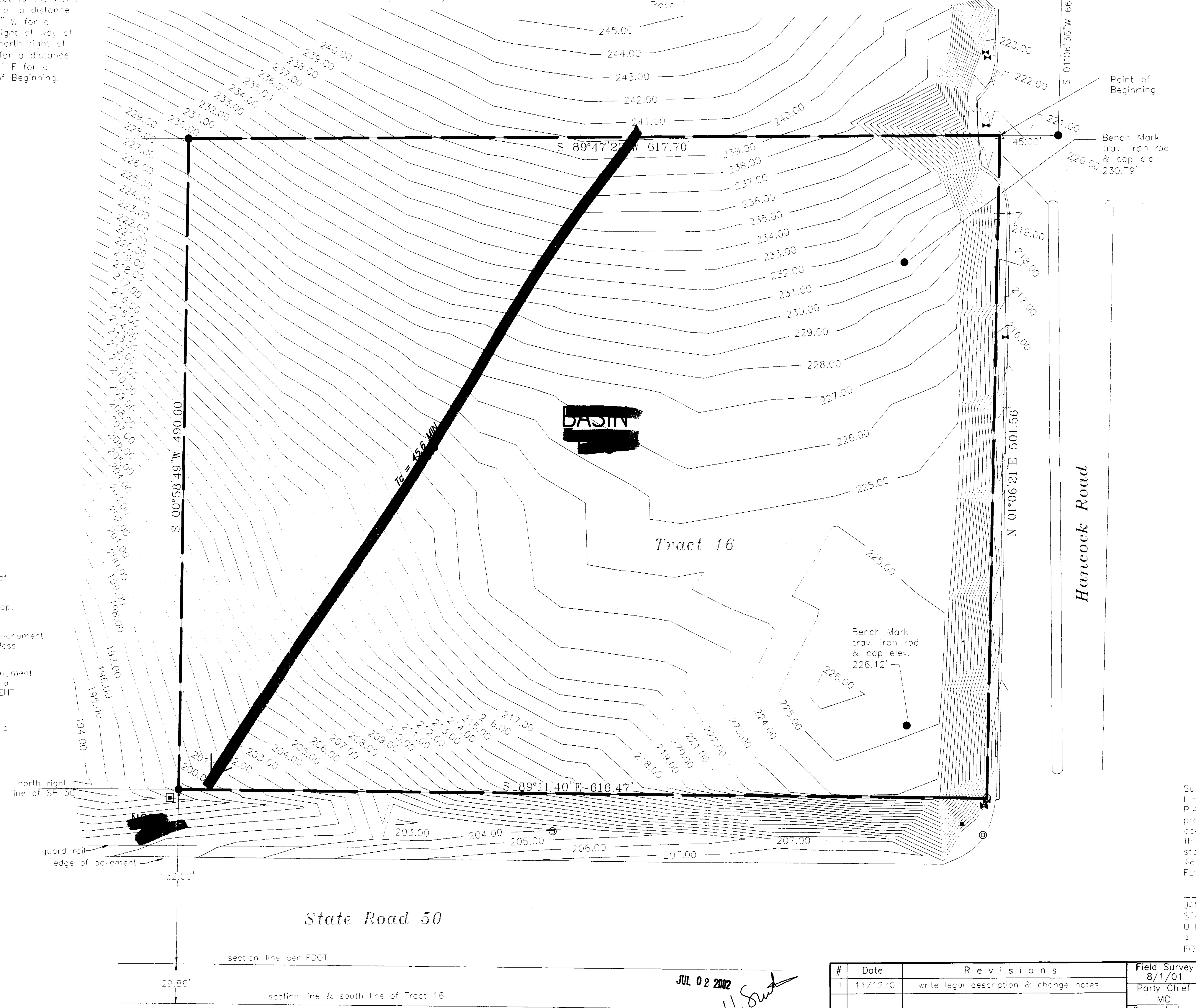
SHEET: 1 OF: 1

Map of Boundary & Topographic Survey

Description by Florida Geodetic Surveying & Mapping, Inc.
Commence at the Northeast corner of Section 28, Township 22 South, Range 26 East, Lake County, Florida. Run S 01°06'36" W along the east line of said Section for a distance of 664.22 feet; thence run S 89°47'22" W for a distance of 45 feet to the Point of Beginning; Continue S 89°47'22" W for a distance of 617.70 feet; thence run S 00°58'49" W for a distance of 490.60 feet to the north right of way of State Road 50; thence run along the north right of way of State Road 50 S 89°11'40" E for a distance of 616.47 feet; thence run N 01°06'21" E for a distance of 501.56 feet to the Point of Beginning.

Lake Highlands Subdivision, Tract 16, according to the plat thereof, as recorded in Plat Book 2, Page 28, Public Records of Lake County, Florida, less right of way of State Road 50 and Less the East 45 feet for road rightof way, in Section 28, Township 22 South, Range 26 East. CONTAINING 7.03 acres, more or less, and being subject to any easements or rights of way of record.



North - Scale 1" = 60'
0 15 30 60 90 120

Notes:
- Bearings based on the East line of the NE-1/4 of Section 28-22-26 as being S 01°06'36" W, an assumed meridian.
- Initial Legal description supplied by client.
- Title Commitment No. File Number 0111610 for the above property has been provided. It was reviewed and none of the documents affect the boundary of this parcel.
- No adjacent, underground or internal improvements, other than those shown, located this date.
- Elevations based on LAK 13 FLDNP with and elevation of 185.466'

Lake County
I hereby declare that I have examined the Flood Insurance Rate Map panel 120421 0375 B dated April 1, 1982, and that to the best of my knowledge, information and belief and my professional opinion that the above described property lies within flood zone C.

Legend:

- ● denotes found 1/2" iron rod not marked unless otherwise noted
- ○ denotes set 5/8" iron rod & cap, marked "FGSM, INC LB 7063"
- ■ denotes found 4"x4" concrete monument & disk, marked "PLS 2142" unless otherwise noted
- □ denotes set 4"x4" concrete monument marked "PPM PLS 2565" being a PERMANENT REFERENCE MONUMENT
- △ denotes set "PK" nail & disk marked "PCP PLS 2565" being a PERMANENT CONTROL POINT
- denotes fire hydrant
- denotes water valve
- denotes electric riser
- denotes telephone riser
- denotes utility pole
- denotes utility pole anchor
- denotes light pole
- denotes utility/light pole
- denotes concrete signal post
- denotes storm man hole
- denotes flat grate inlet

Surveyor's Certification:
I hereby certify to Trycon, Inc., Akerman Senterfitt, Peter Mc Farlane, P.A. and Lawyers Title Insurance Corporation that I have surveyed the property described hereon and that said survey and drawing are accurate to the best of my knowledge and belief. I further certify that this Map of Boundary Survey meets the minimum technical standards for surveys as set forth in Chapter 61G17 Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.
FLORIDA GEODETIC SURVEYING & MAPPING, INC. LB 7063

JAMES H. WALTERS JR. PLS #2565 Date
STATE OF FLORIDA
UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS MAP REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

JUL 02 2002
[illegible]

[redacted]

#	Date	Revisions
1	11/12/01	write legal description & change notes

Field Survey 8/1/01
Party Chief MC
Computed by ML
Drawn by ML
Scale 1"=60'

Prepared for: Project 01003.006

Trycon, Inc.

RECEIVED
JUL 02 2002
PDS
ALTAMONTE SVC. CTR.

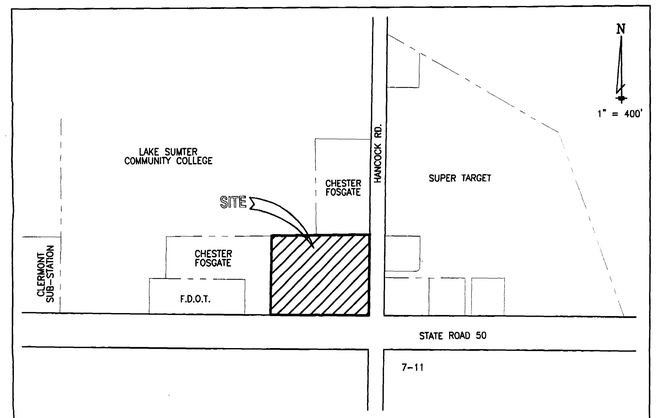
Florida Geodetic Surveying & Mapping, Inc.
720 West Montrose Street
Clermont, Florida 34711
(352) 394-3000 / FAX (352) 394-1305

84428-1

CONSTRUCTION PLANS FOR:

HANCOCK VILLAGE

CLERMONT, FLORIDA



VICINITY MAP

UTILITY COMPANIES:

ELECTRICAL POWER:	FLORIDA POWER CORPORATION 3250 BONNET CREEK RD. LAKE BEUNA VISTA, FLORIDA 32830 (407) 646-8501
TELEPHONE:	BELL SOUTH 500 NORTH ORANGE AVENUE ORLANDO, FLORIDA 32801 (407) 780-2800
SANITARY SEWER:	CITY OF CLERMONT 400 12TH ST. CLERMONT, FLORIDA 34711 (352) 394-3350
WATER DISTRIBUTION:	CITY OF CLERMONT 400 12TH ST. CLERMONT, FLORIDA 34711 (352) 394-3350

PROJECT DIRECTORY:

OWNER:	RABI AND GEORGE NESHEIWAT 435 MEADOW DRIVE ROSELLE, ILLINOIS 60172 PHONE: (630) 295-9815
DEVELOPER/APPLICANT:	TRYCON, INC. 300 INTERNATIONAL PKWY., STE 184 HEATHROW, FLORIDA 32746 SPENCER PHELPS PHONE: (407) 804-8949 FAX: (407) 804-8963
ENGINEER:	AMERICAN CIVIL ENGINEERING CO. 207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 THOMAS H. SKELTON, PE #42752 PHONE: (407) 327-7700 FAX: (407) 327-0227 EMAIL: tomskelton@bellsouth.net
SURVEYOR:	FLORIDA GEODETIC SURVEYING & MAPPING, INC. 720 WEST MONTROSE STREET CLERMONT, FLORIDA 34711 ROBERT C. JOHNSON, PSM PHONE: (352) 394-3000 FAX: (352) 394-1305
GEOTECH:	UNIVERSAL ENGINEERING SCIENCES, INC. 3532 MAGGIE BLVD. ORLANDO, FLORIDA 32811 R. KENNETH DERICK, PE PHONE: (407) 423-0504 FAX: (407) 423-3106 EMAIL: kderick@uesorl.com

TAX PARCEL ID #:

09-22-26-120001600000

SOILS TYPE:

#14 CANDLER SAND, HYDROLOGIC GROUP 'A'

FLOOD ZONE:

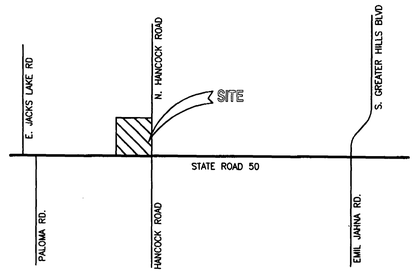
THIS SITE IS LOCATED IN ZONE C, AREAS OF MINIMAL FLOODING PER FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 120421-0375-B, APRIL 1, 1982

WETLANDS:

THERE ARE NO JURISDICTIONAL WETLANDS ON SITE.

PREPARED FOR:

TRYCON, INC.



LOCATION MAP

SEC. 28 TWP. 22 S RGE. 26 E

PERMIT STATUS	DATE ISSUED	DATE EXPIRES

INDEX OF SHEETS

PLANS ISSUED FOR:	DATE
84428-1	

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ALTAMONTE SVC. CTR.

Thomas H. Skelton
JUL 0 2 2002

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

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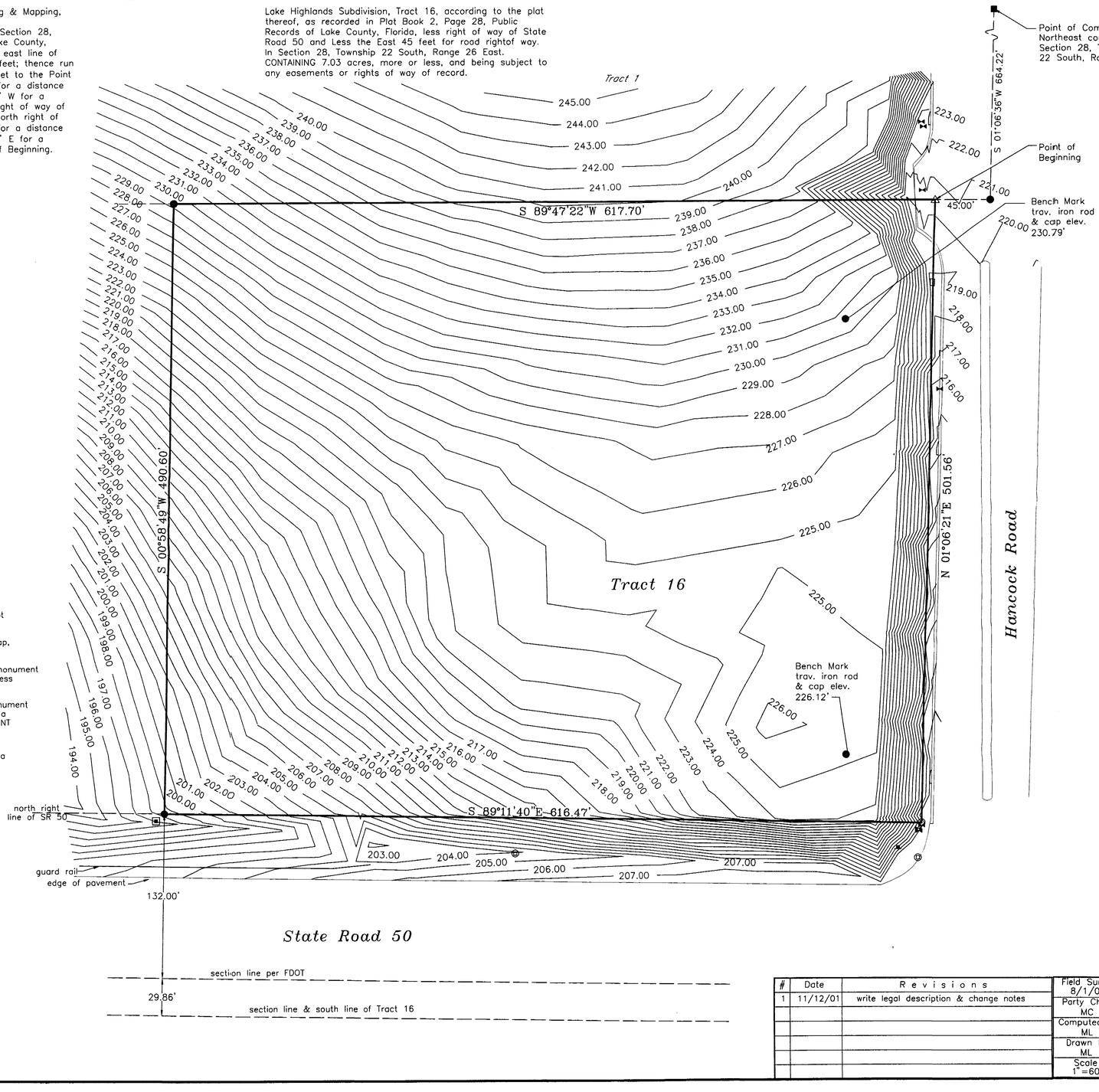

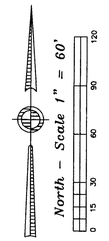

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FLORIDA GEODETIC SURVEYING & MAPPING, INC. LB 7063

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#	Date	Revisions
1	11/12/01	write legal description & change notes

Field Survey	8/1/01
Party Chief	MC
Computed by	ML
Drawn by	ML
Scale	1"=60'

Prepared for:
Trycon, Inc.

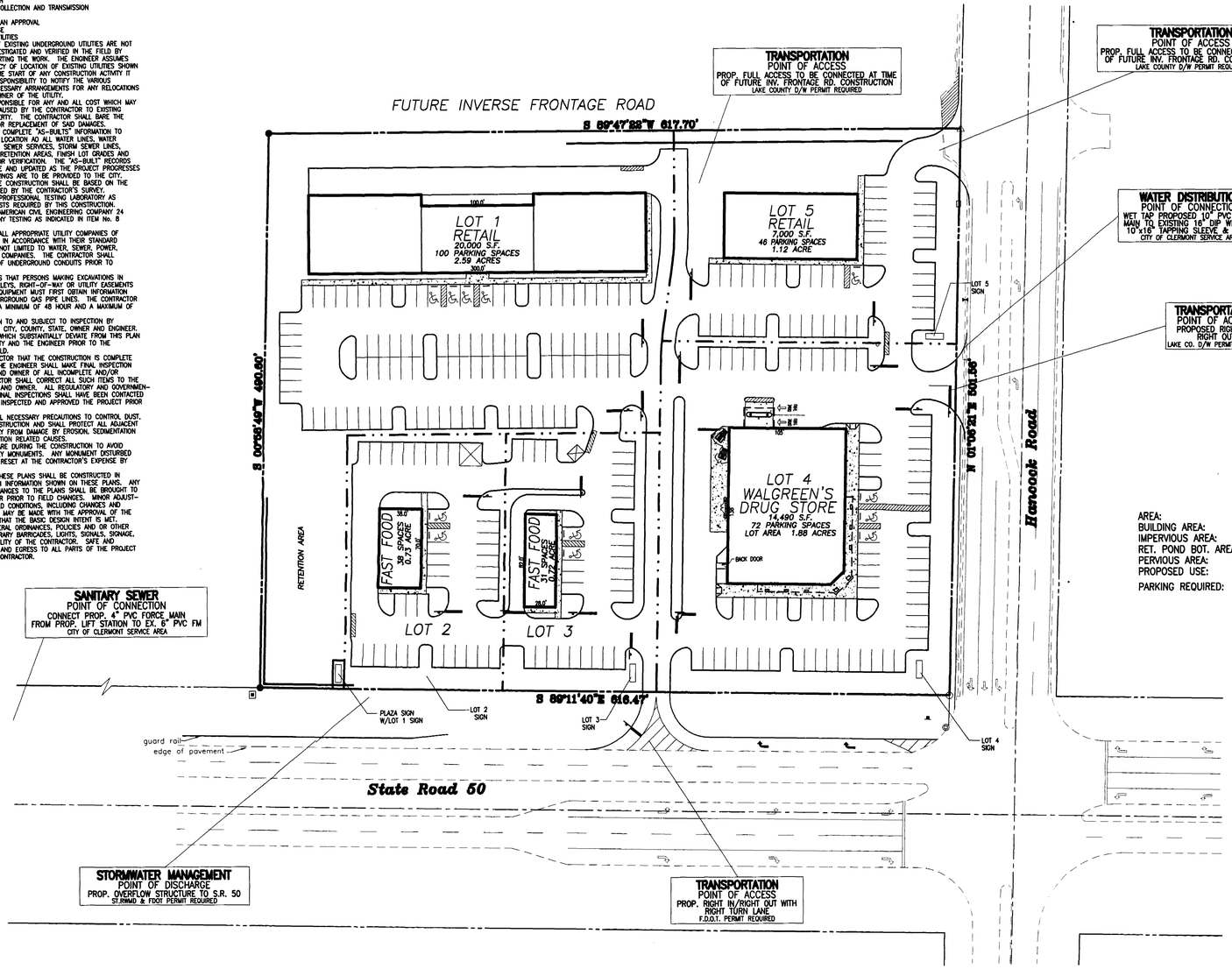
Project#: 2002.006

RECEIVED
JUL 02 2002
PDS
ALTAMONTE SVC. CTR.
04428-1

Florida Geodetic Surveying & Mapping, Inc.
720 West Montrose Street
Clermont, Florida 34711
(352) 394-3000 / FAX (352) 394-1305

CONSTRUCTION NOTES GENERAL:

1. THE FOLLOWING GENERAL NOTES APPLY TO ALL CONSTRUCTION AS DEPICTED ON THE PLANS.
2. ALL PROPOSED SITE CONSTRUCTION SHALL BE PURSUANT TO INFORMATION SHOWN ON THESE PLANS AS APPROVED BY CITY OF CLERMONT.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE STATE, FEDERAL, AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT THEIR EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
   - WATER MANAGEMENT DISTRICT STORMWATER
   - FDEP WATER DISTRIBUTION
   - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
   - FDOT DRIVEWAY
   - LOCAL CONSTRUCTION PLAN APPROVAL
   - LOCAL RIGHT OF WAY USE
   - LOCAL UNDERGROUND UTILITIES
4. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO STARTING THE WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY OF LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THESE UTILITIES WITH THE OWNER OF THE UTILITY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COST WHICH MAY OCCUR DUE TO ANY DAMAGES CAUSED BY THE CONTRACTOR TO EXISTING UTILITIES STRUCTURES OR PROPERTY. THE CONTRACTOR SHALL BARE THE ENTIRE COSTS OF REPAIR AND/OR REPLACEMENT OF SAID DAMAGES.
6. THE CONTRACTOR SHALL PROVIDE COMPLETE "AS-BUILTS" INFORMATION TO THE ENGINEER RELATIVE TO THE LOCATION AO ALL WATER LINES, WATER SERVICES, VALVES, SEWER LINES, SEWER SERVICES, STORM SEWER LINES, INVERTS OF STRUCTURES, FINAL RETENTION AREAS, FINISH LOT GRADES AND CONSTRUCTION BENCH MARKS FOR VERIFICATION. THE "AS-BUILT" RECORDS SHALL BE KEPT AT THE JOB SITE AND UPDATED AS THE PROJECT PROGRESSES TWO (2) SETS OF RECORD DRAWINGS ARE TO BE PROVIDED TO THE CITY.
7. ALL HORIZONTAL LAYOUT FOR SITE CONSTRUCTION SHALL BE BASED ON THE APPROVED SITE PLAN AND VERIFIED BY THE CONTRACTOR'S SURVEY.
8. THE CONTRACTOR SHALL HIRE A PROFESSIONAL TESTING LABORATORY AS NECESSARY TO PERFORM ALL TESTS REQUIRED BY THIS CONSTRUCTION.
9. THE CONTRACTOR SHALL NOTIFY AMERICAN CIVIL ENGINEERING COMPANY 24 HOURS IN ADVANCE PRIOR TO ANY TESTING AS INDICATED IN ITEM No. 8 ABOVE.
10. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF THE PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS, INCLUDING BUT NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF UNDERGROUND CONDUITS PRIOR TO SUBBASE PREPARATION.
11. FLORIDA LAW (633.851) REQUIRES THAT PERSONS MAKING EXCAVATIONS IN PUBLIC OR PRIVATE STREETS, ALLEYS, RIGHT-OF-WAY OR UTILITY EASEMENTS WITH HAND TOOLS OR POWER EQUIPMENT MUST FIRST OBTAIN INFORMATION ON THE THE LOCATION OF UNDERGROUND GAS PIPE LINES. THE CONTRACTOR SHALL NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOUR AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATION.
12. ALL WORK SHALL SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, COUNTY, STATE, OWNER AND ENGINEER.
13. ANY PROPOSED FIELD CHANGES WHICH SUBSTANTIALLY DEVIATE FROM THIS PLAN SHALL BE APPROVED BY COUNTY AND THE ENGINEER PRIOR TO ANY CHANGE BEING MADE IN THE FIELD.
14. UPON NOTICE FROM THE CONTRACTOR THAT THE CONSTRUCTION IS COMPLETE AND READY FOR ACCEPTANCE, THE ENGINEER SHALL MAKE FINAL INSPECTION AND NOTIFY THE CONTRACTOR AND OWNER OF ALL INCOMPLETE AND/OR DEFECTIVE WORK. THE CONTRACTOR SHALL CORRECT ALL SUCH ITEMS TO THE SATISFACTION OF THE ENGINEER AND OWNER. ALL REGULATORY AND GOVERNMENTAL AGENCIES WHICH REQUIRE FINAL INSPECTIONS SHALL HAVE BEEN CONTACTED BY THE CONTRACTOR AND HAVE INSPECTED AND APPROVED THE PROJECT PRIOR TO ACCEPTANCE BY THE OWNER.
15. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL DUST, MUD AND EROSION DURING CONSTRUCTION AND SHALL PROTECT ALL ADJACENT PROPERTIES AND RIGHTS-OF-WAY FROM DAMAGE BY EROSION, SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
16. THE CONTRACTOR SHALL TAKE CARE DURING THE CONSTRUCTION TO AVOID DISTURBING ANY EXISTING SURVEY MONUMENTS. ANY MONUMENT DISTURBED BY THE CONTRACTOR SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY THE PROJECT SURVEYOR.
17. ALL IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH INFORMATION SHOWN ON THESE PLANS. ANY CONFLICTS WHICH RESULT IN CHANGES TO THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO FIELD CHANGES. MINOR ADJUSTMENTS CAUSED BY VARYING FIELD CONDITIONS, INCLUDING CHANGES AND DEPTHS OF BERMS AND SWALES MAY BE MADE WITH THE APPROVAL OF THE ENGINEER IF IT IS DETERMINED THAT THE BASIC DESIGN INTENT IS MET.
18. ALL LOCAL, AND STATE AND FEDERAL ORDINANCES, POLICIES AND OR OTHER REGULATIONS REGARDING TEMPORARY BARRICADES, LIGHTS, SIGNALS, SIGNAGE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SAFE AND CONVENIENT MEANS OF ACCESS AND EGRESS TO ALL PARTS OF THE PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR.



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W E
S
0' 50' 100'
SCALE: 1" = 50'

PROJECT DATA:

TOTAL AREA:	306,037 SF	7.03 ACRES
EXISTING ZONING:	C-2	
FUTURE LAND USE:	COMMERCIAL	
TOTAL IMPERVIOUS AREA:	212,783 SF	(69.5%)
TOTAL BUILDING AREA:	50,490 SF	(16.5%)
RET. POND BOT. AREA:	925 SF	(00.3%)
OPEN SPACE PROVIDED:	93,254 SF	(30.5%)
F.A.R. ALLOWABLE:	0.3500	
F.A.R. PROVIDED:	0.1650	
BUILDING SETBACKS REQUIRED:		
S.R. 50:	50 FEET	
HANCOCK ROAD:	50 FEET	
NORTH:	10 FEET	
WEST:	10 FEET	
MAXIMUM BUILDING HEIGHT:	35 FEET	

	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5
AREA:	112,879 S.F.	31,750 S.F.	31,231 S.F.	81,712 S.F.	48,685 S.F.
BUILDING AREA:	20,000 S.F. (17.7%)	5,000 S.F. (15.7%)	4,000 S.F. (12.8%)	14,490 S.F. (17.7%)	7,000 S.F. (14.4%)
IMPERVIOUS AREA:	70,229 S.F. (62.3%)	23,620 S.F. (74.4%)	23,154 S.F. (74.1%)	64,144 S.F. (78.5%)	31,636 S.F. (65.0%)
RET. POND BOT. AREA:	925 S.F. (00.8%)	0 S.F. (00.0%)	0 S.F. (0.00%)	0 S.F. (00.0%)	0 S.F. (00.0%)
PERVIOUS AREA:	42,450 S.F. (37.7%)	8,130 S.F. (25.6%)	8,077 S.F. (25.9%)	17,568 S.F. (21.5%)	17,029 S.F. (35.0%)
PROPOSED USE:	COM.-RETAIL	COM.-REST/ FAST FOOD	COM.-REST/ FAST FOOD	COM.-RETAIL/ DRUG STORE	COM.-RETAIL
PARKING REQUIRED:	1 SP/200 SF	1 SP/50 SF	1 SP/50 SF	1 SP/200 SF	1 SP/200 SF

DATE:	JUNE 28, 2002
SCALE:	1" = 50'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO:	99453403
CAD FILE NO:	99453403

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AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

MASTER PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

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SHEET: 3 OF: 15

FUTURE INVERSE FRONTAGE ROAD

S 89°47'22"W 617.70'

'NO PARKING, FIRE LANE' STRIPING (TYP.)

LOT 1
RETAIL
20,000 S.F.
100 PARKING SPACES
2.59 ACRES

LOT 5
RETAIL
7,000 S.F.
46 PARKING SPACES
1.12 ACRE

LOT 4
WALGREEN'S
DRUG STORE
14,490 S.F.
72 PARKING SPACES
LOT AREA 1.88 ACRES

FAST FOOD
38 SPACES
0.73 ACRE

FAST FOOD
31 SPACES
0.72 ACRE

LOT 2

LOT 3

RETENTION AREA

24" STOP BAR & 30" STOP SIGN

BACK DOOR

LOT 5 SIGN

LOT 4 SIGN

LOT 3 SIGN

LOT 2 SIGN

PLAZA SIGN W/LOT 1 SIGN

S 00°58'49"W 490.60'

N 01°06'21"E 501.56'

S 89°11'40"E 616.47'

Hancock Road

guard rail
edge of pavement

State Road 50

N

W E

S

0' 40' 80'

DATE: JUNE 28, 2002
SCALE: 1" = 40'
DESIGNED: THS
DRAWN: SCM
CHECKED BY: THS
JOB NO.: 99455
CAD FILE NO.: 99455004

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SITE PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

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CONSTRUCTION NOTES SANITARY SEWER SYSTEM:

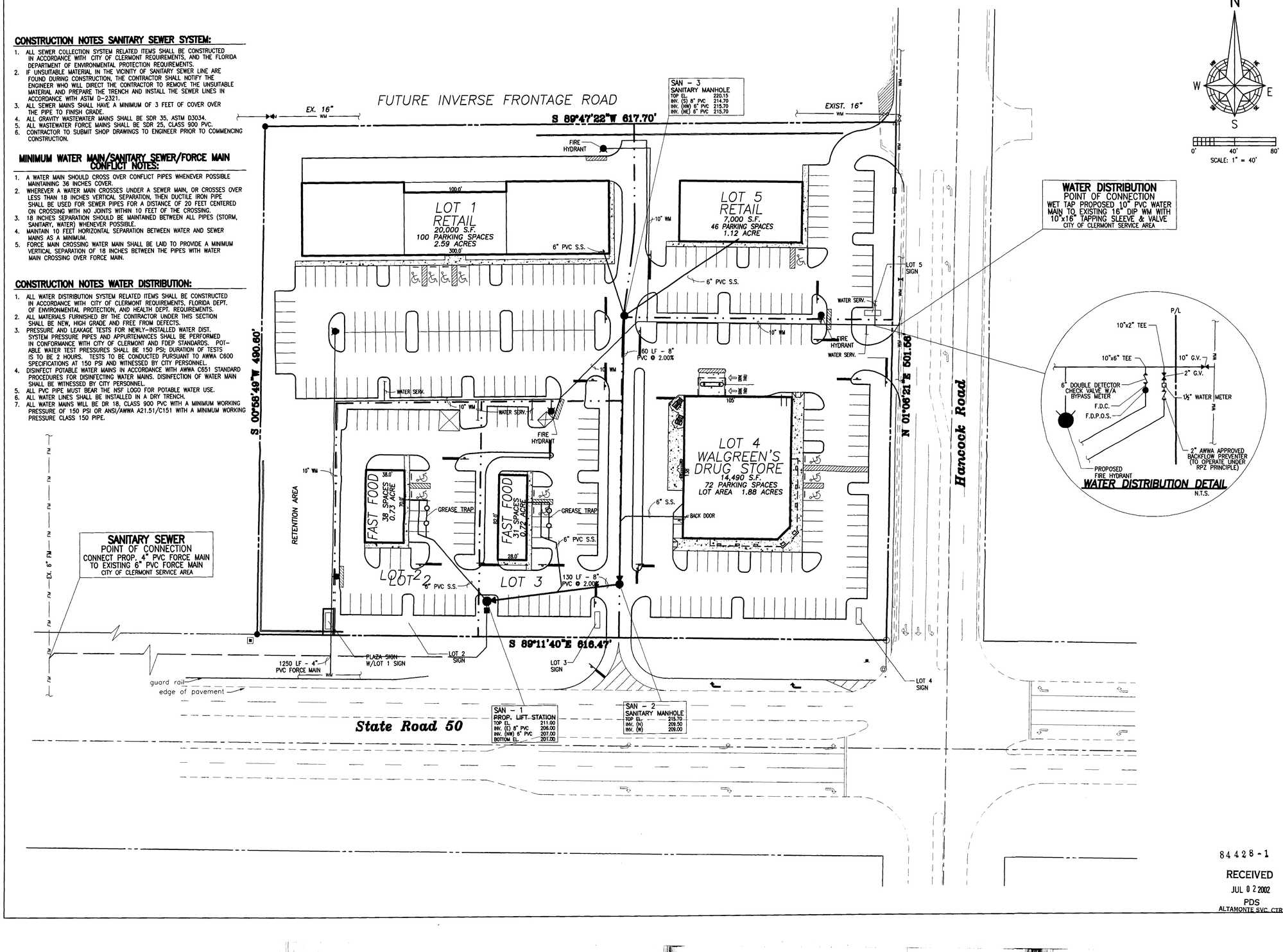
1. ALL SEWER COLLECTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CLERMONT REQUIREMENTS, AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
2. IF UNSUITABLE MATERIAL IN THE VICINITY OF SANITARY SEWER LINE ARE FOUND DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHO WILL DIRECT THE CONTRACTOR TO REMOVE THE UNSUITABLE MATERIAL AND PREPARE THE TRENCH AND INSTALL THE SEWER LINES IN ACCORDANCE WITH ASTM D-2321.
3. ALL SEWER MAINS SHALL HAVE A MINIMUM OF 3 FEET OF COVER OVER THE PIPE TO FINISH GRADE.
4. ALL GRAVITY WASTEWATER MAINS SHALL BE SDR 35, ASTM D3034.
5. ALL WASTEWATER FORCE MAINS SHALL BE SDR 25, CLASS 900 PVC.
6. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER PRIOR TO COMMENCING CONSTRUCTION.

MINIMUM WATER MAIN/SANITARY SEWER/FORCE MAIN CONFLICT NOTES:

1. A WATER MAIN SHOULD CROSS OVER CONFLICT PIPES WHENEVER POSSIBLE MAINTAINING 36 INCHES COVER.
2. WHEREVER A WATER MAIN CROSSES UNDER A SEWER MAIN, OR CROSSES OVER LESS THAN 18 INCHES VERTICAL SEPARATION, THEN DUCTILE IRON PIPE SHALL BE USED FOR SEWER PIPES FOR A DISTANCE OF 20 FEET CENTERED ON CROSSING WITH NO JOINTS WITHIN 10 FEET OF THE CROSSING.
3. 18 INCHES SEPARATION SHOULD BE MAINTAINED BETWEEN ALL PIPES (STORM, SANITARY, WATER) WHENEVER POSSIBLE.
4. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN WATER AND SEWER MAINS AS A MINIMUM.
5. FORCE MAIN CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN THE PIPES WITH WATER MAIN CROSSING OVER FORCE MAIN.

CONSTRUCTION NOTES WATER DISTRIBUTION:

1. ALL WATER DISTRIBUTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CLERMONT REQUIREMENTS, FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION, AND HEALTH DEPT. REQUIREMENTS.
2. ALL MATERIALS FURNISHED BY THE CONTRACTOR UNDER THIS SECTION SHALL BE NEW, HIGH GRADE AND FREE FROM DEFECTS.
3. PRESSURE AND LEAKAGE TESTS FOR NEWLY-INSTALLED WATER DIST. SYSTEM PRESSURE PIPES AND APPURTENANCES SHALL BE PERFORMED IN CONFORMANCE WITH CITY OF CLERMONT AND FDEP STANDARDS. POTABLE WATER TEST PRESSURES SHALL BE 150 PSI; DURATION OF TESTS IS TO BE 2 HOURS. TESTS TO BE CONDUCTED PURSUANT TO AWWA C600 SPECIFICATIONS AT 150 PSI AND WITNESSED BY CITY PERSONNEL.
4. DISINFECT POTABLE WATER MAINS IN ACCORDANCE WITH AWWA C651 STANDARD PROCEDURES FOR DISINFECTING WATER MAINS. DISINFECTION OF WATER MAIN SHALL BE WITNESSED BY CITY PERSONNEL.
5. ALL PVC PIPE MUST BEAR THE NSF LOGO FOR POTABLE WATER USE.
6. ALL WATER LINES SHALL BE INSTALLED IN A DRY TRENCH.
7. ALL WATER MAINS WILL BE DR 18, CLASS 900 PVC WITH A MINIMUM WORKING PRESSURE OF 150 PSI OR ANSI/AWWA A21.51/C151 WITH A MINIMUM WORKING PRESSURE CLASS 150 PIPE.



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JOB NO.: 99455
CAD FILE NO.: 99455DWG

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UTILITY PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

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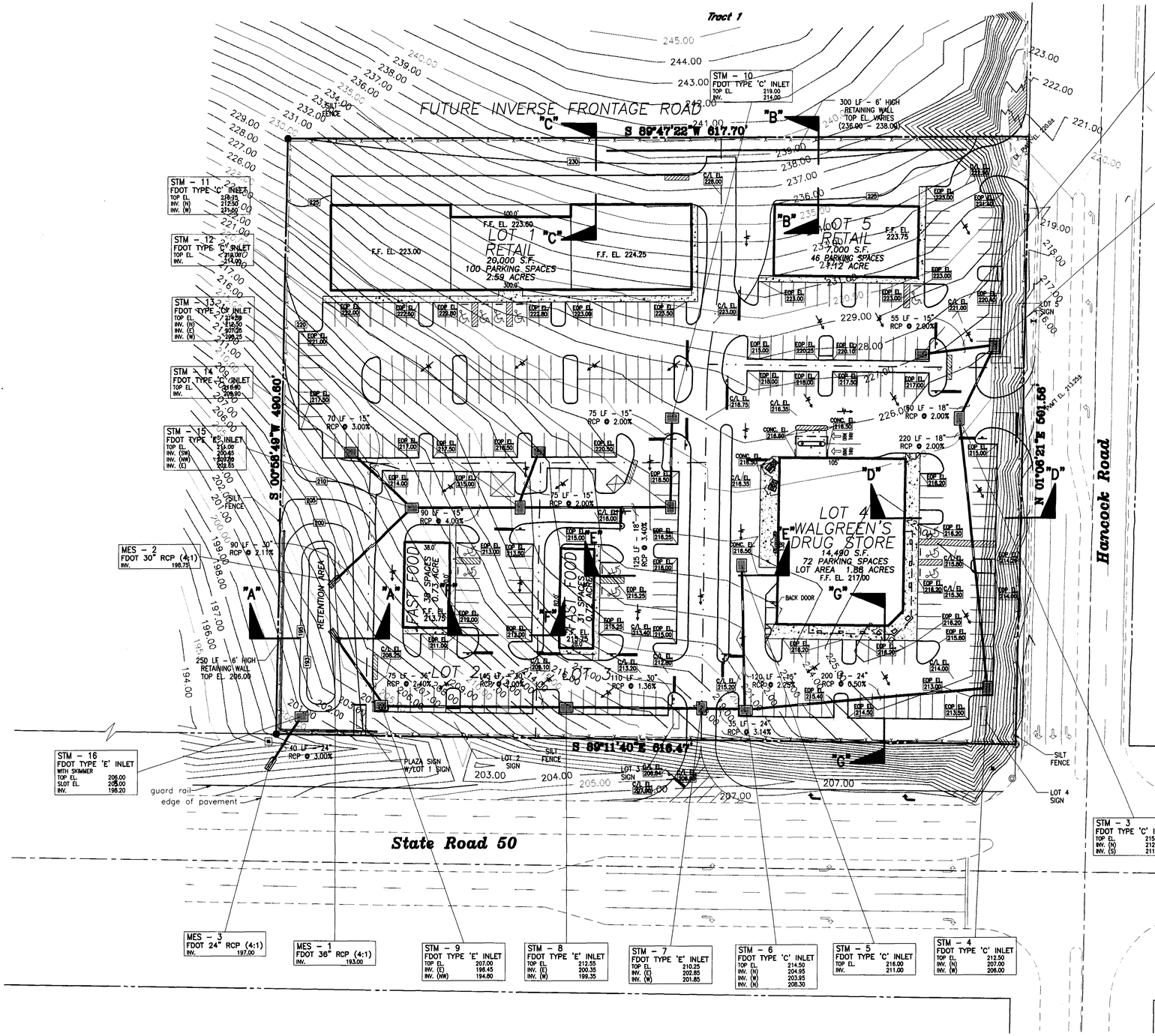

SILT FENCE DETAIL
F.D.O.T. INDEX NO. 102

NOTES:

1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND DESIGN STANDARDS CURRENT EDITION.
2. CONTRACTOR SHALL PROVIDE SILT FENCES AND HAY BALES AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONST.
3. CONTRACTOR SHALL ROUGH GRADE STORM-WATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF CLERMONT AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, AND THE SJRWMD.

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JOB NO.: 99455
CAD FILE NO.: 99455P06

NO.	DATE	REVISIONS

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207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

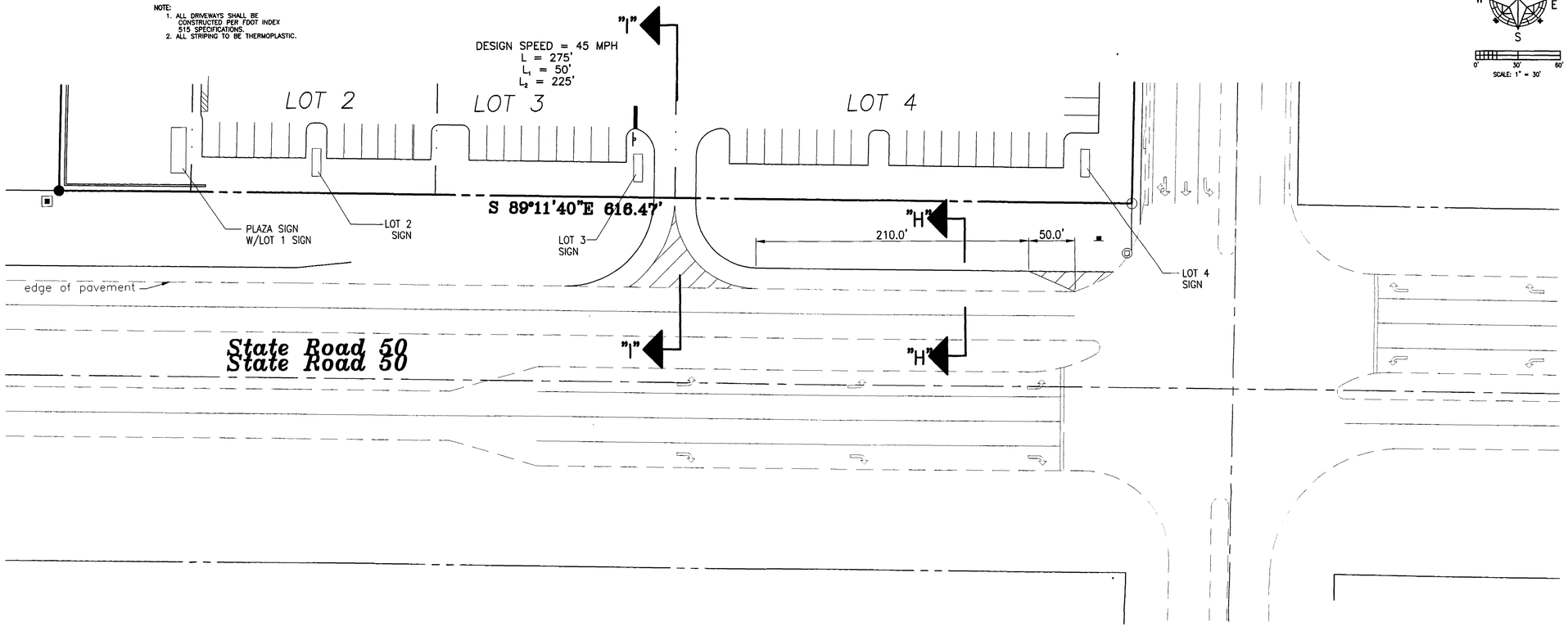
PAVING, GRADING & DRAINAGE PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

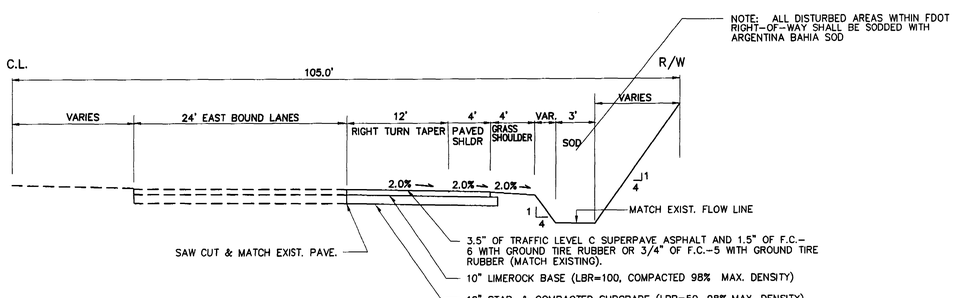
JUL 01 2002

SHEET: 6 OF: 15

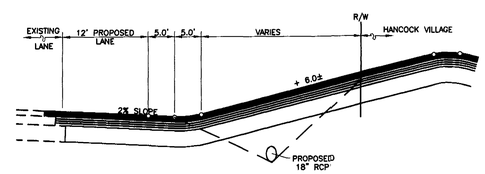
NOTE:
1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE 1994 EDITION OF THE ROADWAY AND TRAFFIC DESIGN STANDARDS AS WELL AS THE MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL DISTURBED AREAS WITHIN THE R/W WILL NEED TO BE REGRADED AND SODDED WITH ARGENTINA BAHIA.

NOTE:
1. ALL DRIVEWAYS SHALL BE CONSTRUCTED PER FDOT INDEX 515 SPECIFICATIONS.
2. ALL STRIPING TO BE THERMOPLASTIC.





SECTION "H" – "H"
N.T.S.
S R 50 SECTION AT DECEL TAPER LANES



SECTION "I" – "I"
N.T.S.
SECTION THROUGH C/L D/W
CONSTRUCT GRADES PER FDOT INDEX 515

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DATE: JUNE 28, 2002
SCALE: 1" = 30'
DESIGNED: SDS
DRAWN: SDS
CHECKED BY: THS
JOB NO.: 99455
CAD FILE NO.: 99455MP7

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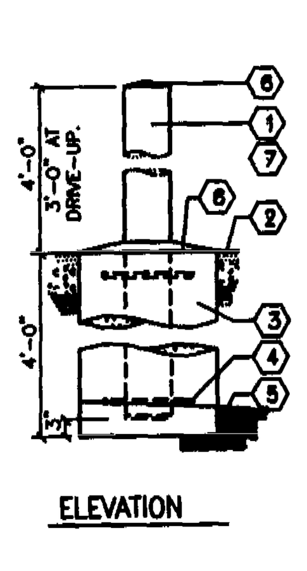
S.R. 50 IMPROVEMENTS PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

JUL 0 1 2002

SHEET: 7 OF: 15



KEYED NOTES

1. 4" DIAMETER STD. STL. PIPE CONCRETE FILLED. PROVIDE 1/4" WELDED CLOSURE PLATE AT BOTTOM. (PAINTED EXPOSED PIPE YELLOW).
2. TOP OF PAVEMENT.
3. 24" DIA. CONCRETE FOUNDATION. USE SONOTUBE FORM.
4. 3/8" DIAMETER WELDED HOOPS. 18" DIAMETER TOP, BOTTOM AND CENTER.
5. SOLID UNDISTURBED SOIL.
6. PROVIDE PITCH, SMOOTH CONCRETE FINISH.
7. 6" BOLLARDS BEHIND TRASH ENCLOSURE AND GATE POSTS.

TYPICAL PIPE BUMPER GUARDS

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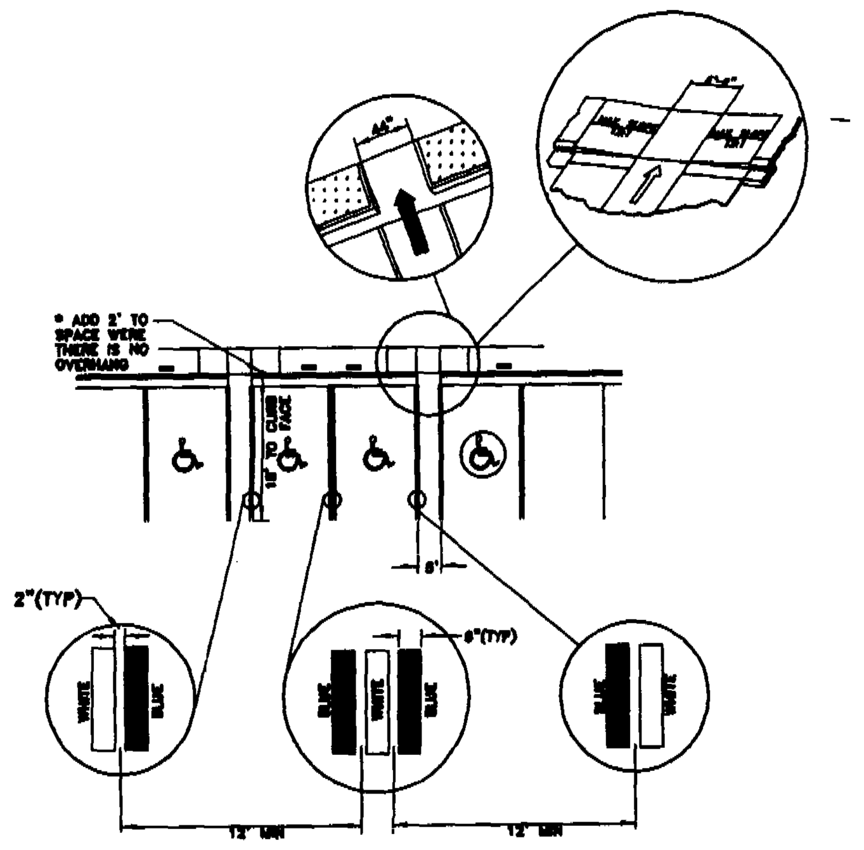
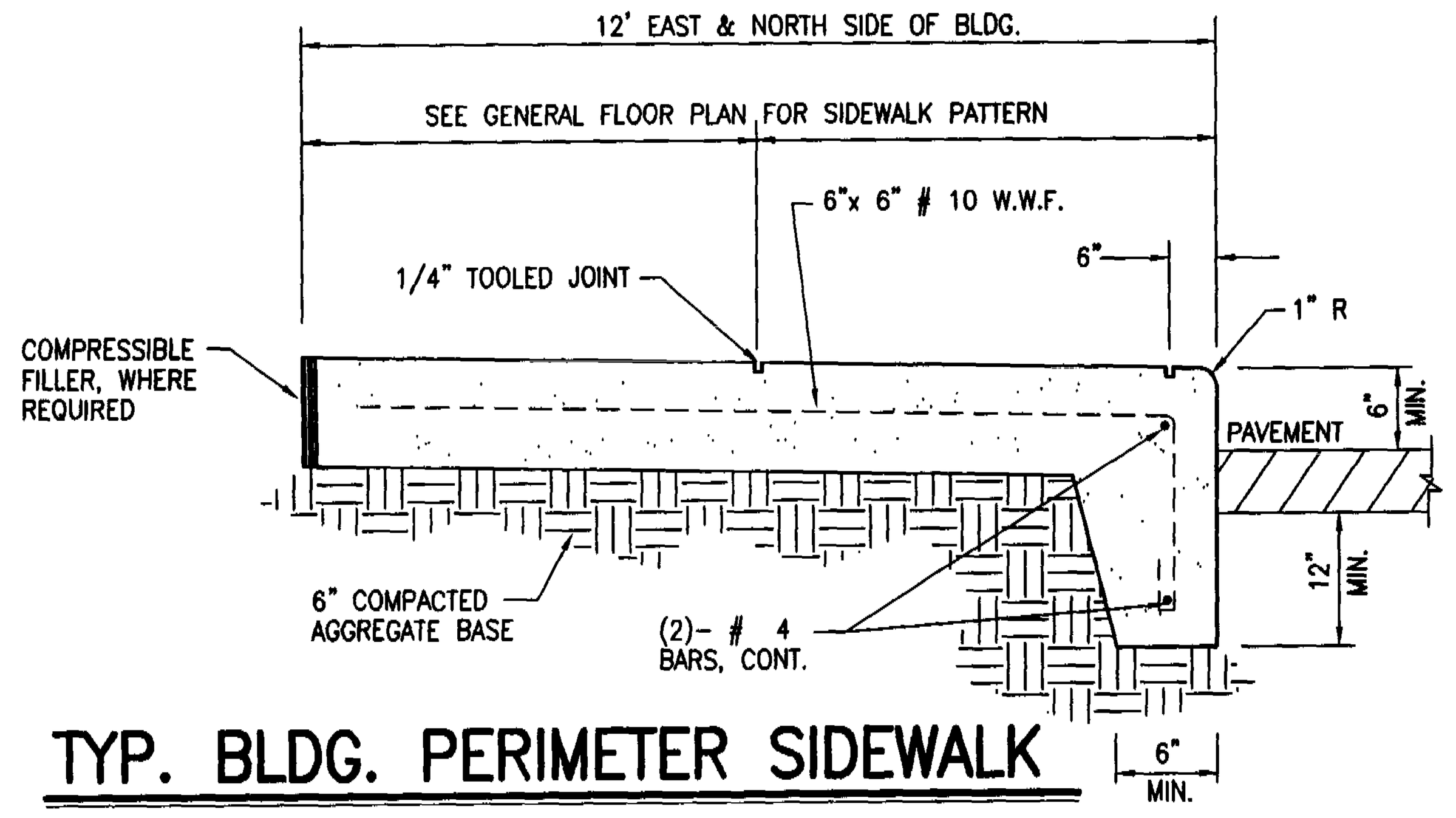


NOTES:

1. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY." OR BEARING BOTH SUCH SYMBOL AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION. CITY OF CLERMONT DISCOURAGES VARIATIONS FROM THE STANDARD.
2. FL DOT RECOMMENDS MEASURING PARKING SPACE WIDTH FROM CENTER TO CENTER BETWEEN BLUE AND WHITE STRIPES.
3. THIS DETAIL IS PROVIDED TO SUPPORT LDC SECTION 3.41.3.2

HANDICAP PARKING STRIPING FOR MULTIPLE SPACES



TYP. BLDG. PERIMETER SIDEWALK

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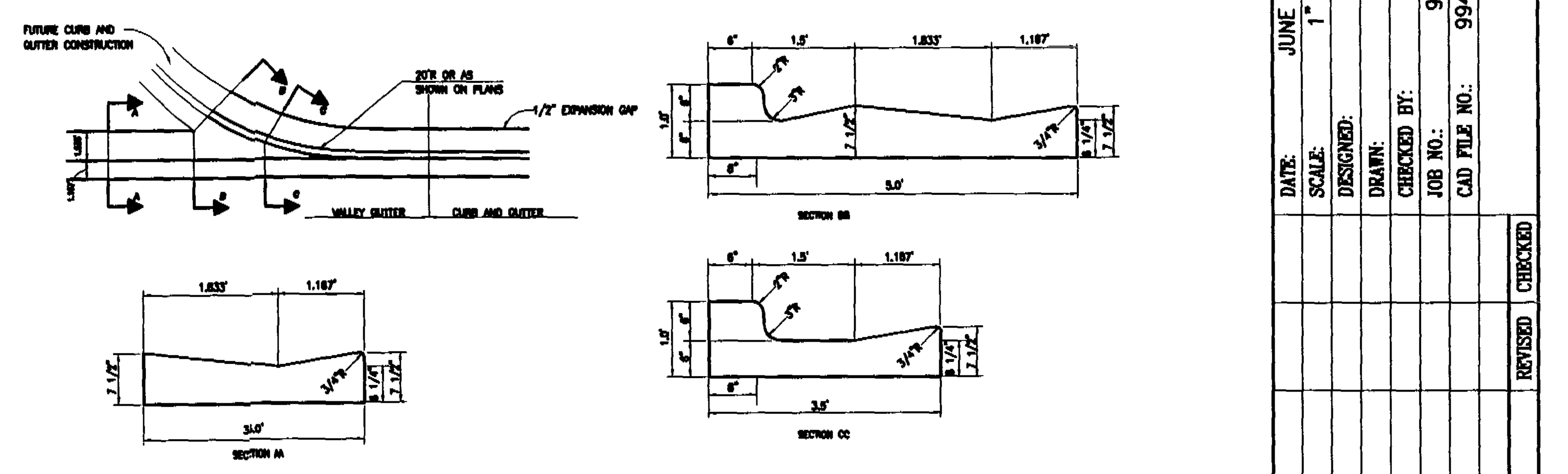
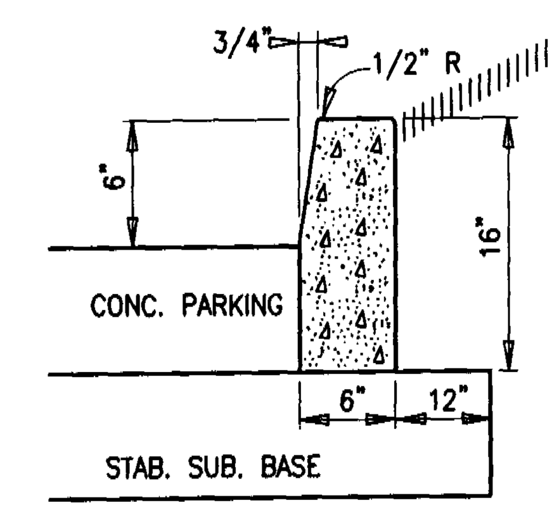
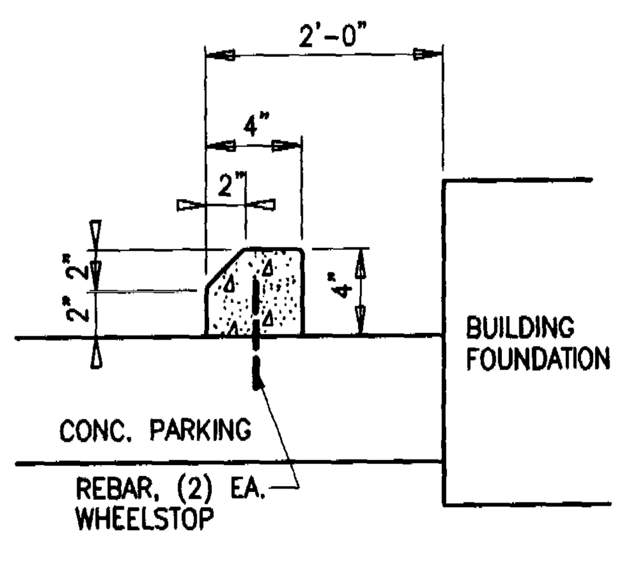


FDOT VALLEY GUTTER



CONCRETE CURB

N.T.S.



WHEEL STOP

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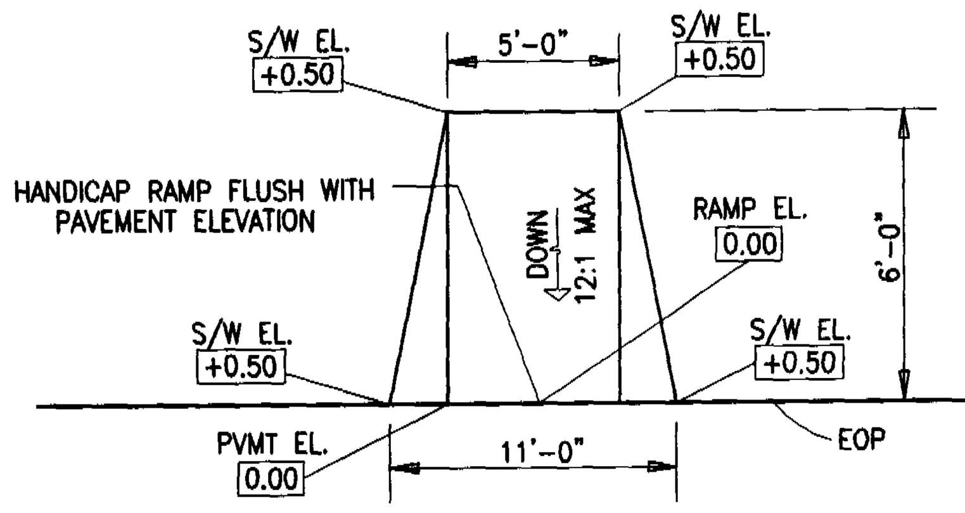

TYPICAL HANDICAP RAMP

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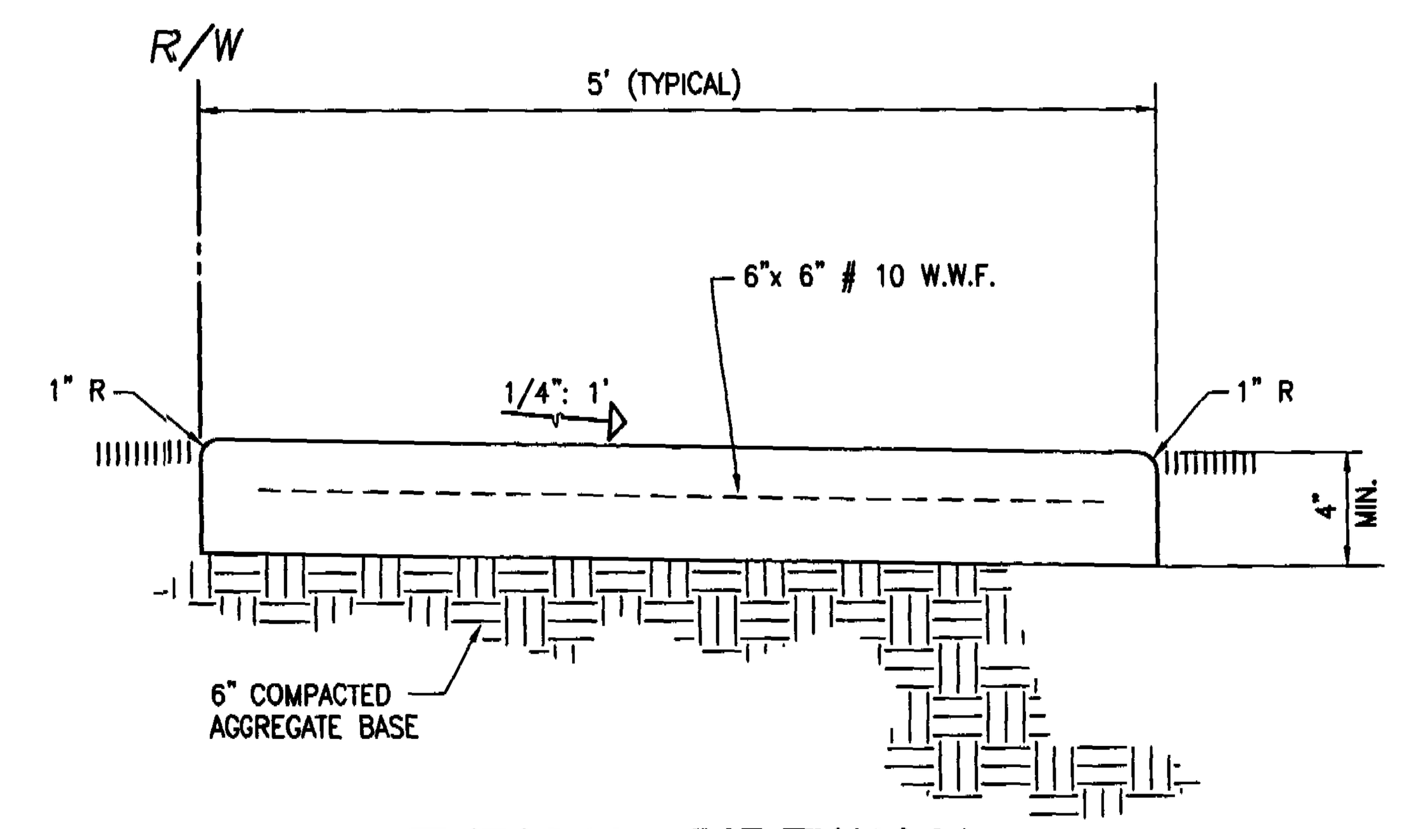

TYPICAL SIDEWALK ADJACENT TO R.O.W.

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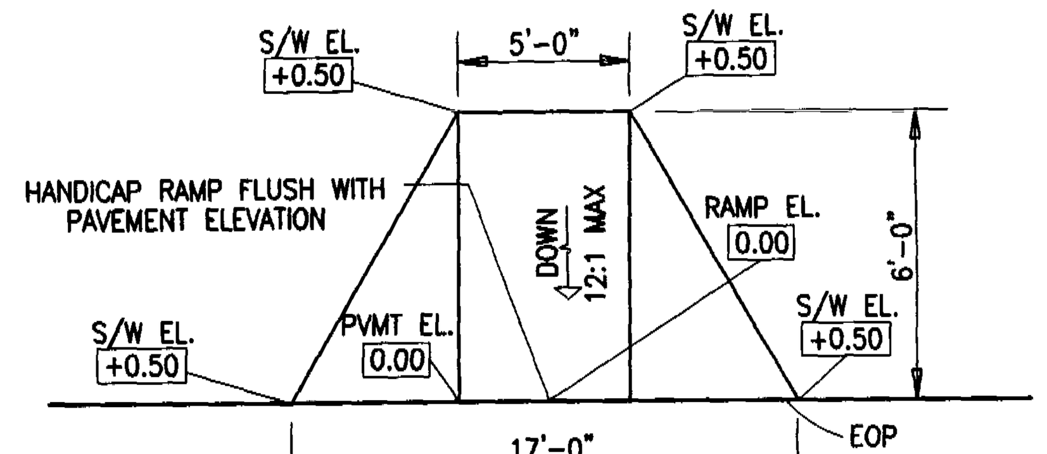


TYPICAL HANDICAP RAMP @ FRONT ENTRANCE

CONSTRUCTION NOTES GRADING:

1. EXISTING TOPOGRAPHY AND CONTOURS ARE BASED ON THE FOLLOWING:
   SURVEYOR: FLORIDA GEODETIC SURVEYING & MAPPING, INC.
   DRAWING No.: 97003.006
   DATED: 11/12/2001
   REVISION DATE:
2. GEOTECHNICAL SERVICES HAVE BEEN PROVIDED AS REFERENCED BELOW. ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE CONSTRUCTION PLANS SHALL BE REPORTED TO THE ENGINEER UPON DISCOVERY. THE CONTRACTOR SHALL REVIEW THE BELOW REPORT PRIOR TO BIDDING.
   GEOTECHNICAL ENGINEER:
   REPORT No.(S):
   DATED:
3. EXISTING TREES, PLANTS AND SHRUBS WHICH ARE MARKED OR DESIGNATED AS PART OF THE LANDSCAPING SHALL BE CAREFULLY PROTECTED DURING CONSTRUCTION. WHERE TREES, PLANTS OR SHRUBS ARE ADJACENT TO THE CONSTRUCTION CARE SHALL BE TAKEN TO PROTECT AND RESTORE THE ORIGINAL CONDITIONS OF THE VEGETATION
4. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES, AS NECESSARY.
5. ALL SITE CLEARING AND GRUBBING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 110 OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
6. ALL EXCAVATION AND EMBANKMENT SHALL BE PERFORMED IN ACCORDANCE TO WITH SECTION 120 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. LATEST EDITION.
7. ALL FILL AREAS GREATER THAN 12 INCHES IN HEIGHT SHALL BE COMPACTED IN 12 INCH LIFTS (MEASURE PRIOR TO COMPACTION) TO 95% MAXIMUM DENSITY PER A.A.S.H.T.O. T-180.
8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE NOTED ON THESE PLANS. ALL GRASSING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 570 OF FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
9. ALL DESIGNATED AREAS TO BE SODDED PER THE PLANS, SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 575 OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
10. THE CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS OR MEDIANS.
11. FINISH FLOOR ELEVATIONS ARE TYPICALLY 6 INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN ON THE GRADING PLAN.
12. THE CONTRACTOR SHALL COORDINATE THE INSTALLATIONS OF UTILITY CONDUITS (SLEEVES) UNDER PAVED AREAS WITH EACH UTILITY COMPANY PRIOR TO BASE INSTALLATION.
13. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OF OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING DRAINAGE SYSTEM AND ADJACENT WATER BODIES AND WETLANDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT CONDITIONS RELATED TO SUCH MEASURES. METHODS MAY INCLUDE BUT ARE NOT LIMITED TO, FLOATING SILT BARRIERS, SEDIMENTATION BASINS, SEDIMENT CHECK DAMS, SILT FENCES, HAY BAILS. THE MEASURES SHOWN ON THESE PLANS SHALL BE CONSIDERED MINIMUM AND SHALL NOT DEVIATE THE CONTRACTOR FROM THE RESPONSIBILITY TO IMPLEMENT ANY MEASURES NECESSARY TO PROVIDE PROTECTION FOR EROSION, SEDIMENTATION AND TURBIDITY.

CONSTRUCTION NOTES DRAINAGE:

1. ALL DRAINAGE RELATED CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ST. JOHNS RIVER WATER MANAGEMENT, PERMIT ISSUED FOR THIS PROJECT.
2. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. THE FOLLOWING F.D.O.T. CONSTRUCTION DETAILS ARE HEREBY INCORPORATED THESE PLANS BY REFERENCE:

INDEX NO.	DESCRIPTION
102	SILT FENCES
104	EROSION CONTROL
200	STRUCTURE BOTTOMS
201	SUPPLEMENTARY DETAILS FOR MANHOLES.
232	DITCH BOTTOM INLETS-TYPE "C" AND "E"
272	MITERED END SECTIONS
300	CURB & CURB AND GUTTER
500	EXCAVATION, EMBANKMENT AND GRADING
600	TRAFFIC CONTROL

4. PIPE LENGTHS SHOWN REPRESENT SCALED DIMENSIONS BETWEEN CENTER-LINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF HEADWALLS AND MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
5. ALL STORMWATER DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (ASTM C-76, CLASS III) OR ALUMINIZED STEEL TYPE 2 C.M.P.

FDOT SPECIFICATIONS:

1. 3 1/2" TYPE S-I ASPHALTIC CONCRETE
2. 10" COMPACTED LIMEROCK BASE
3. 12" STABILIZED AND COMPACTED SUB BASE.

CONSTRUCTION NOTES PAVING:

1. ALL PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF CLERMONT CONSTRUCTION SPECIFICATIONS.
2. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENTS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD MODIFICATIONS BE REQUIRED, CONTRACTOR TO CONTACT ENGINEER PRIOR TO PAVING SO THAT RECOMMENDATIONS CAN BE MADE.
3. SPECIFICATIONS FOR THE INTERNAL ROADWAYS ARE AS FOLLOWS:
   SUB-BASE REQUIREMENTS:
   LIMEROCK
   A). COMPACT TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST(ASTM D-1557) FOR TOP 12" WITH A LBR 40 AND FBV 75 PSI.
   BASE REQUIREMENTS:
   LIMEROCK 6" IN PARKING AREAS, 8" IN HEAVILY TRAVELED DRIVES
   A). COMPACTED TO 98% OF MAX. DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (AASHTO T-180).
   SURFACE COURSE:
   1 1\2" FDOT ASPHALT CONCRETE TYPE S-III COMPACTED TO A MINIMUM OF 96% OF THE MARSHALL MAXIMUM LABORATORY UNIT WEIGHT.

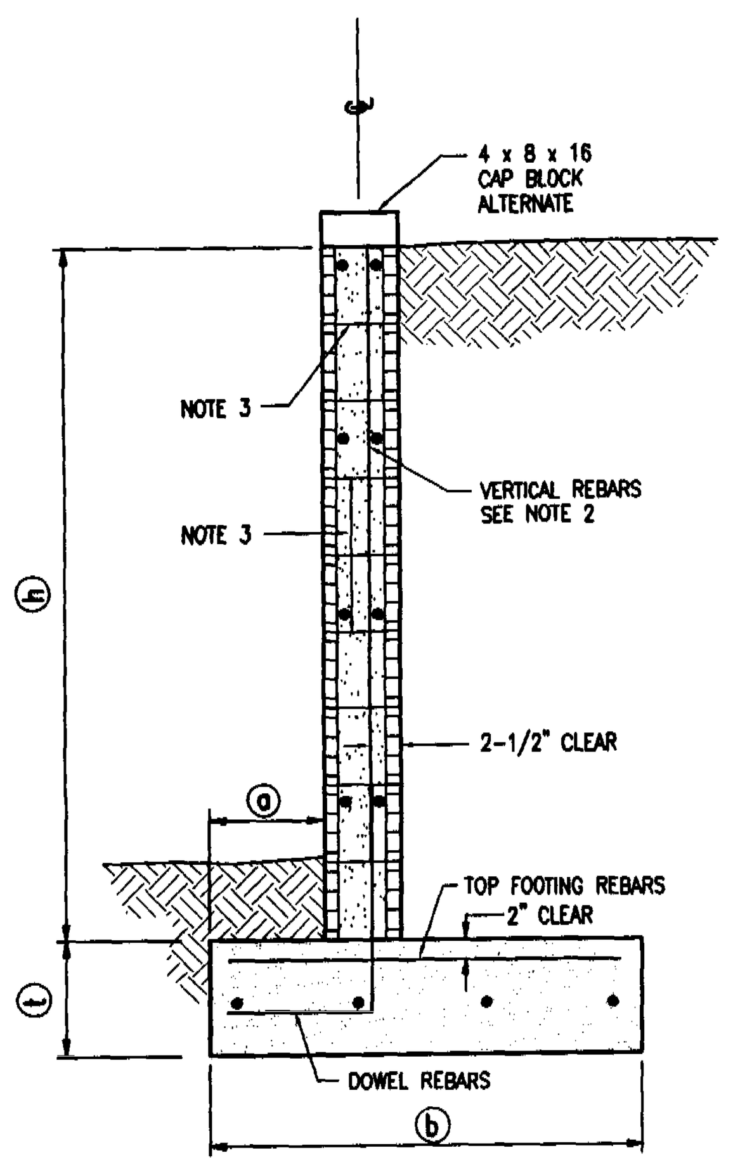
CONSTRUCTION NOTES DRAINAGE DURING CONSTRUCTION:

1. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL SYSTEMS FOR CONFORMANCE WITH THE SITE CONSTRUCTIONS PLANS AND FIELD CHANGES. BANKS AND SLOPES OF RETENTION PONDS SHALL ALSO BE CHECKED AFTER RAINFALL EVENTS FOR EROSION PROBLEMS.
2. THE CONTRACTOR SHALL REPAIR ALL EROSION AND SEDIMENT CONTROL SYSTEMS AS REQUIRED FOR CONTINUED FUNCTION. RE-GRADE IF REQUIRED, TO MAINTAIN DESIGN CONFIGURATION. ADD SOD AND SILT FENCES AS REQUIRED TO PREVENT SILTATION FROM EXITING THE SITE.
3. MOW RETENTION AREAS REGULARLY TO MAINTAIN WEED AND OVERGROWTH CONTROL.
4. INSPECT RETENTION AREAS PERIODICALLY FOR ACCUMULATION OF DEBRIS AND TRASH. PROPERLY DISPOSE OF ALL DEBRIS AND TRASH IN RETENTION AREAS AND CONVEYANCE SWALES.
5. INSPECT RETENTION AREA BOTTOMS FOR DEPOSITS OF SAND AND/OR SILT AND REMOVE.
6. PERCOLATION PERFORMANCE SHALL BE EVALUATED YEARLY FOR EACH DRY RETENTION ARE.. THE RETENTION AREAS SHALL PERCOLATE STORED WATER WITHIN 36 HOURS OF THE END OF THE DESIGN RAINFALL EVENT. BOTTOM MAINTENANCE SHALL BE PERFORMED BY EXERCISING THE FOLLOWING PROCEDURE:
   A. REMOVE 4 TO 6 INCHES OF RETENTION AREA BOTTOM MATERIAL AND SCARIFY EXCAVATED BOTTOM.
   B. REPLACE EXCAVATED MATERIAL WITH CLEAN SAND MATERIAL TO DESIGN GRAD AND SEED AND MULCH PER ORIGINAL DESIGN.

CONSTRUCTION NOTES EROSION & SEDIMENTATION CONTROL:

EROSION/SEDIMENT CONTROL:
THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, ON SITE WETLANDS, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC. THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.

CONSTRUCTION SEQUENCE TO MINIMIZE EROSION AND SEDIMENTATION AT STORM WATER DISCHARGE POINTS.
1. CONTRACTOR TO INSTALL SILT FENCES AS SHOWN AND AS REQUIRED.
2. CONTRACTOR TO CONSTRUCT POND AND CONNECTING DRAINAGE OUTFALLS AT INITIAL STAGES OF CONSTRUCTION.
3. ALL GRADING OPERATIONS SHALL BE PERFORMED WITHOUT DELAY OR PAUSE (CONTINUOUS OPERATION) UNTIL PROPOSED GRADES ARE MET. ALL EXPOSED EARTH SHALL BE SEEDED AND MULCHED OR SODDED SOON AFTER GRADING IS COMPLETE.

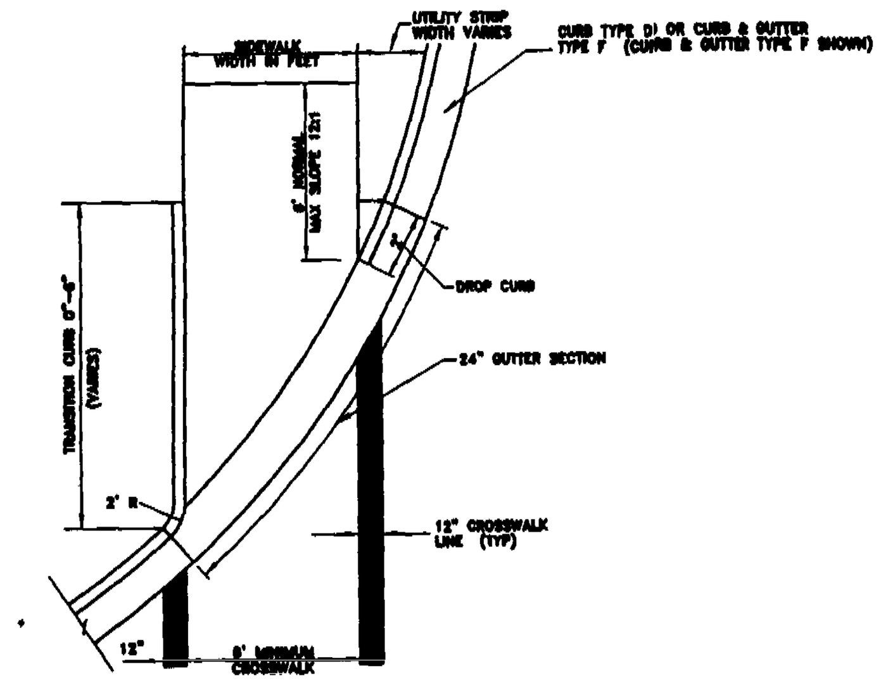


BLOCK WIDTH	ⓗ	ⓐ	ⓑ	ⓣ	DOWEL & VERTICAL REINFORCEMENT	TOP FOOTING REINFORCEMENT
8"	3'-4"	12"	2'-8"	9"	NO. 3 @ 32" O.C.	NO. 3 @ 27" O.C.
	4'-0"	12"	4'-0"	9"	NO. 4 @ 32" O.C.	NO. 3 @ 27" O.C.
	4'-8"	12"	3'-3"	10"	NO. 5 @ 32" O.C.	NO. 3 @ 27" O.C.
	5'-4"	14"	3'-8"	10"	NO. 4 @ 16" O.C.	NO. 4 @ 30" O.C.
	6'-0"	15"	4'-2"	12"	NO. 6 @ 24" O.C.	NO. 4 @ 25" O.C.
12"	3'-4"	12"	2'-8"	9"	NO. 3 @ 32" O.C.	NO. 3 @ 27" O.C.
	4'-0"	12"	3'-0"	9"	NO. 3 @ 32" O.C.	NO. 3 @ 27" O.C.
	4'-8"	12"	3'-3"	10"	NO. 4 @ 32" O.C.	NO. 3 @ 27" O.C.
	5'-4"	14"	3'-8"	10"	NO. 4 @ 24" O.C.	NO. 3 @ 25" O.C.
	6'-0"	15"	4'-2"	12"	NO. 4 @ 16" O.C.	NO. 4 @ 30" O.C.
	6'-8"	16"	4'-6"	12"	NO. 6 @ 24" O.C.	NO. 4 @ 22" O.C.
	7'-4"	18"	4'-10"	12"	NO. 7 @ 32" O.C	NO. 5 @ 26" O.C
	8'-0"	20"	5'-4"	12"	NO. 7 @ 24" O.C.	NO. 5 @ 21" O.C.
	8'-8"	22"	5'-10"	14"	NO. 7 @ 16" O.C.	NO. 6 @ 26" O.C.
	9'-0"	24"	6'-4"	14"	NO. 8 @ 8" O.C.	NO. 6 @ 21" O.C.

GENERAL NOTES:

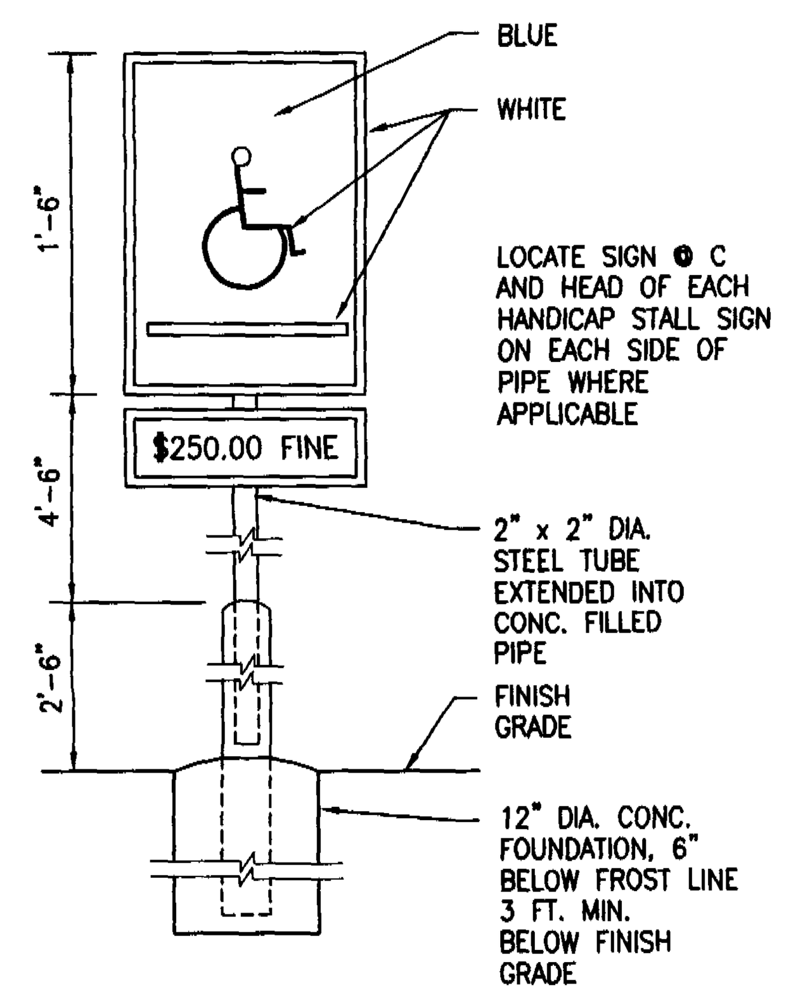
1. REINFORCING BARS SHOULD HAVE STANDARD DEFORMATIONS AND YEILD STRENGTH OF 40,000 psi.
2. ALTERNATE VERTICAL REINFORCING BARS MAY BE TERMINATED AT THE MIDHEIGHT OF THE WALL. EVERY THIRD BAR MAY BE TERMINATED AT THE UPPER THIRD-POINT OF THE WALL HEIGHT.
3. THE WALL SHOULD HAVE HORIZONTAL JOINT REINFORCEMENT AT EVERY CPOURSE OR ELSE A HORIZONTAL BOND BEAM WITH TWO NO. 4 BARS EVERY 16 INCH.
4. WEIGHT OF ASSUMED SOIL BACKFILL (GRANULAR SOIL WITH CONSPICUOUS CLAY CONTENT) IS 100 pcf AND EQUIVALENT FLUID PRESSURE IS 45 pcf. THERE IS NO SURCHARGE AND MAXIMUM SOIL BERAING PRESSURE IS 1,500 psf.

RETAINING WALL DETAIL



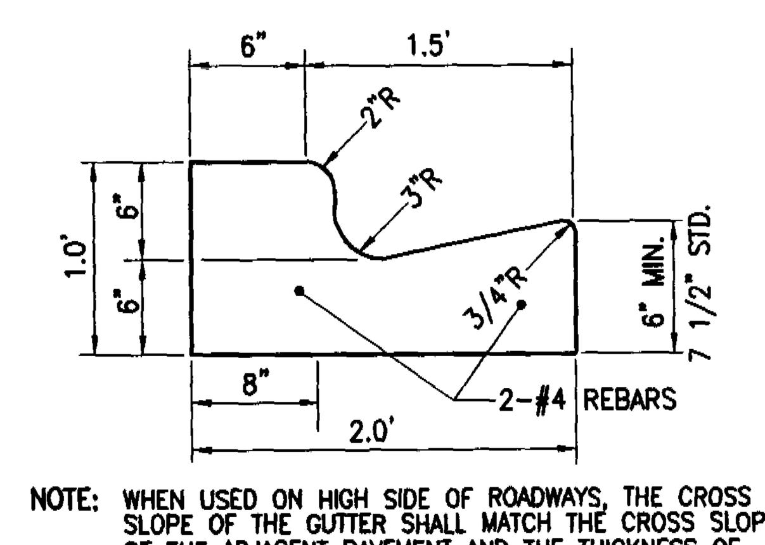
PLAN VIEW

S/W RAMP DETAIL



HANDICAP PARKING SIGN

N.T.S.



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

FDOT TYPE 'F' CURB

N.T.S.

84428-1

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JOB NO.:	99455
CAD FILE NO.:	99455D08

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AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

PAVING, GRADING & DRAINAGE DETAILS

HANCOCK VILLAGE

CLERMONT, FLORIDA

[illegible]
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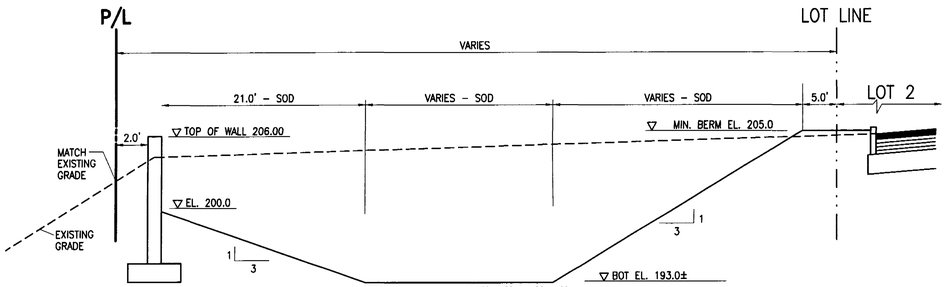
SHEET: 8 OF: 15



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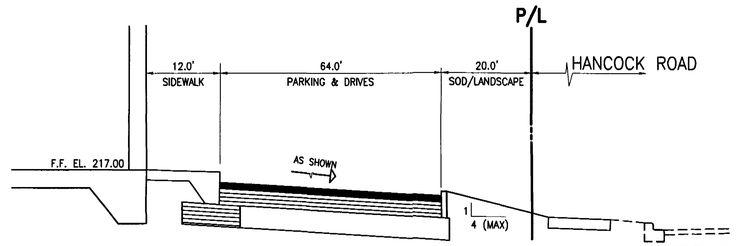

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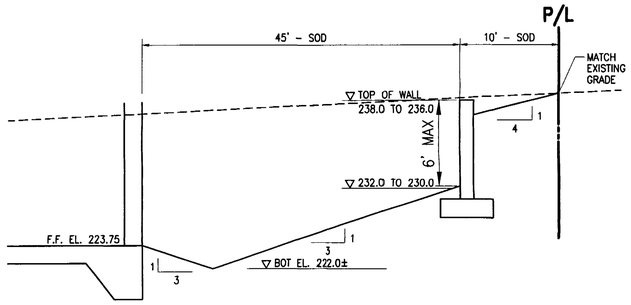

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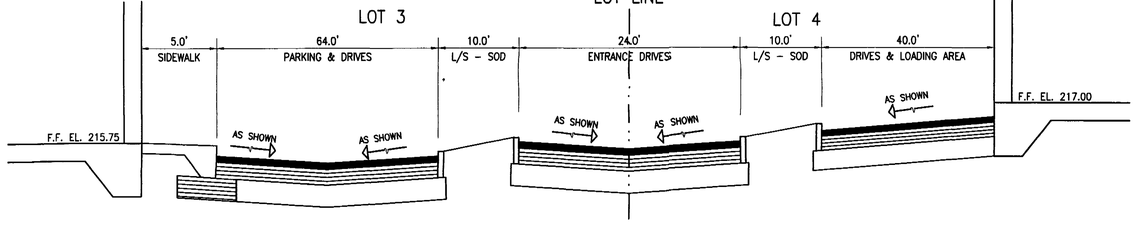

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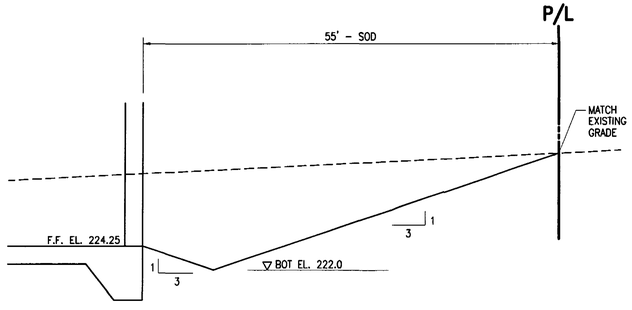

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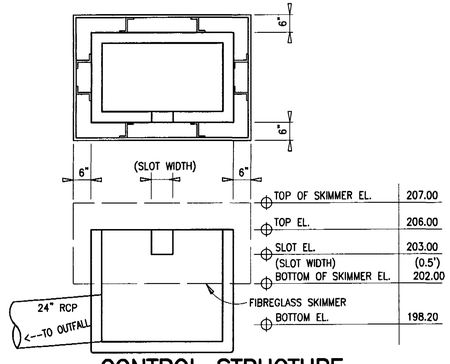
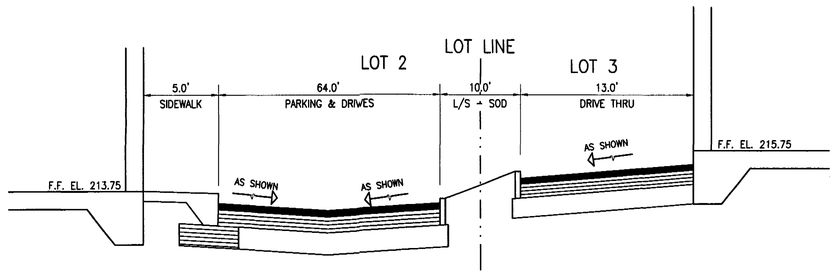


CONTROL STRUCTURE

F.D.O.T. MODIFIED TYPE 'C' INLET



SECTION "F"–"F"

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PAVING, GRADING & DRAINAGE DETAILS

HANCOCK VILLAGE

CLERMONT, FLORIDA

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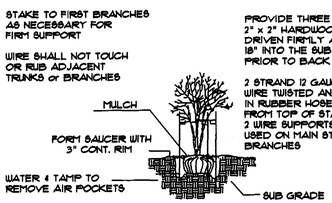
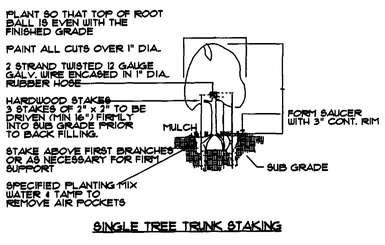
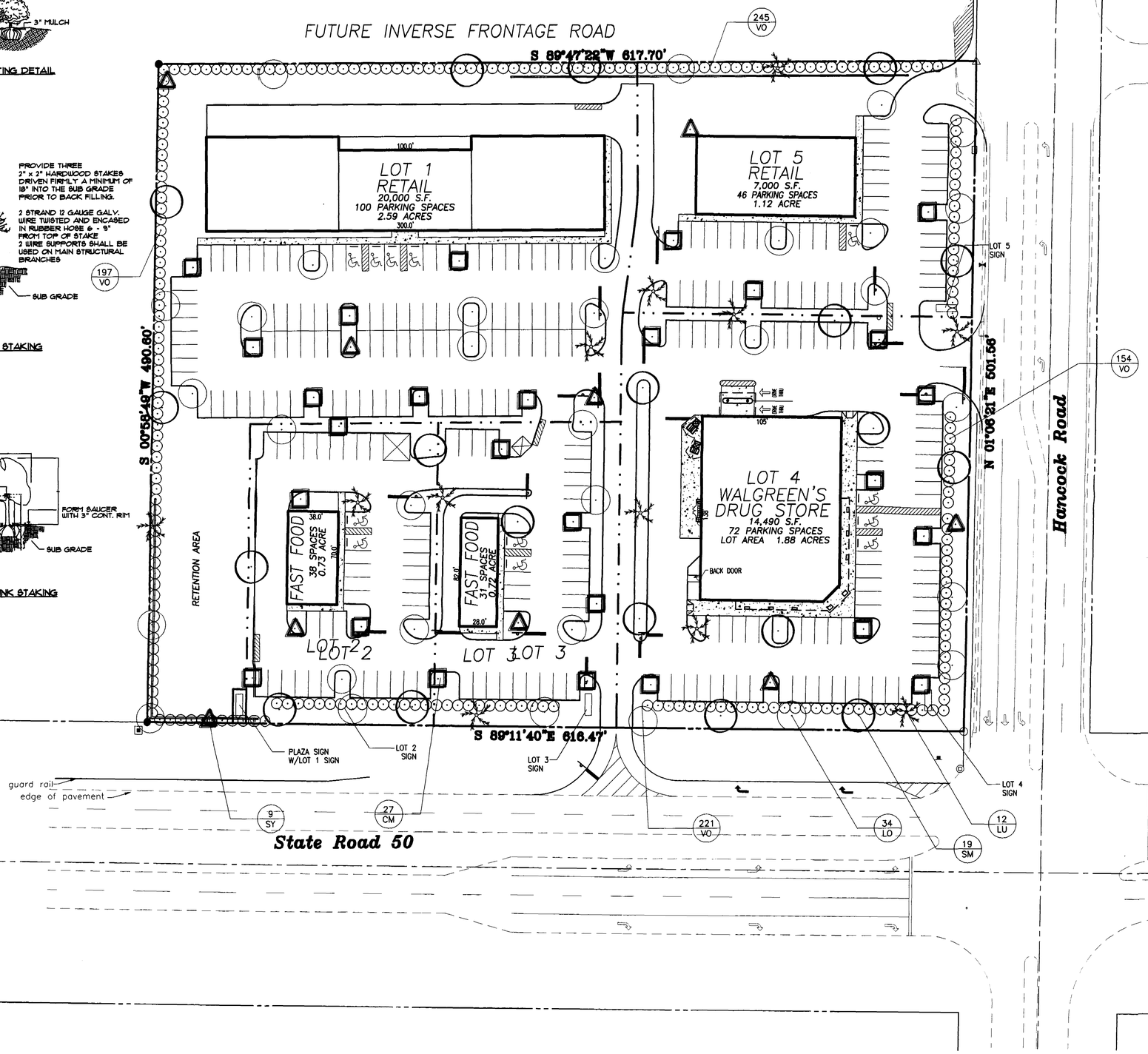
SHRUB PLANTING DETAIL

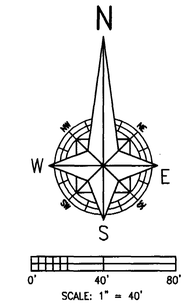


MULTI-TRUNK TREE STAKING



SINGLE TREE TRUNK STAKING



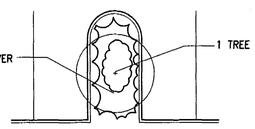


LANDSCAPE REQUIREMENTS:

I. PROPERTY ADJACENT TO R/W:
  A. REQUIRED:
    1. 1 TREE/50 LF
    2. SHRUB @ 30" O.C.
    3. SOD/MULCH (100% COVERAGE)
II. PROPERTY ADJACENT TO EXT. P/L:
  A. REQUIRED:
    1. 1 TREE/75 LF
    2. SHRUB @ 30" O.C.
    3. SOD/MULCH (100% COVERAGE)
III. PROPERTY ADJACENT TO INTERIOR P/L:
  A. REQUIRED:
    1. 1 TREE/100 LF
    2. SOD/MULCH (100% COVERAGE)
IV. INTERIOR PARKING ISLAND:
  A. REQUIRED:
    1. 1 TREE @ EACH ISLAND
    2. GROUND COVER
V. RETENTION AREA:
  A. REQUIRED:
    1. SOD SIDE SLOPES & BERMS
    2. SEED & MULCH BOTTOM

LANDSCAPING LEGEND

SYMBOL	DESCRIPTION	KEY	COMMON NAME	BOTANICAL NAME	SIZE	WATER ZONE
	SHADE TREE	S.M.	SOUTHERN MAGNOLIA	PLATANUS OCCIDENALIS	2"-2 1/2"CAL., @ 4 1/2 FT DBH 6' SPREAD CONT. GROWN	H,M,L
	SHADE TREE	L.O.	LIVE OAK	QUERCUS VIRGINIA	SAMES AS ABOVE	M,L
	SHADE TREE	L.U.	LAUREL OAK	QUERCUS LARIFOLIA	SAMES AS ABOVE	M,L
	SHADE TREE	S.Y.	SYCAMORE	PLATANUS OCCIDENALIS	SAME AS ABOVE	M,L
	ACCENT TREE	C.M.	CRAPE MYRTLE	LAGERSTROEMIA INDICA	10'-12'x4'-5' 1 1/2"x 1 3/4"CAL.	M,L
	GROUND COVER	L.E.G.	EVERGREEN GIANT LIRIOPE	LIRIOPE MUSCARI 'EVERGREEN GIANT'	1 GAL-FULL 6-7 PPP, 18" OC	M,L
	GROUND COVER	J.P.	PARSONS JUNIPER	JUNIPERUS PARONILI	1 GAL - 12"x12" SPD.	M,L
	SHRUB-TALL	V.O.	SWEET VIBURNUM	VIBURNUM ODOROTTISIMUM	3-4 GAL. 30" HIGH, 30" O.C.	H,M
	TURF GRASS	S.A.	ST. AUGUSTINE GRASS	--	--	H,M



TYPICAL ISLAND PLANTING DETAIL

84428-1

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DATE: JUNE 28, 2002
SCALE: 1" = 40'
DESIGNED: THS
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JOB NO.: 99455
CAD FILE NO.: 99455L10

DATE	REVISIONS	REVISED	CHECKED

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

LANDSCAPE PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

SHEET: 10 OF: 15

PART 1 – GENERAL

1.01 WORK DESCRIPTION

A. THE WORK IN THIS SECTION CONSISTS OF FURNISHING, PLANTING, WATERING, FERTILIZING, MAINTAINING AND MULCHING ALL PLANTS AND LAWN AREA OF SPECIES, SIZE AND QUANTITY AS INDICATED ON THE LANDSCAPE ARCHITECTURE DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.

1.02 DELIVERY, STORAGE AND HANDLING

A. PLANT TRANSPORTATION, STORAGE AND HANDLING SHALL COMPLY WITH ALL FEDERAL AND AND STATE REGULATIONS. STORAGE OF ANY MATERIAL ON SITE SHALL BE COORDINATED WITH THE OWNER.

1.03 GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTING WORK FOR A PERIOD OF 12 MONTHS AND ALL SOD FOR 6 MONTHS AFTER THE DATE OF PROVISIONAL ACCEPTANCE. DURING THIS PERIOD THE LANDSCAPE CONTRACTOR SHALL CONTINUE THE OBSERVATION OF PLANTS AND GUARANTEED WORK. THE CONTRACTOR SHALL SUBMIT MONTHLY OBSERVATION REPORTS TO THE OWNER WITH A COPY TO THE LANDSCAPE ARCHITECT DURING THE GUARANTEE PERIOD. THE PURPOSE OF THESE REPORTS IS TO STATE ANY MAINTENANCE DEFICIENCIES OBSERVED. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO REPORT THESE TO PROTECT HIS GUARANTEE. FAILURE TO SUBMIT REPORTS ELIMINATES ANY CLAIMS THAT THE GUARANTEE IS NOT VALID DUE TO IMPROPER MAINTENANCE BY THE OWNER.

B. REPLACEMENT OF DEFLECTED PLANTS: ANY DEAD PLANTS, PLANTS SHOWING INDICATIONS OF LACK OF HEALTH AND VIGOR, OR PLANTS WHICH DO NOT EXHIBIT THE CHARACTERISTICS TO MEET SPECIFICATIONS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR WITHIN TWO WEEKS OF WRITTEN NOTICE FROM THE OWNER OR LANDSCAPE ARCHITECT. THE REPLACEMENT PLANTS SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE GUARANTEED FOR SIX (6) MONTHS FROM THE DATE OF INSTALLATION. ALL REPLACEMENTS SHALL MEET ORIGINAL SPECIFICATIONS.

C. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IN WRITING, TEN DAYS PRIOR TO THE END OF THE GUARANTEE PERIOD. THE GUARANTEE SHALL BE EXTENDED UNTIL SUCH WRITTEN NOTIFICATION IS RECEIVED.

1.04 JOB CONDITIONS

A. PROTECTION: THE LANDSCAPE CONTRACTOR SHALL PROTECT ALL MATERIALS AND WORK AGAINST INJURY FROM ANY CAUSES. LANDSCAPE CONTRACTOR SHALL PROVIDE AND MAINTAIN ANY NECESSARY SAFEGUARDS FOR THE PROTECTION OF THE PUBLIC. HE SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.

B. EXISTING CONDITIONS:
1. THE LANDSCAPE CONTRACTOR SHALL EXERCISE CARE IN DIGGING AND OTHER WORK SO AS NOT TO DAMAGE EXISTING WORK INCLUDING OVERHEAD OR UNDERGROUND PIPES, CABLES AND UTILITY LINES OF ANY KIND. SHOULD THE OVERHEAD OR UNDERGROUND OBSTRUCTIONS INTERFERE WITH PLANTING, THE LANDSCAPE ARCHITECT SHALL BE CONSULTED AND WILL ADJUST THE LOCATION OF PLANTS TO CLEAR SUCH OBSTRUCTIONS. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OF ANY DAMAGE CAUSED BY HIS WORK.
2. SHOULD ANY OBJECTIONABLE MATERIALS SUCH AS OLD CONCRETE, BRICKS OR OTHER DEBRIS BE ENCOUNTERED DURING PLANTING OPERATIONS, THEY SHALL BE REMOVED FROM THE SITE BY THE LANDSCAPE CONTRACTOR.

1.05 QUALITY CONTROL

A. THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT AT ANY STAGE OF THE OPERATIONS TO REJECT ANY AND ALL WORK AND MATERIALS WHICH IN HIS/HER OPINION DO NOT MEET WITH THE REQUIREMENTS OF THESE SPECIFICATIONS.

B. ALL PLANTING SHALL BE PERFORMED BY THE PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN. ANYTHING PLANTED TOO HIGH OR TOO LOW OR WITHOUT FERTILIZER OR WATER RINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

C. ALL WORK SHALL COMPLY WITH APPLICABLE CODE AND REGULATIONS.

D. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE COORDINATION WITH THE OTHER TRADES TO PREVENT CONFLICTS.

1.06 QUANTITIES

A. IN THE EVENT OF A DIFFERENT BETWEEN QUANTITIES LISTED IN THE PLANT LIST AND THOSE SHOWN ON THE PLANS, THE PLANS SHALL CONTROL THE QUANTITIES. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO ISSUANCE OF CONTRACT.

PART 2 – PRODUCTS

2.01 MATERIALS

A. GENERAL:
1. NOMENCLATURE: ALL TREES, SHRUBS AND PLANTS SHALL BE TRUE TO NAME AS ESTABLISHED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE PUBLICATION:"STANDARD PLANT NAMES." THE DESIGNATED AUTHORITY FOR THE IDENTIFICATION OF ALL MATERIAL SHALL BE THE TWO PUBLICATIONS OF L.H. HORTUS III AND MANUAL OF CULTIVATED PLANTS AND ALL SPECIMENS SHALL BE TRUE TO TYPE, NAME ETC.
2. GRADE STANDARDS AND QUALITY: ALL PLANTS SHALL BE NURSERY GROWN AND SHALL COMPLY WITH ALL REQUIRED INSPECTION , GRADING, STANDARDS AND PLANT REGULATIONS AS SET FORTH IN THE FLORIDA DEPARTMENT OF AGRICULTURE, "GRADES AND STANDARDS FOR NURSERY PLANTS", PART 1 AND 2 (INCLUDING REVISIONS).
   A. THE MINIMUM GRADE FOR ALL TREES AND SHRUBS SHALL BE FLORIDA NO. 1 UNLESS OTHERWISE INDICATED AND ALL PLANTS SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED (WHEN IN LEAF). THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS AND SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS, OR LARVAE AND THEIR EFFECTS.
3. MEASUREMENTS: AFTER PRUNING AND SHAPING, THE MINIMUM ACCEPTABLE SIZE OF ALL PLANTS MEASURED WITH BRANCHES IN NORMAL POSITIONS SHALL CONFORM TO THE SPECIFIED SIZES AS SHOWN ON THE PLANS. SIZES SPECIFIED ARE MINIMUM STANDARDS. PLANTS SHALL EQUAL TO OR LARGER THAN ALL CATEGORIES (HEIGHT, SPREAD, CALIPER) OF SIZE SPECIFICATIONS. SUBSTANTIAL DEVIATIONS FROM THESE MEASUREMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. CALIPER OF TREE TRUNKS SHALL BE MEASURED 4 FOOT ABOVE THE ROOT BALL.
4. PLANT PROTECTION: PLANTS SHALL BE PROTECTED UPON ARRIVAL AT THE SITE BY BEING THOROUGHLY WATERED, KEPT MOIST AND PROPERLY MAINTAINED UNTIL PLANTED.

B. PLANT MATERIALS: PLANTS FOR LANDSCAPING SHALL BE CLASSIFIED UNDER THE FOLLOWING DESIGNATIONS, WITH REFERENCE TO METHOD OF CULTIVATION, ROOT SYSTEM STATUS, ETC.
1. BALLED AND BURLAPPED: PLANTS SO CLASSIFIED SHALL BE DUG WITH FIRM NATURAL ROOT BALLS OF EARTH, OF SUFFICIENT DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. THE ROOT BALL OF THESE PLANTS SHALL BE PROPERLY WRAPPED WITH BURLAP SACK MATERIAL AND REMAIN PROTECTED AND WET UNTIL THEY ARE PLANTED. THE PLANT SHALL BE HANDLED ONLY BY THE EARTHBALL AND NOT BY THE PLANT ITSELF. ALL BALLED AND BURLAPPED PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY UPON DELIVERY SHALL BE SET ON THE GROUND AND SHALL BE WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL. THE PLANT SHALL BE SET WITH THE BURLAP COVER INTACT WITH THE BURLAP SHOWING, UNTIL INSPECTION. AT FINAL INSPECTION THE BURLAP WILL BE CUT AWAY TO GROUND LEVEL AND THEN COMPLETELY COVERED WITH SOIL. FAILURE TO CUT AWAY OR LAY BACK BURLAP AFTER PLANTING MAY CONSTITUTE REJECTION OF PLANT MATERIAL.
2. CONTAINER GROWN PLANTS:
   A. CONTAINER GROWN PLANTS SHALL HAVE BEEN GROWN IN A CONTAINER LARGE ENOUGH AND FOR SUFFICIENT TIME TO ENABLE THE ROOT SYSTEM TO HAVE DEVELOPED ENOUGH TO HOLD THE SOIL TOGETHER FIRM AND WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER. PLANTS WHICH HAVE BECOME POT BOUND OR FOR WHICH THE TOP SYSTEM IS TOO LARGE FOR THE SIZE OF THE CONTAINER WILL NOT BE ACCEPTABLE.
   B. ALL CONTAINERS SHALL BE CUT AND OPENED FULLY, IN A MANNER THAT WILL NOT DAMAGE THE ROOT SYSTEM. CONTAINER GROWN PLANTS SHALL NOT BE REMOVED FROM THE CONTAINER UNTIL IMMEDIATELY BEFORE PLANTING.
3. BARE ROOT PLANTS: NO BARE ROOT PLANTS SHALL BE USED.

C. PLANTING MATERIALS:
1. TOP SOIL/BACK FILL:
   A. TOPSOIL SHALL BE FRIABLE LOAM TYPICAL OF LOCAL CULTIVATED TOPSOIL, CONTAINING AT LEAST 10% DECAYED ORGANIC MATTER (HUMUS). IT SHALL BE TAKEN FROM A WELL DRAINED SITE. IT SHALL BE REASONABLY FREE OF WEEDS, SUB SOILS, STONES, CLODS, STICKS, ROOTS AND OTHER OBJECTIONABLE EXTRANEOUS MATTER OR DEBRIS. IT SHALL NOT CONTAIN TOXIC MATERIALS AND SHALL HAVE AN ACIDITY RANGE OF pH 5.0–7.0. TOP SOIL FROM NUT GRASS INFESTED AREAS WILL NOT BE ACCEPTABLE.
   B. ANY NECESSARY SOIL TESTING SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY.
   C. SOIL PREPARATION: PRIOR TO PLACING MIX AND BACK FILL OR COMMENCING WITH PLANTING, ANY OR ALL AREAS THAT HAVE BEEN PREVIOUSLY COMPACTED FOR OTHER CONSTRUCTION PURPOSES ARE TO BE ROTOTILLED AND TREATED WITH PRE-EMERGENT HERBICIDE.
2. FERTILIZER: FERTILIZER SHALL BE A COMPLETE FERTILIZER OF WHICH 50% OF THE THE ELEMENTS SHALL BE DERIVED FROM ORGANIC SOURCES. OSMOCOTE SLOW RELEASE 9 MONTH FORMULA OR EQUAL SHALL BE PLACED ACCORDING TO DIRECTIONS BELOW EACH PLANT. IT SHALL CONTAIN THE FOLLOWING MINIMUM PERCENTAGES BY WEIGHT:
   A. NITROGEN N–18%
   B. PHOSPHORUS P–6%
   C. POTASSIUM K–12%
   D. OTHER ANALYSIS AS MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
   E. IN ADDITION THE RECOMMENDED MICRO NUTRIENTS MUST BE PRESENTING THE GUARANTEED ANALYSIS
3. PLANTING MIXTURE: PLANTING MIXTURE SHALL CONSIST OF APPROXIMATELY FOUR PARTS OF ACCEPTABLE NATURAL TOPSOIL AND ONE PART PULVERIZED PEAT OR STERILIZED MANURE. ACCORDING TO DIRECTIONS COMMERCIAL FERTILIZER HAVING AN ANALYSIS OF 18 6 12, SHALL BE ADDED TO THE BOTTOM OF EACH PLANTING HOLE.
   A. AZALEA MIXTURE MUST BE USED FOR PLANTS WHICH PREFER LOW pH. THE NUTRIENT PERCENTAGES–MIRACID 30 10 10. PLANTS WHICH PREFER LOW pH ARE AZALEAS, BLUEBERRIES, CAMELLIAS, DOGWOOD, FERNS, FIR, GARDENIAS, HAWTHORN, HOLLY, HYDRANGEA, JUNIPER, LAUREL, MAGNOLIA, OAKS, ORCHID, PINE, RHODODENDRON AND PHOTINEAS.
   B. ACCEPTABLE ARTIFICIALLY PREPARED PLANTING COMPOST MATERIAL APPROVED BY THE LANDSCAPE ARCHITECT WILL BE PERMITTED, IN LIEU OF THE PULVERIZED PEAT OR STERILIZED MANURE, IN THE PREPARED NATURAL TOPSOIL MIXTURE FOR USE AS BACK FILL MATERIAL.
4. MULCH: WOOD MULCH SHALL BE SHREDDED CYPRESS, PINE BARK, PINE NEEDLES, OR OAK LEAVES CLEAN, AND FREE OF WEEDS, MOSS, STICKS OR OTHER DEBRIS.
5. WATER: SUITABLE WATER AND WATERING EQUIPMENT FOR THE IRRIGATION OF THE NEW PLANTINGS DURING THE PROGRESS OF INSTALLATION AND THE GUARANTEE PERIOD SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR. ARRANGEMENTS MAY BE MADE WITH THE OWNER, IF THE PERMANENT IRRIGATION SYSTEM HAS BEEN INSTALLED AND IS OPERABLE.

PART 3 – EXECUTION

3.01 PREPARATION

A. UNDERGROUND OBSTRUCTIONS:
1. UPON REQUEST FROM THE LANDSCAPE CONTRACTOR, THE OWNER SHALL PROVIDE PANS SHOWING THE LOCATION OF UNDERGROUND UTILITIES AND/OR WILL ASSIST THE LANDSCAPE CONTRACTOR IN SECURING UNDERGROUND LOCATIONS FROM THE OTHER PUBLIC UTILITY COMPANIES, SUCH AS TELEPHONE, CABLE AND ELECTRICITY ETC.
2. IN THE EVENT THAT ROCK, UNDERGROUND CONSTRUCTION WORK, UTILITY LINES OR OBSTRUCTIONS OUT OF THE ORDINARY ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION, ALTERNATIVE LOCATIONS SHALL BE SELECTED BY THE LANDSCAPE ARCHITECT. WHERE LOCATIONS CANNOT BE CHANGED AND THE OBSTRUCTION MAY BE REMOVED THE OBSTRUCTION SHALL BE REMOVED TO A DEPTH OF 3' BELOW GRADE AND NO LESS THAN 6" BELOW BOTTOM OF THE ROOT BALL WHEN PLANT IS PROPERLY INSTALLED AT THE REQUIRED GRADE.

B. EXCAVATION OF PLANTING BEDS AND/OR PLANT HOLES:
1. WHERE EXCAVATION ENCOUNTERS MATERIALS WHICH ARE UNSUITABLE FOR PLANT GROWTH, ALL OF THE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH PLANTING MIXTURE.
2. WHERE EXCAVATION ENCOUNTERS MATERIALS WHICH ARE SUITABLE FOR PLANT GROWTH, THE PLANT HOLE EXCAVATION SHALL BE CYLINDRICAL IN SHAPE, WITH THE SIDES VERTICAL. PLANTS SHALL BE CENTERED IN THE HOLES WITH THE TRUNK VERTICAL, (NOT NECESSARILY PERPENDICULAR TO GRADE), LOCATION AS SHOWN IN DETAIL. BOTTOMS OF THE HOLES SHALL BE LOOSENED AND BACK FILLED AT LEAST 6" DEEPER THAT THE REQUIRED DEPTH OF EXCAVATION. FERTILIZER IS TO BE PLACED AT THE BOTTOM OF EACH HOLE TO ENSURE DEEP ROOTING.

C. PROTECTION OF EXISTING TREES: THE CONTRACTOR SHALL PROTECT EXISTING TREES FROM DAMAGE. WHERE DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REMOVE DAMAGED TREE AND REPLACE IT WITH THE APPROPRIATE KIND AND SIZE RECOMMENDED BY THE LANDSCAPE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.

D. GRADES: IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO FINISH (FINE) GRADE ALL LANDSCAPE AREAS ELIMINATING ALL SURFACE IRREGULARITIES, DEPRESSIONS, STICKS, STONES AND OTHER DEBRIS TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT. AFTER THE GRADE HAS BEEN ESTABLISHED AND COMPACTED TO THE REQUIRED DEPTH, NO SOD SHALL BE LAID UNTIL THE GRADE HAS BEEN APPROVED.

3.02 PLANTING

A. SETTING OF PLANTS:
1. WHEN LOWERED INTO THE HOLE THE PLANT SHALL REST ON A PREPARED HOLE BOTTOM SUCH THAT THE ROOTS ARE LEVEL WITH OR SLIGHTLY ABOVE THE LEVEL OF THEIR PREVIOUS GROWTH AND SO ORIENTED SUCH AS TO PRESENT THE BEST APPEARANCE. THE CONTRACTOR, WHEN SETTING PLANTS IN HOLES, SHALL MAKE ALLOWANCES FOR ANY ANTICIPATED SETTLING OF THE PLANTS.
2. THE BACK FILL SHALL BE MADE WITH PREPARED TOPSOIL AS SPECIFIED IN SECTION 3.1 AND SHALL BE FIRMLY PACKED AND WATERED IN, SO THAT NO AIR POCKETS REMAIN. THE QUANTITY OF WATER APPLIED IMMEDIATELY UPON PLANTING SHALL BE SUFFICIENT TO THOROUGHLY MOISTEN ALL OF THE BACK FILLED EARTH. PLANTS SHALL BE KEPT IN A MOISTENED CONDITION FOR THE INITIAL TWO WEEKS AFTER PLANTING.

B. STAKING AND GUYING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL PLANTS IN A PLUMB, UPRIGHT POSITION UNTIL THE END OF THE GUARANTEE PERIOD. STAKING SHALL BE THE OPTION OF THE CONTRACTOR, ALTHOUGH ALL DAMAGED PLANTS RESULTING FROM THE LACK OF PROPER STAKING AND GUYING SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO EXPENSE TO THE OWNER. ALL TREE GUY WIRES SHALL BE FLAGGED WITH YELLOW SAFETY RIBBON.

C. PRUNING:
1. ALL BROKEN OR DAMAGED ROOTS SHALL BE CUT OFF SMOOTHLY AND THE TOPS OF ALL TREES SHALL BE PRUNED IN A MANNER COMPLYING WITH STANDARD HORTICULTURAL PRACTICE. AT THE TIME PRUNING IS COMPLETED, ALL REMAINING WOOD SHALL BE ALIVE. ALL CUT SURFACES OF ONE (1) INCH OR MORE IN DIAMETER, ABOVE THE GROUND, SHALL BE TREATED WITH AN APPROVED COMMERCIAL TREE PAINT. FINE PRUNING FOR TREE SHAPE AND APPEARANCE SHALL BE DONE PRIOR TO FINAL ACCEPTANCE.
2. AT THE END OF THE GUARANTEE PERIOD AT LEAST 95% OF THE WOOD REMAINING SHALL BE ALIVE.

D. MULCHING: WITH IN ONE WEEK AFTER PLANTING MULCH MATERIAL SHALL BE UNIFORMLY APPLIED TO A MINIMUM LOOSE THICKNESS OF 3 INCHES OVER THE ENTIRE AREA OF THE BACK FILLED HOLE OR BED. DO NOT LET MULCH CONTACT DIRECTLY THE CROWN OF THE STEMS OR TRUNK. THE MULCH SHALL BE MAINTAINED CONTINUOUSLY IN PLACE UNTIL THE TIME OF FINAL INSPECTION. MULCHING OF ANNUAL BEDS TO BE EXCHANGED MORE THAN TWO TIMES PER YEAR SHALL NOT BE MULCHED BUT AMENDED WITH PEAT AND TREATED WITH A PRE-EMERGENT HERBICIDE. ALL FREE STANDING TREES SHALL HAVE A 3' DIAMETER RING OF MULCH.

E. WATERING: THE LANDSCAPE CONTRACTOR SHALL CONTINUE WATERING FOR AS LONG AS IS NECESSARY TO PROPERLY ESTABLISH THE NEW PLANTINGS. CARE SHALL BE TAKEN TO PREVENT STAINING OF NEW CONSTRUCTION AREAS, WHERE TEMPORARY WELL WATER IS USED.

F. PEST CONTROL: PRIOR TO FINAL ACCEPTANCE IN 6 MONTHS, ANY OCCURRENCE OF SCALES, BORERS, FOLIAR FEEDERS, APHIDS, MITES, LEAF SPOT, DIEBACK, NEMATODES AND FUNGI, SHALL BE TREATED IMMEDIATELY WITH APPROPRIATE PESTICIDE, OR FUNGICIDE, BY THE LANDSCAPE CONTRACTOR.

G. FERTILIZER: ALL LAWNS SHALL RECEIVE FERTILIZER EVERY THREE MONTHS DURING THE PLANTING AND GUARANTEE PERIOD WITH 50% ORGANIC 16 4 8. ALL PLANTS TO BE FERTILIZED WITH OSMOCOTE 9 MONTH 18 6 12.

3.03 BERMING

A. FILL DIRT: FILL DIRT SHALL BE LOCALLY OBTAINED MATERIAL FROM NATURALLY DRAINED SOURCES, FREE FROM STONES LARGER THAN 1 INCH DIAMETER AND OTHER MATERIALS HARMFUL TO SUCCESSFUL DRAINAGE AND PLANT GROWTH. SOIL SHALL BE WELL MIXED. A MAXIMUM OF 25% MUCK OR CLAY COMPOSITION WILL BE ACCEPTABLE, PROVIDED THE LANDSCAPE CONTRACTOR CONDUCT A PERCOLATION TEST WHICH PROVES THAT STANDING WATER WILL DRAIN WITHIN A 10 HOUR PERIOD.

B. GRADING: GRADE AREAS INDICATED WITH UNIFORM LEVELS OR SLOPES WITH NO MORE THAN 3:1 MAXIMUM SLOPE. BERMS SHALL BE GENTLY ROLLING AND PARABOLIC.

C. REPAIR: GRADES WHICH ARE UNDER THE LANDSCAPE ARCHITECTS SCOPE, WHICH HAVE SETTLED, ERODED, RUTTED OR ARE OTHERWISE DAMAGED WILL BE REPAIRED AND REESTABLISHED BY THE LANDSCAPE CONTRACTOR.

3.04 SODDING

A. THE SOD SHALL BE OF FIRM TOUGH TEXTURE HAVING A COMPACT GROWTH OF GRASS WITH GOOD ROOT DEVELOPMENT. IT SHALL CONTAIN NO BERMUDA GRASS, WEEDS OR ANY OTHER OBJECTIONABLE VEGETATION. THE SOIL EMBEDDED IN THE SOD SHALL BE GOOD CLEAN EARTH FREE FROM STONES AND DEBRIS. THE SOD SHALL BE FREE FROM FUNGUS, INSECTS, GRUBS AND OTHER DISEASES. SOD AREAS ARE TO BE RAKED SMOOTH AND WATERED PRIOR TO SOD INSTALLATION. ADJACENT TO SIDEWALKS AND CURBS REDUCE GRADE 1" TO ALLOW FOR GRASS BUILD UP.

B. SOLID SOD SHALL BE LAID WITH TIGHTLY ABUTTING JOINTS AND TAMPERED OR ROLLED EVEN. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CREATE A NEAT CLEAN EDGE OF SOD ADJACENT TO ALL PAVING AND SHRUB AREAS.

C. AFTER THE SOD IS LAID, A TOP DRESSING OF CLEAN SAND WILL BE EVENLY APPLIED TO THE JOINTS WHICH NEED FILLING.

D. IN ORDER TO PREVENT SLIPPAGE, AND TO PREVENT WASH OUT OF STRAIGHT SEAMS, SOD WILL BE PEGGED ON SLOPES AND PLACED IN A STAGGERED FASHION.

E. ALL SOD AREAS WILL BE TREATED WITH A FERTILIZER CONTAINING THE RATIO 16 4 8 WHICH IS 50% ORGANIC WITH MICRO NUTRIENTS, AT A RATE OF 10 LB/1000 S.F. THIS SHALL BE DONE ONCE AT THE BEGINNING AND AGAIN AT THE END OF THE 3 MONTH SOD GUARANTEE PERIOD.

3.05 FIELD QUALITY CONTROL

A. MAINTENANCE PRIOR TO FINAL ACCEPTANCE:
1. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED AND OTHERWISE MAINTAINED AND PROTECTED FOR THE PERIOD OF TIME STATED ABOVE. SOD SHALL BE MOWED ON A REGULAR BASIS, ONCE PER WEEK IN THE SUMMER (MAY–OCT) AND ONCE A MONTH IN THE WINTER. A SEPARATE CONTRACT FOR THIS CAN BE LET BY THE OWNER, BUT IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE THE MATERIALS ARE PROPERLY MAINTAINED.
2. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE POSITION. PLANTING SAUCERS MUST BE CONTINUOUSLY MAINTAINED.
3. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT. UPON COMPLETION OF PLANTING THE LANDSCAPE CONTRACTOR SHALL REMOVE FROM THE SITE EXCESS SOIL AND DEBRIS, AND REPAIR ANY DAMAGE TO STRUCTURES, ETC. RESULTING FROM PLANTING OPERATIONS. IN A MOISTENED CONDITION FOR THE INITIAL TWO WEEKS AFTER PLANTING.
4. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AGAINST MECHANICAL DAMAGE INCLUDING PROTECTION FROM VEHICLES, BY POSTING OF APPROVED WARNING SIGNS AND/OR BARRICADES, AS MIGHT BE NECESSARY. HE SHALL REPAIR, RESTORE OR REPLACE ANY PLANTS OR PLANTING AREAS WHICH MAY BECOME DAMAGED AS A RESULT OF ANY NEGLIGENCE BY HIM IN COMPLYING WITH THESE REQUIREMENTS. AS A SPECIFIC REQUIREMENT OF THESE CONDITIONS, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL PLANTS AT THE TIME OF FINAL INSPECTION EXHIBIT THE CHARACTERISTICS AND QUALIFICATION REQUIRED FOR THE GRADE OF PLANT AS ORIGINALLY SPECIFIED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL WATERING REQUIRED IF IRRIGATION PROVES TO BE INADEQUATE FOR FRESHLY PLANTED MATERIAL.
6. EXCEPT AS OTHERWISE SPECIFIED THE LANDSCAPE CONTRACTOR WORK SHALL CONFORM TO ACCEPTED HORTICULTURAL PRACTICES.

B. PROVISIONAL ACCEPTANCE:
1. UPON COMPLETION OF ALL WORK INCLUDING MAINTENANCE, THE LANDSCAPE CONTRACTOR SHALL ARRANGE FOR A PROVISIONAL INSPECTION. THE LANDSCAPE WORK MAY BE REVIEWED FOR ACCEPTANCE IN PARTS, PROVIDED THE WORK OF ONE UNIT OR AREA PART IS OF SUBSTANTIAL SIZE.
2. THE DATE OF PROVISIONAL ACCEPTANCE SHALL MARK THE BEGINNING OF THE GUARANTEE PERIOD. THIS DATE MUST BE SPECIFIED BY WRITTEN NOTIFICATION TO THE LANDSCAPE ARCHITECT AND THE OWNER.

C. FINAL ACCEPTANCE INSPECTION:
1. AT THE END OF THE GUARANTEE PERIOD, INSPECTION OF PLANTS WILL BE MADE BY THE LANDSCAPE ARCHITECT/OR OWNER. WRITTEN NOTICE IS TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT/OR OWNER BY THE CONTRACTOR AT LEAST TEN DAYS BEFORE THE ANTICIPATED INSPECTION DATE.
2. ALL DEFECTS DISCOVERED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER, WITH IN TWO WEEKS OF THIS INSPECTION OR THE CONTINGENT FINAL ACCEPTANCE OF THE GUARANTEE INSPECTION SHALL BE VOID AND A NEW FINAL GUARANTEE INSPECTION SCHEDULED.

3.06 ADJUSTMENT AND CLEANING

A. CLEANING UP THE SITE: UPON COMPLETION OF ANY PORTION OF THE LANDSCAPE PROJECT THE LANDSCAPE CONTRACTOR MUST THOROUGHLY CLEAN UP THE PROJECT SITE. IN ADDITION TO REMOVING ALL EQUIPMENT, UNUSED MATERIALS, DELETERIOUS MATERIAL AND SURPLUS MATERIAL, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL DISTURBED AREAS AND THE AREAS ADJACENT TO THE NEW PLANTINGS TO PROVIDE A NEAT AND UNIFORM SITE, SPECIFICALLY, THE SOD AREAS ADJACENT MUST BE AS REQUIRED. ALL DAMAGED OR ALTERED EXISTING STRUCTURES, AS A RESULT OF THE LANDSCAPE WORK SHALL BE CORRECTED BEFORE PROVISIONAL ACCEPTANCE IS GRANTED AND GUARANTEE PERIOD BEGINS.

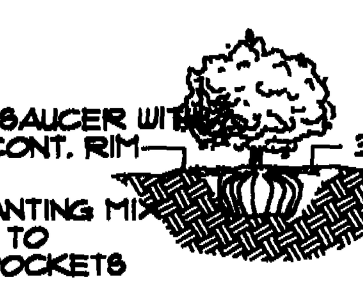
B. ADDITIONAL PLANT MATERIAL: ADDITIONAL PLANT MATERIAL REQUIRED DUE TO A DISCREPANCY IN THE PLANT LIST, THE PLANS OR CHANGES IN THE SITE SHALL BE PROVIDED AT THE SAME RATE AS ORIGINALLY SPECIFIED IN THE BID. ANY DEVIATIONS FROM THE PLANS PROVIDED SHALL REQUIRE A CHANGE ORDER SIGNED BY THE LANDSCAPE ARCHITECT, PRIOR TO THE WORK.

3.07 TRANSPLANTING OPERATIONS

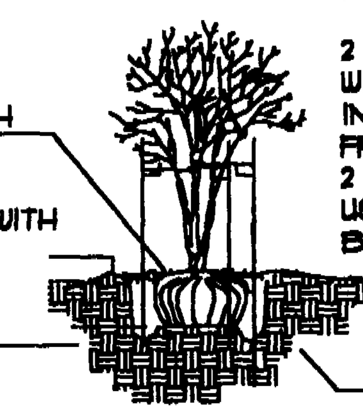
THE LANDSCAPE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO MINIMIZE SHOCK OF ROOT PRUNING AND TRANSPLANTING IN ACCORDANCE WITH NURSERY TRADE PROCEDURES INCLUDING THE FOLLOWING WHERE TIME IS AVAILABLE.

A. PHASE ONE – INITIAL REMOVAL
1. ROOT PRUNE ONE THIRD OF BALL AT A TIME A MINIMUM OF 6 WEEKS BEFORE REMOVAL.
2. THIN OUT INTERIOR CROWN OF DICOTS IN A MANOR, TO COMPENSATE FOR ROOT LOSS, LEAVING THE SHAPE OF THE CANOPY INTACT.
3. LEAVE MONOCOT LEAVES ALONE ALLOWING PLANT TO BALANCE ITSELF PROTECT GROWING POINT AS NECESSARY.
4. AFTER ROOT PRUNING BACK FILL WITH GOOD ORGANIC ROOTING MEDIUM FERTILIZE WITH ORGANIC FERTILIZER TO PROMOTE ROOT GROWTH. FULLY PROTECT PLANTS FROM DAMAGE BY SUN, WIND, DROUGHT, WATER AND OTHER INJURIOUS CONDITIONS DURING TEMPORARY STORAGE.
5. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE STORED PLANTS UNTIL THEIR REUSE. HE SHALL NOTIFY THE OWNER IN WRITING OF ANY CONDITIONS BEYOND HIS CONTROL, WHICH ARE ADVERSELY AFFECTING THE STORED PLANTS.

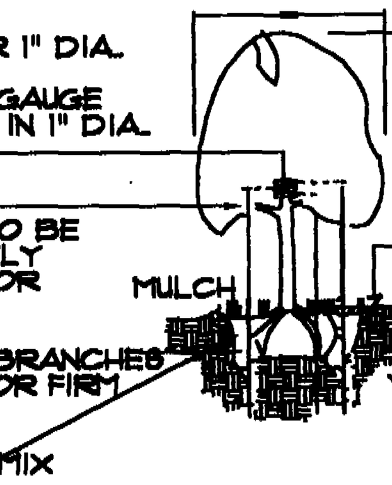
B. PHASE TWO – STORAGE UNTIL REPLANTING SEE AREA DESIGNATED ON PLANS OR PROVIDE OFF SITE TEMPORARY STORAGE.
1. PROVIDE TEMPORARY IRRIGATION FOR THIS HOLDING AREA. MULCH TO REDUCE WEEDS, DISCOURAGE FOOT TRAFFIC AND ITS COMPACTING EFFECT, CONSERVE MOISTURE AND MINIMIZE TEMPERATURE FLUCTUATIONS.
2. BRACE TRUNK AND LEAVE IN PLACE UNTIL TREES ARE WIND FIRM.
3. WRAP TRUNKS AND STRUCTURAL BRANCHES OF THIN BARKED TREES TO PROTECT AGAINST SUN SCALD AND DEHYDRATION. RETAIN THIS PROTECTION THROUGH THE COLD SEASON.
4. FEED WITH DILUTED SOLUTION OF NPK IN SOLUBLE FORM WITH A SOIL NEEDLE PROVIDING WATER, AIR, NUTRIENTS AND A BREAKING UP OF CLODS.
5. WHERE FOLIAGE IS RETARDED SPRAY IT WITH ONE OF THE SOLUBLE AREA TYPES OF FOLIAR FEEDERS.
6. AT TIME OF REPLANTING TO FILL AIR POCKETS AND TO KEEP ROOTS, ESPECIALLY FEEDER ROOTS ,MOIST, LIVE AND HEALTHY, USE SOIL NEEDLE FOR WATERING NEW TRANSPLANTS. DIRECT FINE SPRAY AT FOLIAGE TO HELP HARDEN OFF NEW LEAVES.



SHRUB PLANTING DETAIL



MULTI-TRUNK TREE STAKING



SINGLE TREE TRUNK STAKING

RECEIVED
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PDS
ALTAMONTE SVC. CTR.

84428-1

DATE:	JUNE 28, 2002
SCALE:	1" = 40'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO.:	99455
CAD FILE NO.:	99455L11

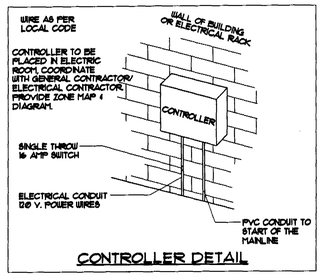
REVISIONS	REVISED	CHECKED	DATE

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

LANDSCAPE SPECIFICATIONS
HANCOCK
VILLAGE
CLERMONT, FLORIDA

JUL 0 1 2002

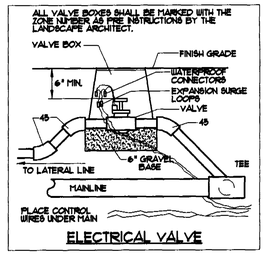
SHEET: 11 OF: 15



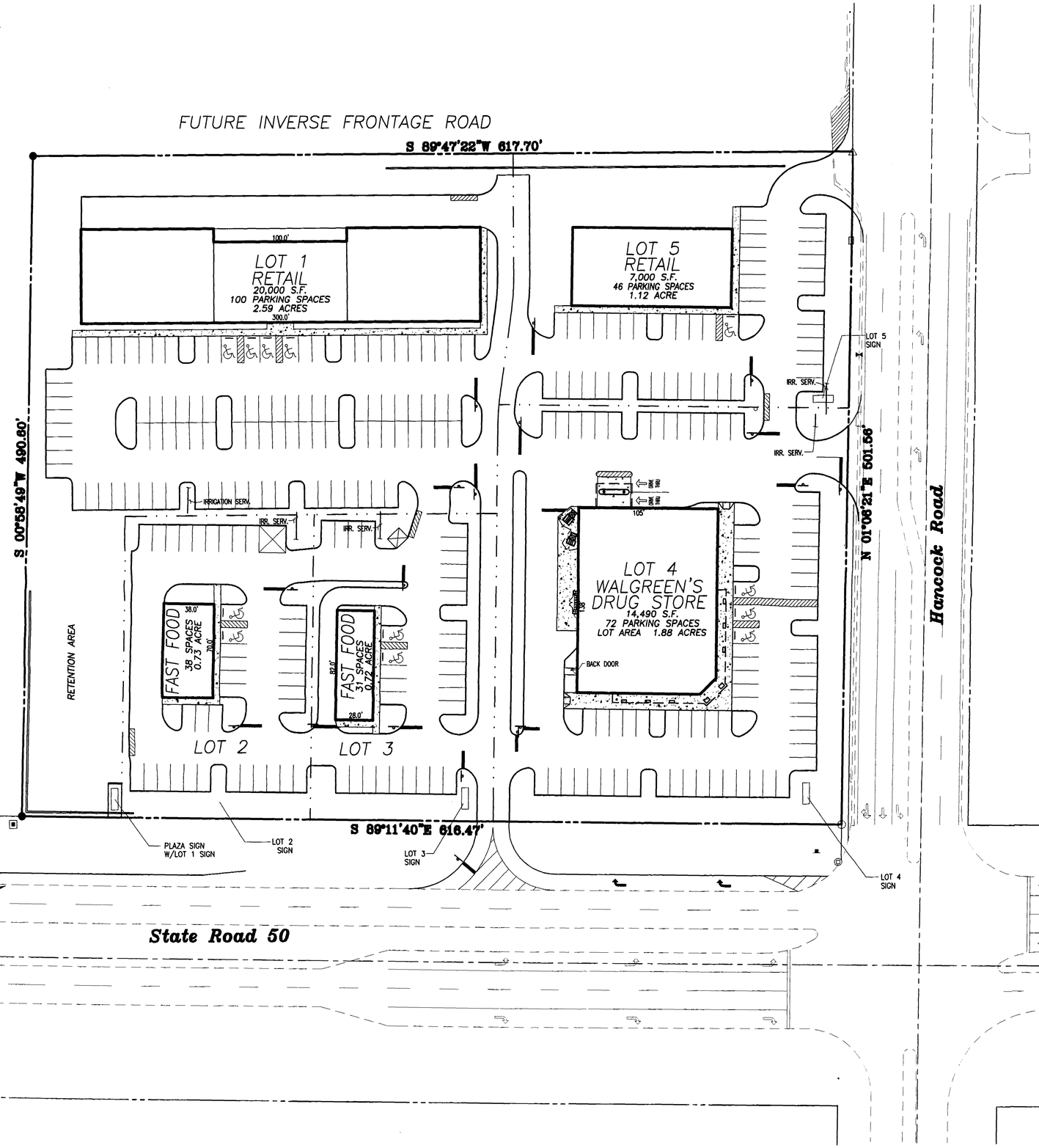
CONTROLLER DETAIL

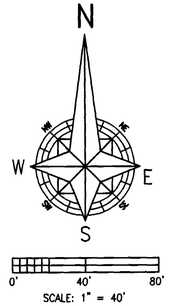
LEGEND

- ● RAINBIRD 1806 SERIES 6" POP-UP SPRAY HEAD
- ■ RAINBIRD 1812 SERIES 12" POP-UP SPRAY HEAD
- ⊕ IRRITROL 1200 SERIES ULTRAFLOW ELECTRIC VALVE. SIZE AS SHOWN ON THE PLAN. INSTALL VALVE IN AN APHTEK VP-12A VALVE BOX.
- ▲ HUNTER PGP-ADJ-6 PART CIRCLE ROTOR HEAD
- CLASS 200 PVC MAIN LINE - 1 1/2"
- CLASS 160 PVC LATERAL LINE - SIZE AS SHOWN UNTIL A SMALLER SIZE IS SHOWN (3/4" MIN.)
- SCHEDULE 40 PVC SLEEVE. SIZE AS SHOWN.
- © CONTROLLER - HARDIE TOTAL CONTROL, 8 STATION. INSTALL WITH A MINI-CLIK II RAIN SENSOR MOUNTED WITH A 8' MINIMUM COPPER CLAD ROD. SLEEVE TO AS REQUIRED.



ELECTRICAL VALVE





GENERAL NOTES

1. REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREES AND SHRUBS.
2. ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER. ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
3. ALL POP-UP ROTORS AND SPRAYS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. DO NOT USE FUNNY PIPE.
4. ADJUST ALL NOZZLES TO REDUCE WATER WASTE ON HARD SURFACES & BLDG WALLS.
5. THROTTLE ALL VALVES ON SHRUB LINES AS REQUIRED TO PREVENT FOGGING.
6. ALL CONTROL WIRE SPLICES SHALL BE MADE IN VALVE BOXES USING KING "ONE STEP" CONNECTORS AND SEALANT WITH WIRE NUTS.
7. THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING ON A REPRODUCIBLE PAPER (SEPIA OR MYLAR) SHOWING ALL IRRIGATION INSTALLATION. A MYLAR OR SEPIA OF THE ORIGINAL PLAN MAYBE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES.
8. ALL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES.
9. ANY PIPING SHOWN OUTSIDE THE PROPERTY LINE OR RUNNING OUTSIDE A LANDSCAPE AREA IS SHOWN THERE FOR CLARITY ONLY. ALL LINES SHALL BE INSTALLED ON THE PROPERTY AND INSIDE THE LANDSCAPE AREAS.
10. THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
11. THE CONTRACTOR SHALL EXERCISE CARE SO AS NOT TO DAMAGE ANY EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIRS AND COST OF ANY DAMAGE CAUSED BY HIS WORK.
12. ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF CERTIFICATE OF OCCUPANCY AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT AND WORKMANSHIP.
13. ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION. (BY OTHERS. NOT A PART OF THIS CONTRACT.)

NOZZLE CHART

LETTER	MODEL	GPM AT 30 PSI	RADIUS	PATTERN
A	1806-SF	3.1	15'	FULL
B	1806-STQ	2.3	15'	THREE QUARTER
C	1806-STT	2.3	15'	TWO THIRD
D	1806-SH	1.5	15'	HALF
E	1806-ST	1.2	15'	ONE THIRD
F	1806-SQ	1.0	15'	QUARTER
G	1806-SEST	.61	4'x15'	END STRIP
H	1806-SCST	1.2	4'x30'	CENTER STRIP
J	1806-12F	2.6	12'	LOW GPM FULL
K	1806-10F	1.6	10'	LOW FULL
L	1806-1186T	1.1	9'x18'	SIDE STRIP
M	1806-1366T	1.2	4'x30'	SIDE STRIP
N	1806-12H	1.2	12'	LOW GPM HALF
P	1806-10T	.52	10'	LOW THIRD
R	1806-10Q	.35	10'	LOW QUARTER
S	1806-10H	.75	10'	LOW HALF
T	1806-8H	.75	8'	FLAT HALF
U	1806-8Q	.35	8'	FLAT QUARTER
V	1806-8T	.52	8'	FLAT THIRD
W	1806-SF-B	1.5	5'	STREAM BUBBLER
X	1806-SCST-B	.50	5'	STRIP BUBBLER
Y	1806-SH-B	1.0	5'	HALF BUBBLER
Z	1806-SVAN	VARIES	15'	ADJUSTABLE

DATE:	JUNE 28, 2002
SCALE:	1" = 40'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO.:	99455
CAD FILE NO.:	99455112

DATE	REVISIONS	REVISED	CHECKED

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

IRRIGATION PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA

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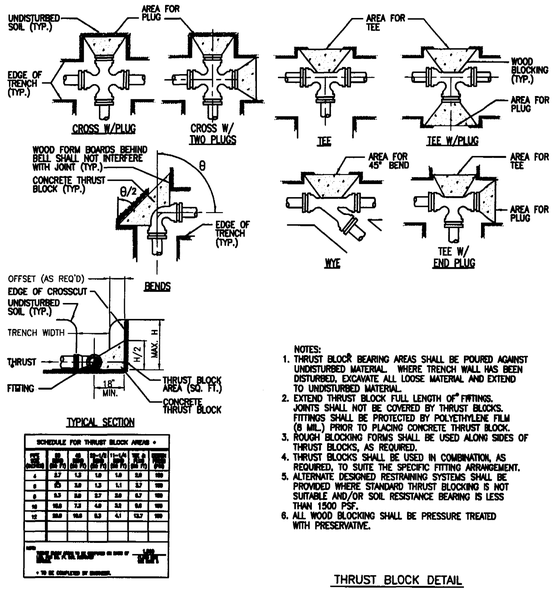
JUL 01 2002

SHEET: 12 OF: 15



TYPICAL SECTION

SCHEDULE FOR THRUST BLOCK AREAS *

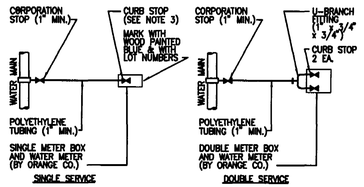
PIPE SIZE (INCHES)	90° BEND (SQ FT)	45° BEND (SQ FT)	22-1/2° BEND (SQ FT)	11-1/4° BEND (SQ FT)	TEE & PLUG (SQ FT)	THRUST FORCE (LBS)
4	2.7	1.3	1.0	0.6	3.0	900
6	4.5	2.0	1.2	1.1	5.2	1500
8	8.3	3.0	2.7	2.0	6.7	1200
10	13.0	7.2	4.0	3.0	9.0	1800
12	19.0	10.0	5.0	4.1	13.7	1800

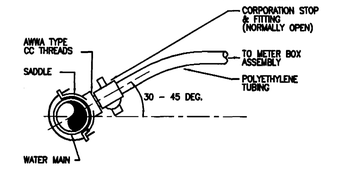
NOTE: [illegible] TO BE COMPLETED BY ENGINEER. [illegible]

* TO BE COMPLETED BY ENGINEER.

NOTES:
1. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
2. EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (8 MIL.) PRIOR TO PLACING CONCRETE THRUST BLOCK.
3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
4. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUITE THE SPECIFIC FITTING ARRANGEMENT.
5. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1500 PSF.
6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.

THRUST BLOCK DETAIL





NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3' BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" X 2" X 18" STAKE WITH THE TOP PAINTED BLUE AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.

WATER SERVICE CONNECTION DETAILS

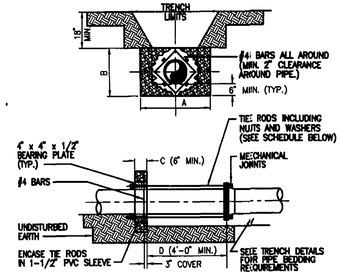
NOTES:
1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 2500 PSI.
3. BEDDING, BACKFILL AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 P.S.I.*

SCHEDULE OF DIMENSIONS AND MATERIALS *

PIPE SIZE (INCHES)	DIMENSIONS A	B	C	D	TIE RODS REQ'D DIA.	NO.
4"	24"	24"	8"	4"	1/2"	4
6"	30"	30"	8"	6"	1/2"	4
8"	36"	36"	8"	8"	1/2"	4

NOTE: [illegible] TO BE COMPLETED BY ENGINEER. [illegible]

* TO BE COMPLETED BY ENGINEER.



WATER MAIN
THRUST COLLAR DETAIL

NOTES:
1. FITTINGS SHALL BE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:

WORKING PRESSURE: 150 P.S.I.*
SOIL DESIGNATION: SP *
LAYING CONDITIONS: NORMAL

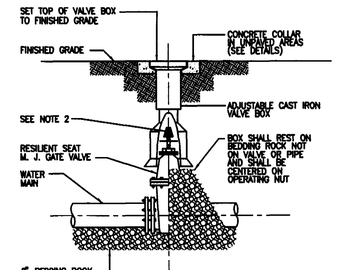
6. FOR PIPE ENCASED IN POLYETHYLENE, USE VALUES GIVEN IN PARENTHESES OR INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.

* TO BE COMPLETED BY THE ENGINEER.

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *

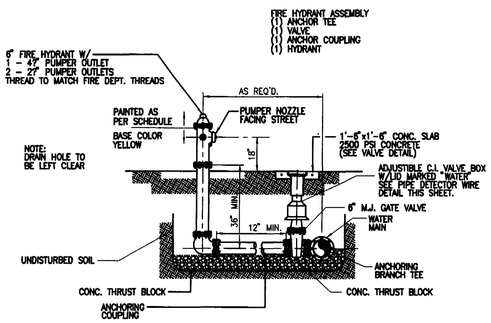
	PIPE SIZE 6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	6'	12'							
45° BEND	6'	9'							
22-1/2° BEND	6'	9'							
11-1/4° BEND	4'	6'							
PLUG OR BRANCH OF TEE	8'	12'							

RESTRAINED PIPE TABLE.



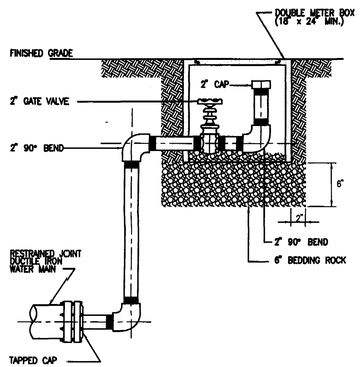
NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL



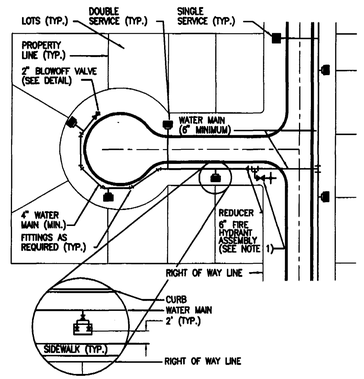
NOTES:
1. FIRE HYDRANTS SHALL BE MUELLER A-423.
2. HYDRANT SHALL BE SUPPLIED WITH DRAIN.
3. HYDRANT SHALL BE PAINTED IN ACCORDANCE WITH THE FOLLOWING COLORING DESIGNATION BASED ON THE TESTED FLOWS:
   BASE HYDRANT - YELLOW
   LESS THAN 500 GPM - RED
   500 TO 999 GPM - ORANGE
   1000 TO 1499 GPM - GREEN
   1500 AND GREATER - BLUE
4. PAINT SHALL BE SHERWIN-WILLIAMS INDUSTRIAL GRADE OSHA:
   RED #B54 R 38
   YELLOW #B54 Y 37
   GREEN #B54 G 14
   ORANGE #B54 E 39
   BLUE #SW4086
5. HYDRANTS TO BE FLOW TESTED BY CONTRACTOR COORD WITH CITY ENGINEER FOR TESTING PROCEDURES.

FIRE HYDRANT ASSEMBLY DETAIL



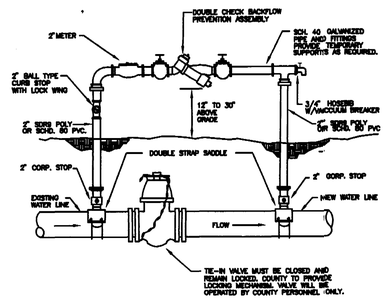
NOTES:
1. ALL 2" PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS.

BLOWOFF VALVE DETAIL



NOTES:
1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRICTIONS WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.

WATER SERVICE LOCATION DETAIL



TEMPORARY JUMPER DETAIL

1. A TEMPORARY JUMPER CONNECTION IS REQUIRED AT ALL CONNECTIONS BETWEEN EXISTING ACTIVE WATER MAINS AND PROPOSED NEW WATER MAIN IMPROVEMENTS.
2. THE DETAIL ABOVE IS TO BE USED FOR FILLING ANY NEW WATER MAIN OF ANY SIZE FROM EXISTING ACTIVE WATER MAINS AND FOR FLUSHING OF NEW MAINS UP TO 8" DIAMETER (2.5 FPS MINIMUM VELOCITY) AND FOR PULLING BACTERIOLOGICAL SAMPLES FROM ANY NEW WATER MAIN OF ANY SIZE. THE JUMPER CONNECTION SHALL BE MAINTAINED UNTIL AFTER FILLING, FLUSHING, TESTING AND DISINFECTION, THE NEW MAIN HAS BEEN SUCCESSFULLY COMPLETED AND CLEARANCE FOR USE FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) & OTHER PERTINENT AGENCIES HAS BEEN RECEIVED BY UTILITIES INC. THIS JUMPER CONNECTION SHALL ALSO BE USED TO MAINTAIN A MINIMUM PRESSURE OF 20 PSI IN THE NEW MAINS ALL THE TIME AFTER DISINFECTION AND UNTIL THE FDEP CLEARANCE LETTER IS OBTAINED. ADEQUATE THRUST BLOCKING AND/OR RESTRAINTS SHALL BE PROVIDED TEMPORARILY, AS REQUIRED. PIPE AND FITTINGS USED FOR CONNECTING THE NEW PIPE TO THE EXISTING PIPE SHALL BE DISINFECTED PRIOR TO INSTALLATION, IN ACCORDANCE WITH AWWA C651, 1992 EDITION. THE TAPPING SLEEVE AND THE EXTERIOR OF THE MAIN TO BE TAPPED SHALL BE DISINFECTED BY SPRAYING OR SWABBING PER SECTION II OF AWWA C651-92.
3. FLUSHING OF 10" DIAMETER AND LARGER WATER MAINS MAY BE DONE THROUGH THE TIE-IN VALVE UNDER VERY CONTROLLED CONDITIONS.

   THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

   A. THE TIE-IN VALVES SHALL BE OPERATED AND PRESSURE TESTED IN THE PRESENCE OF THE UTILITY COMPANY AND ENGINEER TO VERIFY WATER TIGHTNESS PRIOR TO TIE-IN. VALVES WHICH ARE NOT WATERTIGHT SHALL BE REPLACED OR A NEW VALVE INSTALLED IMMEDIATELY ADJACENT TO THE LEAKING VALVE.
   B. THE TEMPORARY JUMPER CONNECTION SHALL BE CONSTRUCTED AS DETAILED. THE JUMPER CONNECTION SHALL BE USED TO FILL THE NEW WATER MAIN AND FOR PROVIDING WATER FOR BACTERIOLOGICAL SAMPLING OF THE NEW MAIN AS REQUIRED BY THE FDEP PERMIT.
      - FLUSHING SHALL NOT BE ATTEMPTED DURING PEAK DEMAND HOURS OF THE EXISTING WATER MAINS.
      - ALL DOWNSTREAM VALVES IN THE NEW SYSTEM MUST BE OPEN PRIOR TO OPENING THE TIE-IN VALVE.
      - PROVIDE FOR AND MONITOR THE PRESSURE AT THE TIE-IN POINT. THE PRESSURE IN THE EXISTING MAIN MUST NOT DROP BELOW 35 PSI.
      - TIE-IN VALVE SHALL BE OPENED A FEW TURNS ONLY, ENSURING A PRESSURE DROP ACROSS THE VALVE IS ALWAYS GREATER THAN 10 PSI.
   C. THE TIE-IN VALVE SHALL BE LOCKED CLOSED BY THE UTILITY COMPANY UNTIL FLUSHING BEGINS.
   D. THE TIE-IN VALVE SHALL BE OPENED ONLY FOR FLUSHING OF THE NEW MAIN. THE PROCEDURE SHALL BE DIRECTED BY THE UTILITY COMPANY AND OBSERVED BY THE ENGINEER.
   E. AFTER FLUSHING, THE TIE-IN VALVE SHALL BE CLOSED AND LOCKED IN THE CLOSED POSITION BY THE UTILITY COMPANY.
4. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION DEMONSTRATING THAT THE DOUBLE CHECK BACKFLOW PREVENTION DEVICE HAS BEEN TESTED WITHIN ONE YEAR AT THE TIME OF INSTALLATION & IS IN GOOD WORKING ORDER AT THE TIME OF INSTALLATION. THE TEST SHALL BE PREFORMED BY A QUALIFIED BACK FLOW PREVENTION TECHNICIAN AS APPROVED BY CITY OF CLERMONT'S CROSS-CONNECTION CONTROL PROGRAM.
5. EXCEPT AS REQUIRED TO FLUSH LINES OF GREATER THAN 8" IN DIAMETER, THE TIE-IN VALVE SHALL REMAIN CLOSED AND SHALL BE LOCKED IN THE CLOSED POSITION BY THE UTILITY COMPANY. THE TIE-IN VALVE SHALL REMAIN LOCKED CLOSED UNTIL THE NEW SYSTEM HAS BEEN CLEARED FOR USE BY FDEP AND ALL OTHER PERTINENT AGENCIES.
6. UPON RECEIPT OF CLEARANCE FOR USE FROM FDEP AND ALL OTHER PERTINENT AGENCIES, THE CONTRACTOR SHALL REMOVE THE TEMPORARY JUMPER CONNECTION. THE CORPORATION STOPS ARE TO BE CLOSED AND PLUGGED WITH 2" BRASS PLUGS.
7. ALL INSTALLATION AND MAINTENANCE OF THE TEMPORARY JUMPER CONNECTION AND ASSOCIATED BACKFLOW PREVENTION DEVICE, FITTINGS, VALVE, ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TEMPORARY JUMPER CONNECTION

84428-1

RECEIVED
JUL 02 2002
PDS
ALTAMONTE SVC. CTR.

DATE:	JUNE 28, 2002
SCALE:	1" = 40'
DESIGNED:	THS
DRAWN:	SCM
CHECKED BY:	THS
JOB NO.:	99455
CAD FILE NO.:	99455013

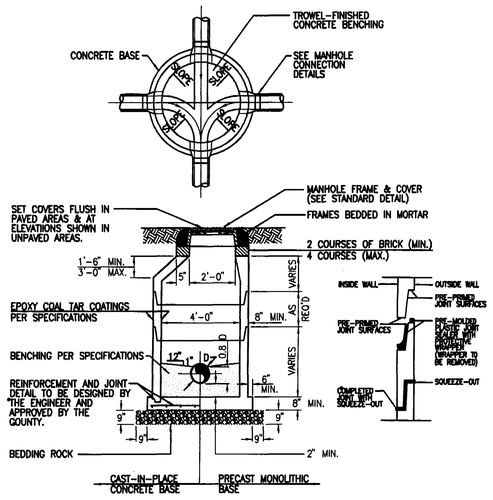
DATE	REVISIONS	REVISED	CHECKED

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

STANDARD UTILITY DETAILS
HANCOCK VILLAGE
CLERMONT, FLORIDA

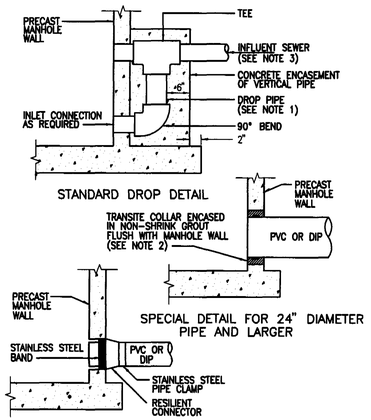
JUL 01 2002

SHEET: 13 OF: 15



NOTES:
1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24", SEE SECTION 20.4.3 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. APPROVED CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE.

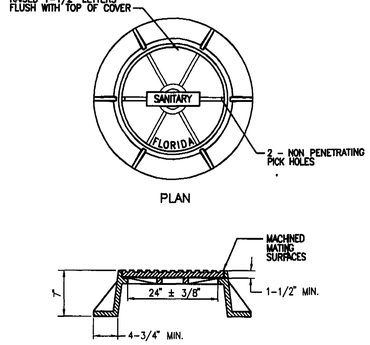
PRECAST CONCRETE MANHOLE PLAN AND SECTION



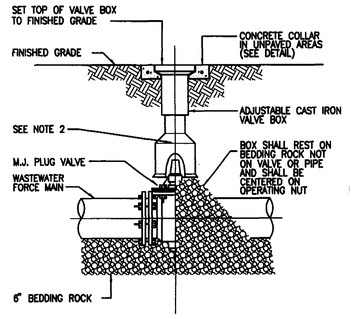
STANDARD PRECAST MANHOLE PIPE CONNECTION

NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATER TIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.

MANHOLE CONNECTION DETAILS

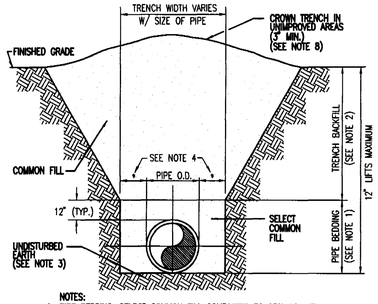


STANDARD MANHOLE FRAME AND COVER



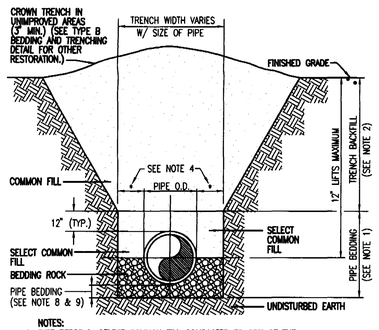
NOTES:
1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO
2. COME UP TO 4 FOOT DEPTH BELOW FINISHED GRADE.

PLUG VALVE AND BOX DETAIL



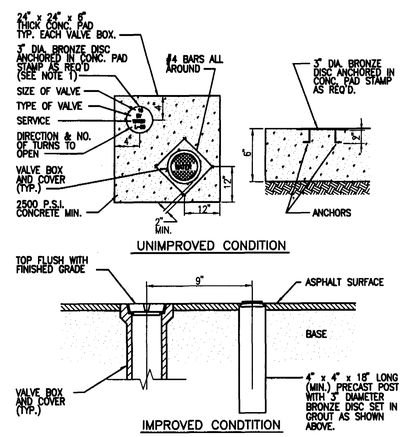
NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (+): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

TYPE B BEDDING AND TRENCHING DETAIL



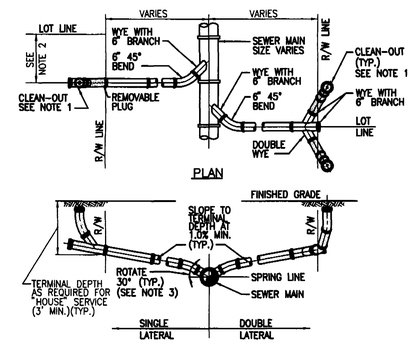
NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (+): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. REFER TO SECTION 32.5 OF THE MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.
8. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING, IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15", AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
9. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. CLERMONT SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.

TYPE A BEDDING AND TRENCHING DETAIL



NOTES:
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES 16" AND LARGER, OR AS REQUIRED BY THE CITY FOR CRITICAL OFFSITE VALVES.
2. VALVE COLLAR DIMENSIONS MAY BE REDUCED TO 16" X 16" X 6" WHEN THE BRONZE IDENTIFICATION DISC IS NOT REQUIRED.

VALVE COLLAR DETAIL



NOTES:
1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE, 25' MAXIMUM.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.

SERVICE LATERAL DETAIL

	DATE	REVISIONS	REVISED	CHECKED
DATE:	JUNE 28, 2002			
SCALE:	1" = 40'			
DESIGNED:	THS			
DRAWN:	SCM			
CHECKED BY:	THS			
JOB NO.:	99455			
CAD FILE NO.:	99455014			

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708 (407) 327-7700

STANDARD UTILITY DETAILS

HANCOCK VILLAGE

CLERMONT, FLORIDA

JUL 01 2002

SHEET: 14 OF: 15

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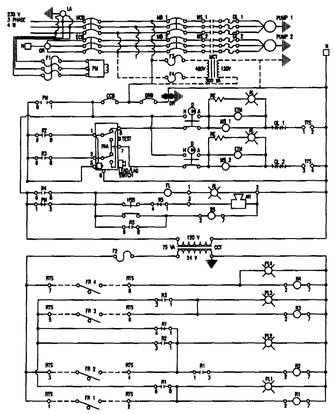
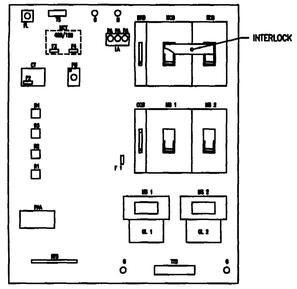


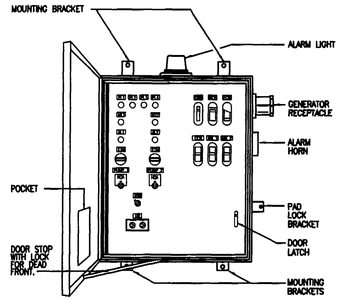
NOTES:
1. MAIN CIRCUIT TRANSFORMER REQUIRED FOR 480 VOLT SUPPLY ONLY.

DUPLEX CONTROL SCHEMATIC



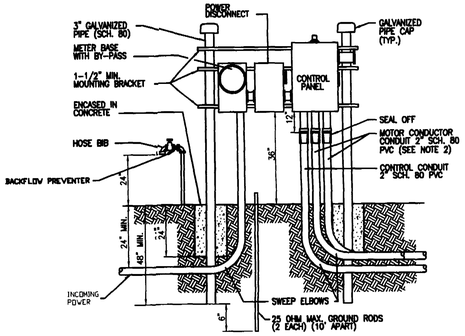
NOTES:
1. MAIN CIRCUIT TRANSFORMER REQUIRED FOR 480 VOLT SUPPLY ONLY.

DUPLEX CONTROL PANEL ENCLOSURE
SUBPANEL LAYOUT



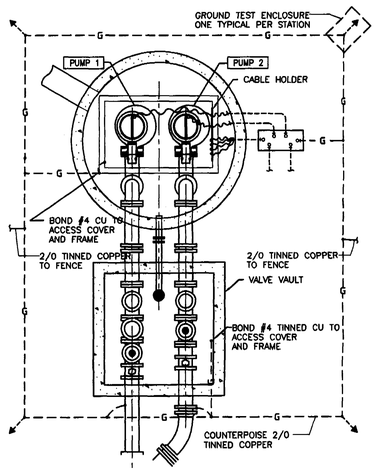
NOTES:
1. OUTER BOX SIZE SHALL BE A MINIMUM OF 24"W X 36"H X 10"D OR AS APPROVED BY THE COUNTY.
2. FOR STATIONS WITH PUMPS RATED 20 HP OR GREATER, OUTER BOX SIZE SHALL BE 30"W X 42"H X 10"D AND SHALL HAVE 2 LATCHES ON THE DEAD FRONT.
3. THAN 47 HP AND SUBMITTED TO THE COUNTY FOR APPROVAL.

DUPLEX CONTROL PANEL ENCLOSURE
DEAD FRONT LAYOUT



NOTES:
1. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
2. WHENT TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO 3".
3. POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3 PHASE FROM A 3 PHASE SOURCE ONLY.
4. AN ELECTRICAL GROUNDING SYSTEM SHALL BE INSTALLED AS PER THE NATIONAL ELECTRICAL CODE, LOCAL CODES AND ORDINANCES. AN UNDERGROUND PERIMETER CABLE GROUNDING SYSTEM SHALL BE INSTALLED WITH CONNECTIONS TO AT LEAST WET WELL COVER, VALUE VAULT COVER, CONTROL PANELS, GENERATOR, UTILITY COMPANY TRANSFORMER, AND MAIN DISCONNECT SWITCH.

PUMP STATION CONTROL PANEL
INSTALLATION DETAIL

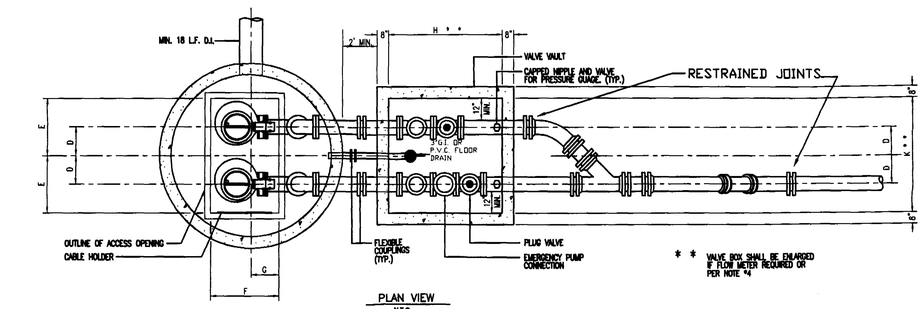


PUMP STATION GROUNDING DETAIL

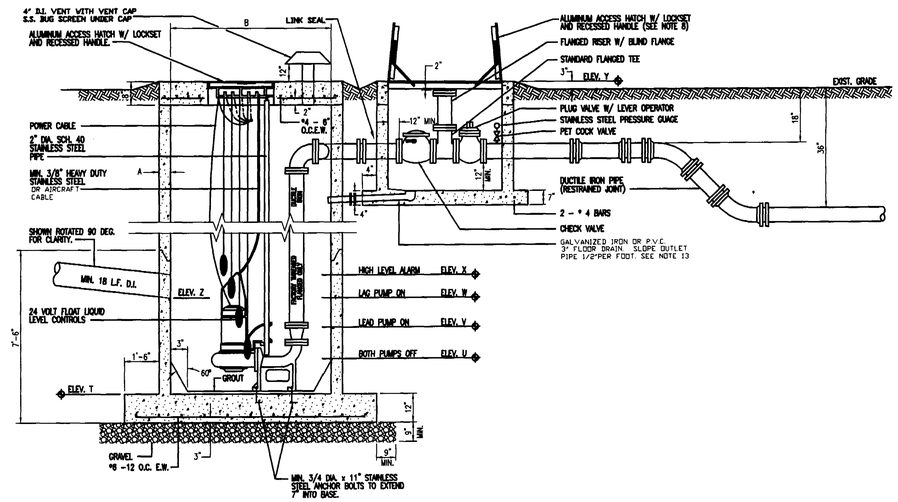
ABBREV.	ITEM DESCRIPTION
AH	ALARM HORN
AL	ALARM LIGHT
ATS	ALTERNATOR TEST SWITCH
CCB	CONTROL CIRCUIT BREAKER
CXF	CONTROL CIRCUIT TRANSFORMER
DR	DUPLEX RECEPTACLE / G.F.I.
DRB	DUPLEX RECEPTACLE BREAKER
DCB	DISCRETE CIRCUIT BREAKER
EM	ELAPSED TIME METER
F	FUSE
FH	FUSEHOLDER
FR	FLOAT REGULATOR
G	GROUND
GR	GENERATOR RECEPTACLE
HOA	HAND-OFF-AUTO SELECTOR
HSS	HOOD SILENCE SWITCH
LA	LIGHTNING ARRESTER
MB	MOTOR BREAKER
MCB	MAIN CIRCUIT BREAKER
MXF	MAIN CIRCUIT TRANSFORMER
MV	MOISTURE AND TEMPERATURE FAILURE LIGHT
MS	MOTOR STARTER
N	NEUTRAL
OL	OVERLOAD HEATER
PA	POWER AVAILABLE LIGHT (3 REQUIRED, 1 EACH PHASE)
PAA	PUMP AUTOMATIC ALTERNATOR
PL	PILOT LIGHT
PM	PHASE MONITOR
R	RELAY
RE	RESISTOR
SI	SUN INDICATOR
TTS	TERMINAL STRIP
TS	TERMINAL STRIP
TTS	THERMAL TERMINAL STRIP

NOTE:

PUMP STATION CONTROL PANEL LEGEND



PLAN VIEW
N.T.S.



SECTION VIEW
N.T.S.

PUMP STATION DETAILS
PLANS, SECTION, AND NOTES

GENERAL NOTES:
1. ALL EXPOSED METAL SHALL BE PRINTED WITH 2 COATS OF EXTERIOR ENAMEL PAINT.
2. WET WELL AND VALVE VAULT SHALL BE COATED WITH COAL TAR INSIDE AND OUT. (TWO COATS, 9 MILS EACH.)
3. BASE AND FIRST RISER UNIT TO BE CAST MONOLITHIC.
4. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND SMALLER. CLEARANCES SHALL INCREASE AS REQUIRED FOR LARGER PIPE SIZES.
5. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
6. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE OR NON-SHRINK GROUT.
7. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
8. WET WELL AND VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE AND LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURER AND APPROVED BY THE COUNTY.
9. FLEXIBLE COUPLING SHALL BE SLEEVE TYPE.
10. PUMPS SHALL BE:

MANUFACTURER: FLYGHT ; MODEL: CP.3102 ; IMP: 432 ; DIA: N/A ;
MM. SPEED: 1700 RPM; DISCHARGE SIZE: 4 IN.; VOLTAGE: 230 ;
HZ.: 60 ; PHASE: 3 ; H.P.: 5.0 ;
MIN. SOLID SIZE: 3 IN.; CURVE: 432 .

MANUFACTURER: _____ ; MODEL: _____ ; IMP: _____ ; DIA: _____ ;
MM. SPEED: _____ RPM; DISCHARGE SIZE: _____ IN.; VOLTAGE: _____ ;
HZ.: _____ ; PHASE: _____ ; H.P.: _____ ;
MIN. SOLID SIZE: _____ IN.; CURVE: _____ .

MANUFACTURER: _____ ; MODEL: _____ ; IMP: _____ ; DIA: _____ ;
MM. SPEED: _____ RPM; DISCHARGE SIZE: _____ IN.; VOLTAGE: _____ ;
HZ.: _____ ; PHASE: _____ ; H.P.: _____ ;
MIN. SOLID SIZE: _____ IN.; CURVE: _____ .

11. OPERATING CONDITIONS SHALL BE 133 GPM AT 43 FEET TDH.
12. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE STAINLESS STEEL.
13. CONTRACTOR MAY INSTALL A "P" TRAP BETWEEN THE VALVE VAULT AND WET WELL AS AN ALTERNATIVE TO THE FLOOR DRAIN SHOWN.

PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.
DIM A	8" MIN.	
DIM B	6'-0" MIN.	
DIM C	*	
DIM D	*	
DIM E	*	
DIM F	*	
DIM G	*	
DIM H	6'-0" MIN.	
DIM J		
DIM K	4'-8" MIN.	
ELEV T		
ELEV U		
ELEV V		
ELEV W		
ELEV X		
ELEV Y		210.00
ELEV Z$_1$		
ELEV Z$_2$		

* PER PUMP MANUFACTURERS REQUIREMENT

RECEIVED
JUL 0 2 2002
PDS
ALTAMONTE SVC. CTR.
84428-1

JUL 0 1 2002

SHEET: 15 OF: 15

DATE: JUNE 28, 2002
SCALE: 1" = 40'
DESIGNED: THS
DRAWN: SCM
CHECKED BY: THS
JOB NO.: 99455
CAD FILE NO.: 99455015

DATE	REVISIONS	REVISED	CHECKED

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 251 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

LIFT STATION PLAN
HANCOCK VILLAGE
CLERMONT, FLORIDA