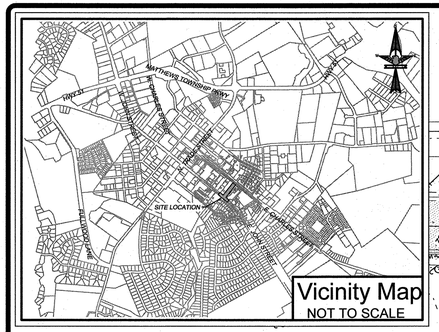


CONCEPT PLAN NOTES:

THE PROPOSED PROJECT WILL PROVIDE A NEW ROADWAY CONNECTION (CHARLES BUCKLEY WAY) BETWEEN EAST CHARLES STREET AND EAST JOHN STREET IN THE TOWN OF MATTHEWS NORTH CAROLINA. THE PROPOSED CONNECTION WILL HELP TO REDUCE TRAFFIC FROM EAST CHARLES STREET HAVING TO TRAVEL DIRECTLY INTO DOWNTOWN MATTHEWS AND SUBSEQUENTLY ONTO NORTH TRADE STREET TO TRAVEL EAST ALONG EAST JOHN STREET.

THE PROPOSED PLAN HAS MADE EVERY ATTEMPT TO MINIMIZE DISTURBANCE OF THE EXISTING WOODED PARCEL AND MAXIMIZE TREE SAVE AREA.

PER TOWN OF MATTHEWS, CHARLES BUCKLEY WAY WILL BE A LOCAL ROAD UTILIZING A CROSS SECTION FROM THE TOWN OF MATTHEWS DOWNTOWN MASTER PLAN ADOPTED IN 1997. THE PROPOSED RIGHT OF WAY IS 100'.

PROPOSED CHARLES BUCKLEY WAY NEW BUA = 18,350 SF - 42.2% OF R/W

THE PROPOSED ROADWAY SEEKS TO MINIMIZE IMPERVIOUS AREA BY USING THE TOWN OF MATTHEWS MINIMUM LANE WIDTH REQUIREMENT OF 12'.

THE PROPOSED ROAD DESIGN SEEKS TO USE A SUPER-ELEVATED CROSS SECTION TO MINIMIZE GRADING AND DISTURBED AREAS ON THE UPHILL SIDE.

THE PROPOSED CHARLES BUCKLEY WAY WILL HAVE SIDEWALK ON ONLY ONE SIDE TO MINIMIZE IMPERVIOUS AREA AND IS DESIGNED AT THE TOWN MINIMUM 5' WIDTH.

PROPOSED SIDEWALK IS DESIGNED TO MEANDER THROUGH WOODED PORTION OF SITE WITH MINIMAL GRADING TO RETAIN AS MUCH NATURAL/WOODED AREA AS POSSIBLE.

STORMWATER MANAGEMENT ALONG CHARLES BUCKLEY WAY WILL BE ADDRESSED BY INSTALLING CURB CUTS WITH FLOW DEFLECTORS TO CONVEY SURFACE RUNOFF BEHIND THE CURB. A GRASSED SWALE IS PROPOSED ON THE LOW END OF THE SITE. STORMWATER WILL BE TREATED AND SUBSEQUENTLY CONVEYED TO THE EXISTING DRAINAGE PATTERNS OF THE SITE. GRASSED SWALES ARE PROPOSED INSTEAD OF ENHANCED SWALES TO MINIMIZE GRADING, REDUCING THE NEED FOR ADDITIONAL EXCAVATION WHICH WOULD DAMAGE EXISTING TREE ROOT SYSTEMS. ENERGY DISSIPATORS WILL BE INSTALLED BELOW THE FLOW DEFLECTORS ON THE HIGH END OF THE SITE TO RETURN SURFACE RUNOFF TO EXISTING DRAINAGE PATTERNS.

JOHN STREET BUA WILL BE CONVEYED VIA EXISTING ROADWAY DITCHES AND DRAINAGE SYSTEM.

UNDISTURBED OPEN SPACE
REQUIRED 17.5% (7,606 SQ. FT.)
PROVIDED 28% (12,085 SQ. FT.)

EAST CHARLES ST.
60' PUBLIC R/W

EAST JOHN STREET
SR 1009
75' PUBLIC R/W
RECORDED IN MB 4, PG 17

CHARLES BUCKLEY WAY
100' ROW

TAX PID - 21501423
OWNER - TOWN OF MATTHEWS
DEED REFERENCE - 17078/334
MAP REFERENCE - 4/17
ZONING - R-12
(NOW OR FORMERLY)

TAX PID - 21501407
OWNER - THOMAS & MARY FUNDERBURK LIVING TRUST
DEED REFERENCE - 21353/335
MAP REFERENCE - 4/17
ZONING - R-12
(NOW OR FORMERLY)

TAX PID - 21501406
OWNER - 433 EAST JOHN STREET CORPORATION
DEED REFERENCE - 8853/21
MAP REFERENCE - 4/17
ZONING - I-1
(NOW OR FORMERLY)

UNDISTURBED AREA
12,085 SQ. FT. (28%)

DI
RIM/718.32

DI
RIM 719.50
OUT 717.21
15" RCP

PROP CURB CUT/INLET DEFLECTOR WITH RIPRAP APRON (TYP.)

GRASSED SWALE

PROPOSED RIPRAP APRON UNDERCUT RIP RAP AS TO MAINTAIN DITCH GRADES

PROP DI-1
NCDOT STD # 840.15
RIM: 717.50
INV. OUT: 714.00

102 LF OF 15" RCP @ 0.50%

PROP DI-2
NCDOT STD # 840.15
RIM: 716.00
INV. IN: 713.49
INV. OUT: 713.39

26 LF OF 15" RCP @ 2.00%

PROP CI-3
NCDOT STD # 840.01
RIM: 716.28(FL)
INV. IN: 712.87
INV. OUT: 712.77

INTERCEPT EXISTING 12" STORM PIPE WITH NEW JUNCTION BOX
PROP (JB-6)
RIM: 711.25
INV. IN: 708.73
INV. OUT: 708.63

INSTALL NEW DROP INLET AT LOW POINT IN PARKING LOT
PROP DI-7
NCDOT STD # 840.15
RIM: 708.50
INV. IN: 706.90
INV. OUT: 706.80

SAFETY HANDRAIL
COUNTY STD. 50.04

122 LF OF 15" RCP @ 3.75%

85 LF OF 15" RCP @ 2.04%

12 LF OF 15" RCP @ 1.67%

PROP CI-8
NCDOT STD # 840.01
RIM: 708.60 (FL)
INV. IN: 706.60 (12" & 15")
APPROX. INV. OUT: 706.50

EXTEND EXISTING 12" RCP TO NEW CURB INLET

EX DI
RIM 712.05
INV. OUT - 709.45 (12" RCP)

EX DI
RIM 705.93
INV. OUT - 704.18 (15" CPP)

EX JB
RIM 706.96
INV. IN - 703.61 (15"CPP)
INV. IN - 703.51 (15" & 24" CPP)
INV. OUT - 703.41 (24" RCP)

EX JB
RIM 705.76
INV. IN - 702.26 (24" RCP)
INV. IN - 701.51 (12" RCP)
INV. IN - 701.16 (12" RCP)
INV. OUT - 701.26 (18" RCP)

RIM 704.47
INV. OUT - 703.17 (12" RCP)

8" PVC
INV. 705.40

SAW CUT EXISTING ASPHALT REMOVE AND REPLACE AS NEEDED TO RAISE PROPOSED SIDEWALK

SEE TRAFFIC CONTROL PLAN ON SHEET C-5.0

OPEN CUT, REMOVE AND REPLACE EXISTING ASPHALT, ONE LANE AT A TIME, AS NEEDED TO REPLACE EXISTING 18" CULVERT WITH 24" RCP CULVERT. (MATCH EXISTING INVERTS)

MILL 10 FEET OF EXISTING PAVEMENT AT END OF OVERLAY FOR SMOOTH TRANSITION

PROPOSED NEW PAVEMENT SECTION

PROPOSED 1.5" OVERLAY

12" RCP @ 1.50%

12" RCP
INV. 712.42

12" RCP
INV. 711.73

PROP CI-4
NCDOT STD # 840.01
RIM: 714.65(FL)
INV. IN: 711.27
INV. OUT: 711.17

YI
RIM 710.66

12" RCP
INV. 708.87

12" RCP
INV. 707.28

12" RCP
INV. 707.32

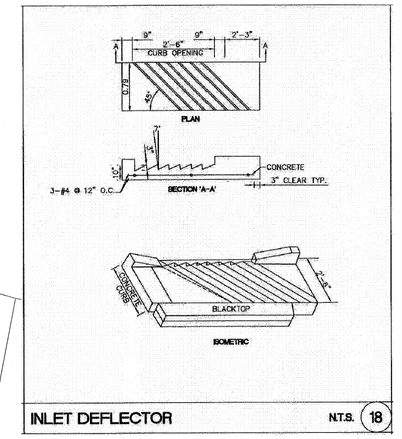
12" CMP
INV. 704.34

12" CMP
INV. 704.02

12" PVC
INV. 703.31

INSTALL JUNCTION MANHOLE TO CONNECT PROPOSED 24" CULVERT TO EXISTING 24" STORM PIPE. SAW CUT REMOVE AND REPLACE EXISTING CONCRETE DRIVEWAY AS NEEDED. MANHOLE SHALL BE SHIFTED IF IN CONFLICT WITH EXISTING 12" DRIVEWAY CULVERT. RIM SHALL BE FLUSH WITH EXISTING DRIVEWAY ELEVATION. INVERT SHALL MATCH EXISTING 24" RCP ELEVATION.

GRAPHIC SCALE
0 30' 60'
(IN FEET)
1 inch = 30 ft.



INLET DEFLECTOR N.T.S. 18

NO.	DATE	BY	ISSUE
1.	04/07/14	JLR	ADDRESS NCDOT COMMENTS
2.	05/15/14	BLL	ADDRESS COUNTY COMMENTS
3.	07/10/14	ARP	ADDRESS COUNTY COMMENTS
4.	08/21/14	KEL	ADDED UNDISTURBED AREA PER COUNTY COMMENTS
5.	01/08/15	JLR	ADDRESS NCDOT / MECK. COUNTY COMMENTS

EAGLE ENGINEERING
P.O. BOX 551
2013A Van Buren Avenue
Indian Trail, NC 28079
Alpharetta, GA 30009
(704) 882-4222
(678) 339-0640
www.eagleonline.net

CHARLES BUCKLEY WAY
TOWN OF MATTHEWS, NC

TOWN OF MATTHEWS-PUBLIC WORKS
1600 TANK TOWN ROAD
MATTHEWS, NC 28105

GRADING & DRAINAGE PLAN

DESIGNED BY	DRAWN BY	CHECKED BY
JLR	JLR	JSM
Scale	DATE	JOB NUMBER
AS SHOWN	09/30/13	4891

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 36900 BENJAMIN L. LANZLOTTI
1-8-15

Sheet
C-3.0

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