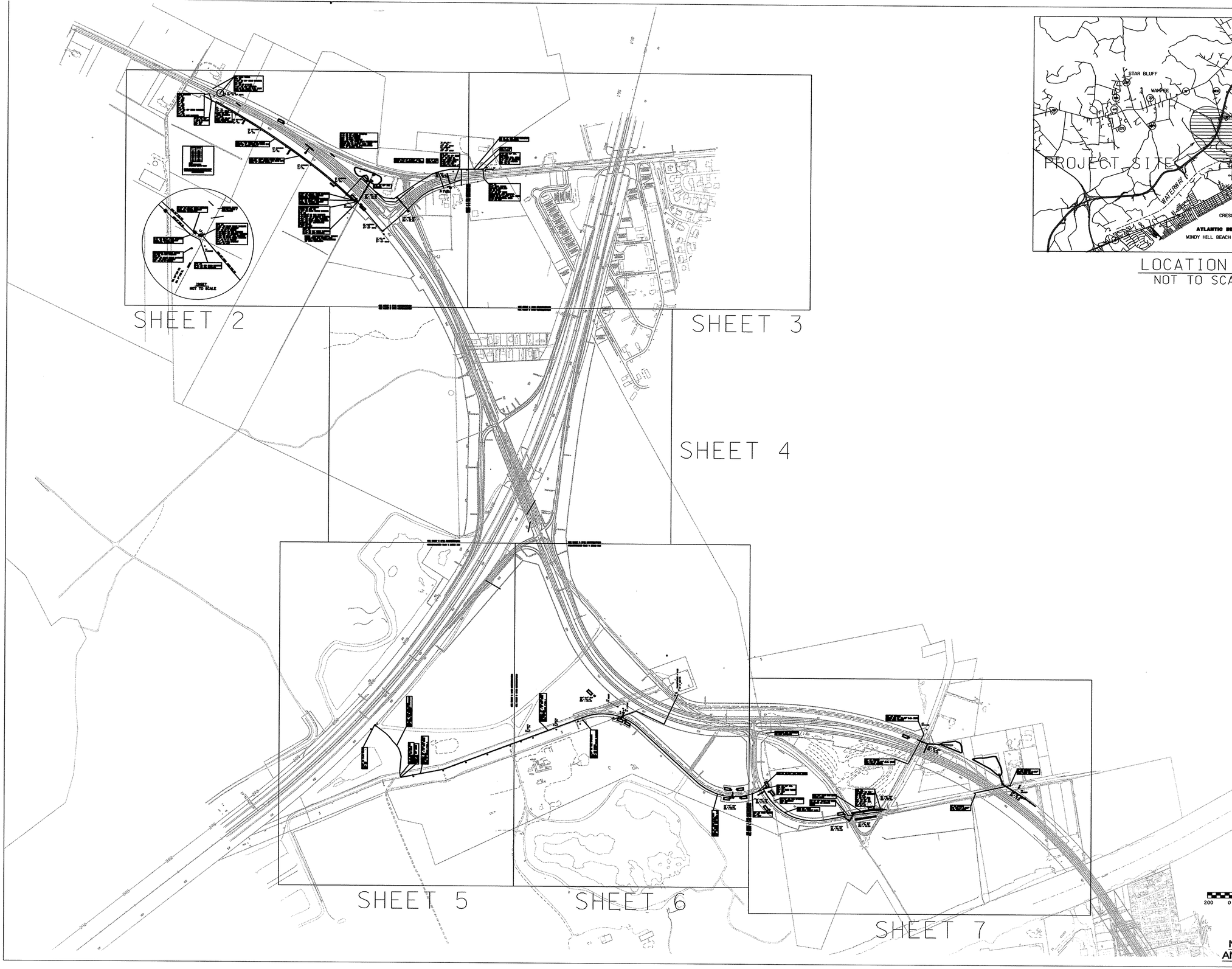

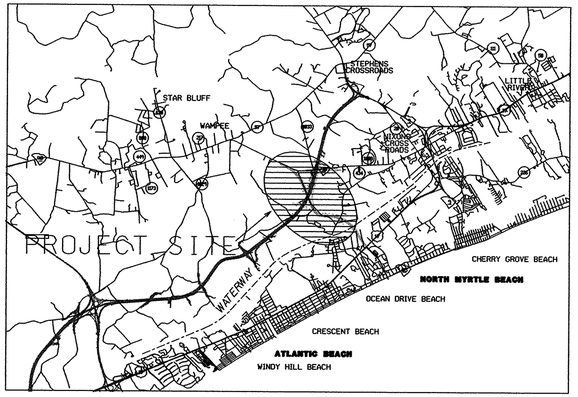

LOCATION MAP
NOT TO SCALE

SCALE: 1" = 400'
200 0 400 800 1200 FEET

NMB CONNECTOR WATER AND SEWER RELOCATIONS

AS-BUILT	REVISION	BY	DATE
		REP	MAY 2006

GRAND STRAND WATER & SEWER AUTHORITY
1701 JACKSON BLUFF RD.
P.O. BOX 2026
CONWAY, SC 29526-2026
(843) 347-2441 OR 448-1685
(843) 347-2446 (FAX)
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)
WATER PROJ. #496-01 /SEWER PROJ. #987-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: MAY 2004
SCALE: 1" = 400 FEET
FILENAME: NMB-CONNECTOR

DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT

APPROVED BY

CHRISTINA S. EVERETT PE #21255

SHEET 1 OF 7

DWG # 41-011-001 /007

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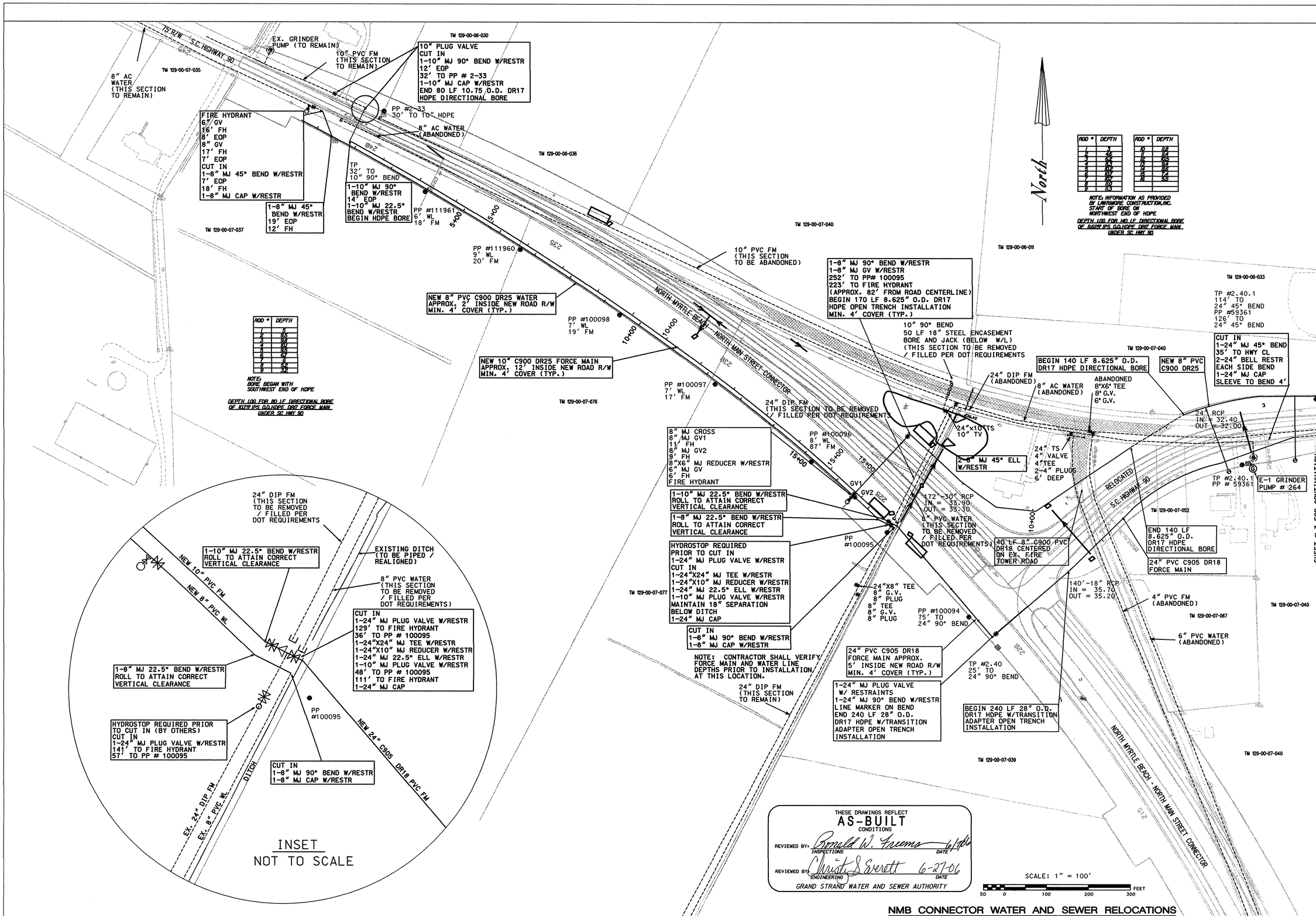

ROD #	DEPTH
1	3
2	4.6
3	5.5
4	6.3
5	7.3
6	10.3
7	10.7
8	11.0
9	11.3

ROD #	DEPTH
10	11.8
11	11.4
12	10.5
13	9.2
14	8.6
15	7.4
16	5.5

NOTE: INFORMATION AS PROVIDED BY LAWRMORE CONSTRUCTION,INC. START OF BORE ON NORTHWEST END OF HDPE

DEPTH LOG FOR 140 LF DIRECTIONAL BORE OF 8.625 IPS. O.D.HDPE DRT FORCE MAIN UNDER SC HWY 90

ROD #	DEPTH
1	5
2	8.5
3	9.0
4	9.0
5	8.5
6	6.7
7	6
8	5.5
9	3.5

NOTE: BORE BEGAN WITH SOUTHWEST END OF HDPE

DEPTH LOG FOR 80 LF DIRECTIONAL BORE OF 10.75 IPS. O.D.HDPE DRT FORCE MAIN UNDER SC HWY 90

NMB CONNECTOR WATER AND SEWER RELOCATIONS

SEE SHEET 4 (FOR CONTINUATION)

REVISION	BY	DATE
1 - ADDED HYDROSTOP REQUIREMENT AND 24" PLUG VALVE	REP	8/03/2005
2 - 180 REVISION	REP	9/22/2005
3 - AS-BUILT	REP	May 2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACOBOCK BLUFF RD.
P.O. BOX 392
CONWAY, SC 29528-0392
(843) 347-1837 OFC (843) 347-1838 FAX
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #496-01, SEWER PROJ. #887-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB-CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 2 OF 7	
DWG # 41-011-002 /007	

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18 LF 8" DIP CL50 CENTERED ON DITCH CROSSING

NEW 8" PVC C900 DR25

1-8" MJ 90° ELL W/RESTR
END HDPE DIR. BORE
1-8" MJ GV W/RESTR
22' TO PP #76498
82' TO TP

PP #76498
TP
S.C. HIGHWAY 90 75' R/W
FH # 2180

8" AC WATER (ABANDONED)

CUT IN
1-8" BELL RESTR
QUANTUM COUPLING
ON AC PIPE
2-8" MJ 90° BEND
HORIZONTAL AND VERTICAL
BEGIN 80 LF 8.625" O.D. DR17
HDPE DIRECTIONAL BORE
1-8" MJ CAP

24" DIP FM (THIS SECTION TO REMAIN)
8" AC WATER (THIS SECTION TO REMAIN)

ROD #	DEPTH
1	22
2	81
3	92
4	103
5	105
6	107
7	78
8	63
9	42

NOTE: INFORMATION AS PROVIDED BY LAWRIMORE CONSTRUCTION,INC. START OF BORE ON NORTH END OF HDPE

DEPTH LOG FOR 80 LF DIRECTIONAL BORE OF 8.625" IPS O.D.HDPE DR17 FORCE MAIN UNDER SC HWY 90

SHEET # 2 FOR CONTINUATION

TM 129-00-06-011

TM 129-00-07-066

10" PVC FM

6" PVC

DIRECTIONAL BORE
60 LF 18" STEEL ENCASEMENT
74 LF 8" DR25
PVC @ 0.41%

DIRECTIONAL BORE
1-8-18" STEEL ENCASEMENT W/SPACERS
46 LF 8" DR25 PVC

24" DIP TAPPING SLEEVE
10" MJ TAPPING VALVE
10" PLUG C.I. BELL C.V.
10"X8" PLUG VALVE
2-10" MJ 90° BEND W/RESTR'S
2-10" MJ 45° BEND W/RESTR'S

8" AC WATER
18" DIP FM
12" DIP FM

ARV

8" PVC

4" PVC FORCE MAIN

TM 130-27-01-063 BAYBERRY LAND COMPANY

TM 130-27-01-063 BAYBERRY PARTNERS, LLC

KODIAK LANE 50' R/W

BROWN BEAR LANE 50' R/W

GRIZZLY LANE 50' R/W

TO U.S. HIGHWAY 501

TO S.C. HIGHWAY 9

S.C. HIGHWAY 31

SEE SHEET 4 (FOR CONTINUATION)

North

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Ronald W. Freeman 6/7/06
INSPECTIONS — DATE

REVIEWED BY: Christina S. Everett 6-27-06
ENGINEERING — DATE

GRAND STRAND WATER AND SEWER AUTHORITY

SCALE: 1" = 100'

50 0 100 200 300 FEET

NMB CONNECTOR WATER AND SEWER RELOCATIONS

REVISION	BY	DATE
BID REVISION CHANGES AS-BUILT	REP REP	9/22/2005 5/2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACKSON BLUFF RD.
P.O. BOX 2368
CONWAY, SC 29528-2368
(843) 347-2541 OR (843)-1696
FAX: (843) 347-2547
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #496-01, SEWER PROJ. #987-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB-CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 3 OF 7	
DWG # 41-011-003 /007	

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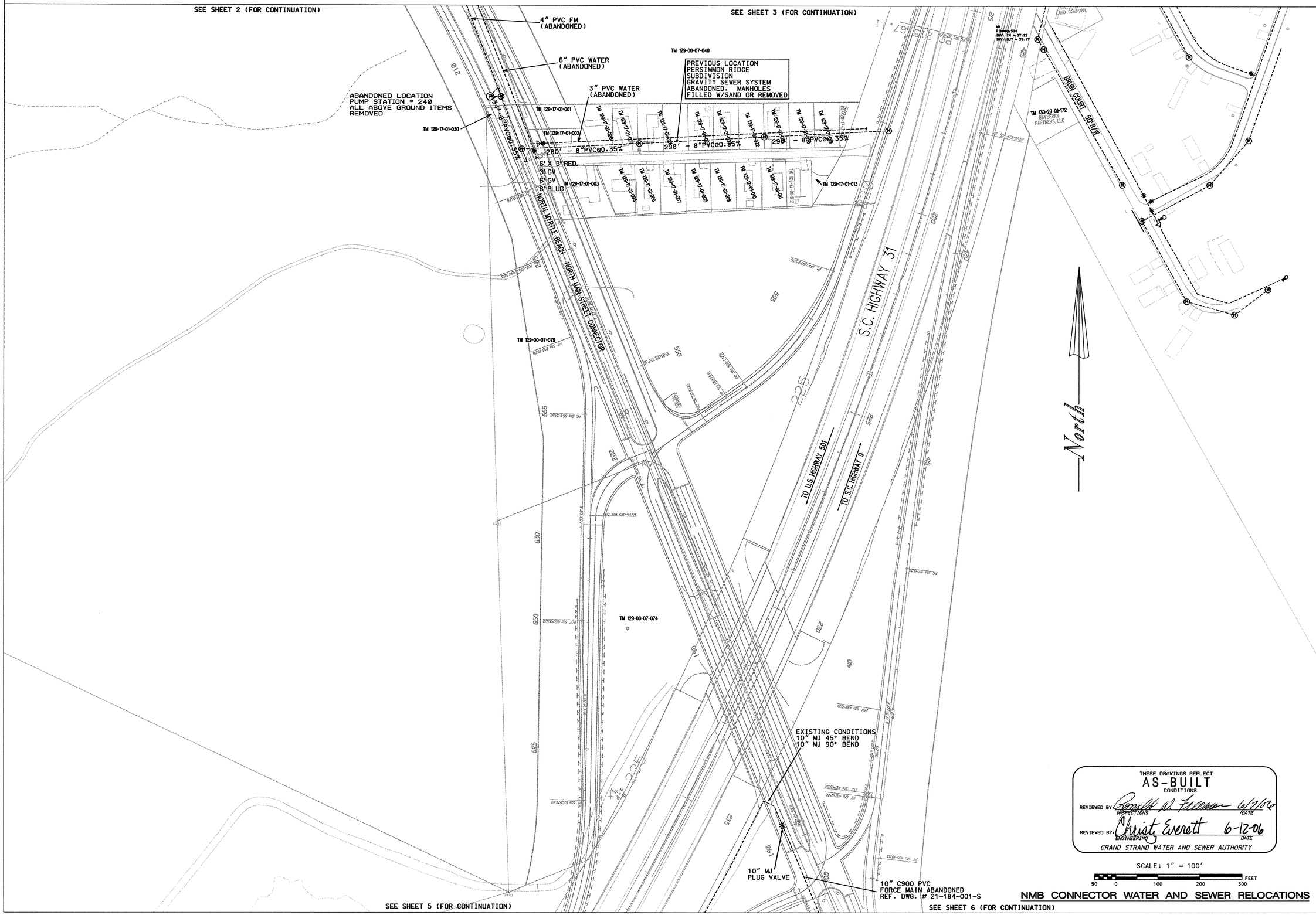

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Gerald W. Freeman 6/7/06
INSPECTIONS DATE

REVIEWED BY: Christy Everett 6-12-06
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

SCALE: 1" = 100'

50 0 100 200 300 FEET

NMB CONNECTOR WATER AND SEWER RELOCATIONS

REVISION	BY	DATE
AS-BUILT	REP	6/2/06

GRAND STRAND WATER & SEWER AUTHORITY
1701 JACKSON BLUFF RD.
P.O. BOX 2868
CONWAY, SC 29526-2868
(843) 347-1441 OR 448-1686
(843) 347-4600 FAX
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #496-01, SEWER PROJ. #987-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB-CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 4 OF 7	
DWG # 41-011-004 /007	

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THIS SECTION 10.75" O.D.
DR17 HDPE FORCE MAIN
TO REMAIN

North

THIS SECTION 10.75" O.D.
DR17 HDPE FORCE MAIN
TO REMAIN
REF. DWG. # 21-184-003-S

1-10" MJ PLUG VALVE
19' VM
47' PV

20" C905 PVC DR25
WATER MAIN
(TO REMAIN)

TP
2.40.7

PP 117398 PP 76983

See Also
Sheet 8 For
This Area

S.C. HIGHWAY 31

EXISTING CONDITIONS
10" MJ 45° ELL
10" MJ CAP
2 - 10" MJ PLUG VALVE

NEW 15' WIDE EASEMENT

NEW 10" C900 PVC DR25
APPROX. 7.5 INSIDE PROPOSED
15' WIDE EASEMENT

PP 76982
10' FM

40 LF C900 PVC DR18
CENTERED ON ROAD
CROSSING

1-10" MJ 90° BEND
W/RESTR

INSTALL 10" C900 PVC DR25
APPROX. 3' - 5' OFF EDGE
OF ROADWAY
MIN. 3' COVER (TYP.)

ABANDONED 10" PVC
FORCE MAIN

ABANDONED 10" PVC
FORCE MAIN

TM 143-00-01-001

PP
76981
12' FM

A

PP
76980
14' FM

NEW
GSWSA EASEMENT
(15' WIDE)

15'

100'

PP
76979
15' FM

PP
76979
15' FM

TO U.S. HIGHWAY 501

TO S.C. HIGHWAY 9

SEE SHEET 4 (FOR CONTINUATION)

PALMETTO LAND PARTNERS, LLC
TM 143-00-01-066

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Donald W. Freeman 6/7/06
INSPECTIONS DATE

REVIEWED BY: Christy Everett 6-12-06
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

SCALE: 1" = 100'

50 0 100 200 300 FEET

ABANDONED 10" C900 PVC
FORCE MAIN
REF. DWG. # 21-184-002-S

NMB CONNECTOR WATER AND SEWER RELOCATIONS

SEE SHEET 6 (FOR CONTINUATION)

REVISION	BY	DATE
ADDITIONAL EASEMENT REQUIREMENT	REP	MARCH 2006
ALIGNMENT CHANGE BESIDE POND DUE TO PUMPS & FLOAT ADDITION	REP	JULY 2006
AS-BUILT	REP	MAY 2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACKSON BLUFF RD.
P.O. BOX 2026
CONWAY, SC 29528-2269
(843) 347-4041 OR 448-1688
(843) 347-4400 (FAX)
EMAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #498-01 /SEWER PROJ. #887-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB_CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 5 OF 7	
DWG # 41-011-005 /007	

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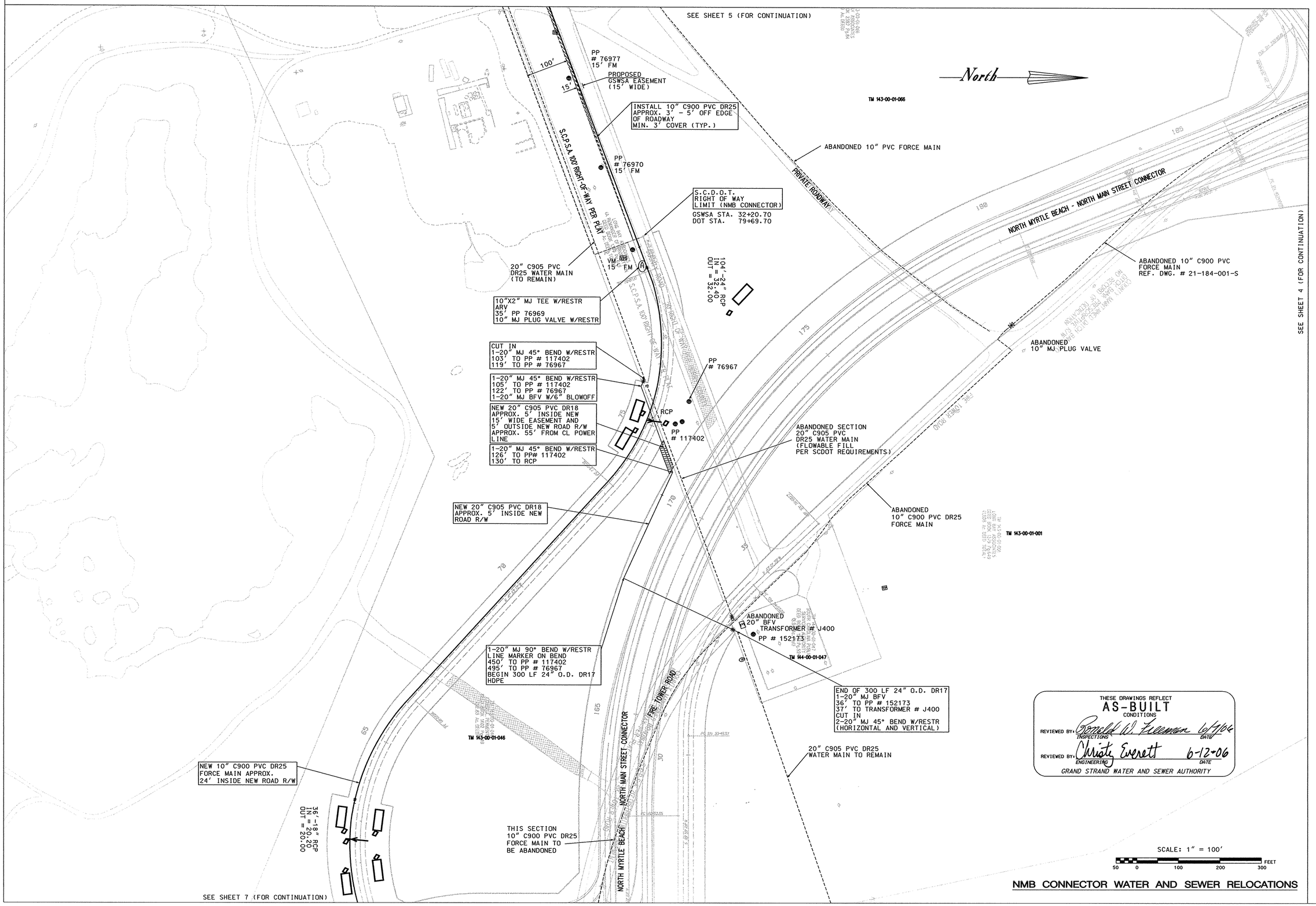

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Donald W. Freeman 6/7/06
INSPECTIONS DATE

REVIEWED BY: Christy Everett 6-12-06
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

NMB CONNECTOR WATER AND SEWER RELOCATIONS

REVISION	BY	DATE
1 - ADDITIONAL EASEMENT REQUIREMENT	REP	MARCH 2005
2 - ALIGNMENT CHANGES BASED ON ROAD PLAN AND DRAINAGE CHANGES	REP	JULY 2005
3 - FIELD REVISION	REP	06/02/06
4 - AS-BUILT	REP	MAY 2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACKSON BLUFF RD.
P.O. BOX 2305
CONWAY, SC 29526-2305
(843) 347-2441 OR 448-1686
(843) 347-4600 (FAX)
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #496-01/SEWER PROJ. #987-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB_CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 6 OF 7	
DWG # 41-011-006 /007	

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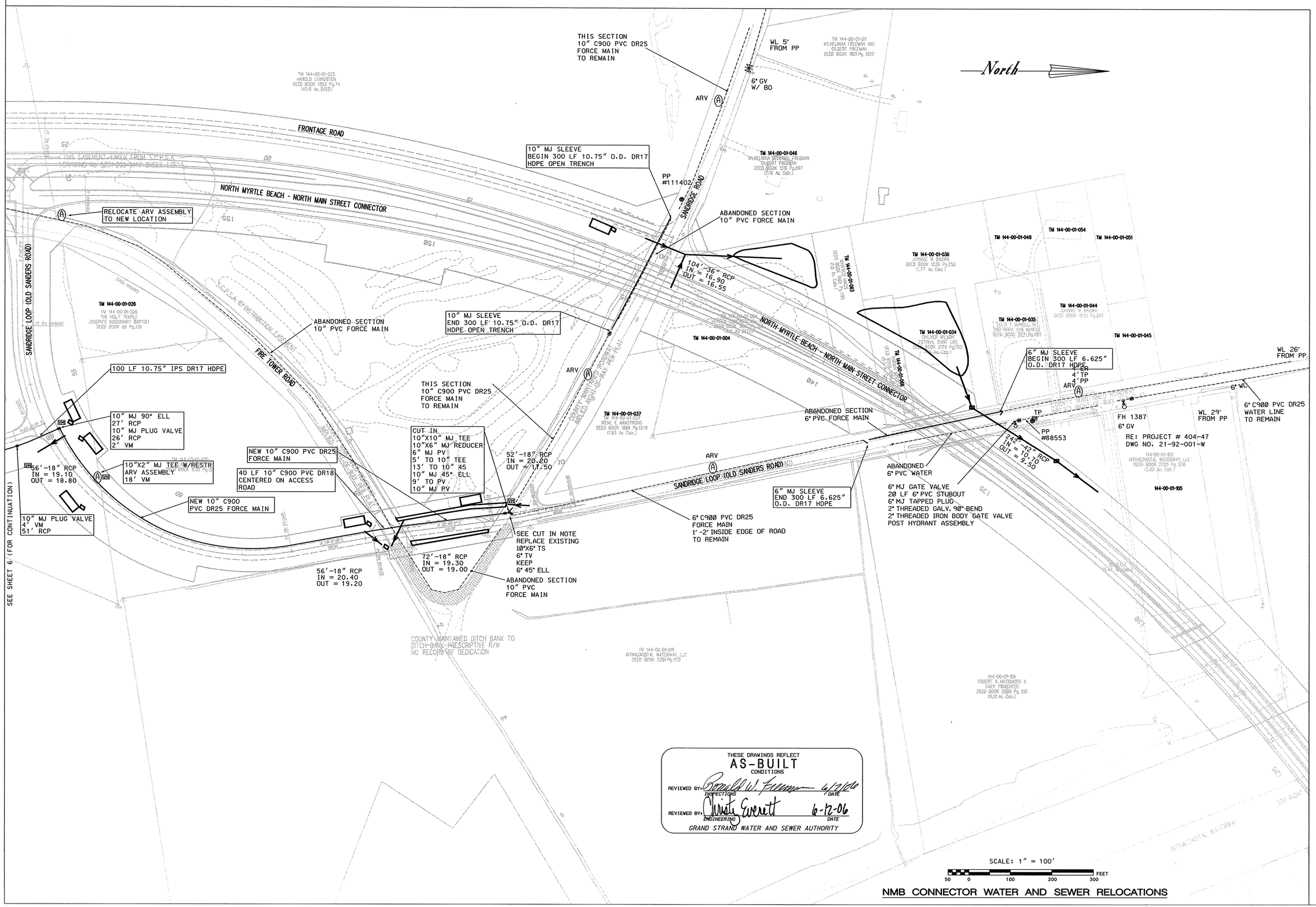

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Ronald W. Freeman 6/7/06
INSPECTIONS DATE

REVIEWED BY: Christy Everett 6-12-06
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

NMB CONNECTOR WATER AND SEWER RELOCATIONS

REVISION	BY	DATE
1 - ALIGNMENT CHANGES BASED ON ROAD PLAN AND DRAINAGE CHANGES	REP	JULY 2005
2 - BID REVISION	REP	9/22/2005
3 - AS-BUILT	REP	MAY 2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACKSON BLUFF RD.
P.O. BOX 696
CONWAY, SC 29528-2288
(843) 347-2451 OR (843) 651-1688
FAX (843) 347-2510
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #498-01 /SEWER PROJ. #887-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004	
SCALE: 1" = 100 FEET	
FILENAME: NMB_CONNECTOR	
DRAWN BY	ROBERT E. PERKINS
CHECKED BY	CHRISTINA S. EVERETT
APPROVED BY	
CHRISTINA S. EVERETT PE #21255	
SHEET 7 OF 7	
DWG # 41-011-007 /007	

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THIS SECTION 10.75" O.D.
DR17 HDPE FORCE MAIN
TO REMAIN

New FM installed
5' from old forcemain
on the North Side.
Old FM was removed

North

Install:
Two 10" MJ 45° Bends
angled to achieve separation
from Ex. 10" Fm
Did not need 45°
to tie together

THIS SECTION 10.75" O.D.
DR17 HDPE FORCE MAIN
TO REMAIN
REF. DWG. # 21-184-003-S

1-10" MJ PLUG VALVE
19' VM
47' PV

20" C905 PVC DR25
WATER MAIN
(TO REMAIN)

TP
2.40.7

PP 117398 PP 76983

Lower Existing 10" Fm within
Existing 15' wide Easement
(2' minimum Cover)
Approximately 520 LF

Install:
Two 10" MJ 45°
Bends angled
to achieve
separation from
Ex. 10" Fm

Exist.
Fm in
this area
to be
abandoned

EXISTING CONDITIONS
10" MJ 45° ELL
10" MJ CAP
2 - 10" MJ PLUG VALVE

NEW 15' WIDE EASEMENT

40 LF C900 PVC DR18
CENTERED ON ROAD
CROSSING

1-10" MJ 90° BEND
W/RESTR

INSTALL 10" C900 PVC DR25
APPROX. 3' - 5' OFF EDGE
OF ROADWAY
MIN. 3' COVER (TYP.)

NEW 10" C900 PVC DR25
APPROX. 7.5 INSIDE PROPOSED
15' WIDE EASEMENT

ABANDONED 10" PVC
FORCE MAIN

ABANDONED 10" PVC
FORCE MAIN

PP 76982
10' FM

PP
76981
12' FM

PP
76980
14' FM

NEW
GSWSA EASEMENT
(15' WIDE)

15'

100'

PP
76979
15' FM

PP
76979
15' FM

S.C. HIGHWAY 31

TO U.S. HIGHWAY 501

TO S.C. HIGHWAY 9

TM 143-00-01-001

PALMETTO LAND PARTNERS, LLC
TM 143-00-01-066

THESE DRAWINGS REFLECT
AS-BUILT
CONDITIONS

REVIEWED BY: Ronald W. Freeman 6/9/06
INSPECTIONS DATE

REVIEWED BY: Christy Everett 6-12-06
ENGINEERING DATE

GRAND STRAND WATER AND SEWER AUTHORITY

SCALE: 1" = 100'

50 0 100 200 300 FEET

ABANDONED 10" C900 PVC
FORCE MAIN
REF. DWG. # 21-184-002-S

NMB CONNECTOR WATER AND SEWER RELOCATIONS

SEE SHEET 6 (FOR CONTINUATION)

SEE SHEET 4 (FOR CONTINUATION)

41-011-008

REVISION	BY	DATE
ADDITIONAL EASEMENT REQUIREMENT	RBP	MARCH 2006
ALIGNMENT CHANGE BESIDE POND DUE TO RUBBLE FILE ADDITION	RBP	JULY 2006
AS-BUILT	RBP	MAY 2006

GRAND STRAND WATER & SEWER AUTHORITY
170 JACKSON BLUFF RD.
P.O. BOX 2000
CONWAY, SC 29526-2000
(843) 347-1641 OR 448-1688
(843) 347-1647 FAX
E-MAIL: GSWSA.COM

NMB CONNECTOR WATER AND SEWER RELOCATIONS

(S.C. 90 AND S.C. 31 INTERCHANGE)

WATER PROJ. #486-01 /SEWER PROJ. #887-01

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21255 CHRISTINA S. EVERETT

DATE: JUNE 2004
SCALE: 1" = 100 FEET
FILENAME: NMB_CONNECTOR
DRAWN BY: ROBERT E. PERKINS
CHECKED BY: CHRISTINA S. EVERETT
APPROVED BY
CHRISTINA S. EVERETT PE #21255
SHEET 5 OF 7
DWG # ~~41-011-005~~ 007

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