

Agenda Item: Stevens Grove Subdivision Revised Preliminary Plat (formerly Arborfield Subdivision)

DATE: April 18, 2017
FROM: Mary Jo Gollnitz, Planner II

Background/Issue:

Pursuant to § 155.405.7.B.3 of the Matthews Unified Development Ordinance, the Preliminary Plan of a proposed subdivision is forwarded to the Board of Commissioners within 30 days following the determination that all required standards have been met. The Board of Commissioners shall approve or approve with conditions the Preliminary Plan. If the Preliminary Plan is conditionally approved, the minutes of the Board of Commissioners meeting shall state the measures necessary for the Final Plat to be approved.

Developer Matthews Arborfield LLC, has submitted a revised Preliminary Plat for Stevens Grove Subdivision (third submission). The new preliminary plan eliminates two cul-de-sacs on Shelton Oaks Court and Margaret Ridge Drive and reconfigures them into one "hammerhead" cul-de-sac (see attached maps). The revised preliminary request will not affect Phase I of the subdivision that is already being developed.

About the subdivision:

- development remains a 50 lot subdivision
- new road/cul-de-sac reconfiguration allows lots #22 – 24 to be larger lots
- "hammerhead" cul-de-sac will be named Shelton Oaks Court
- "hammerhead" cul-de-sac will have mountable islands to allow fire apparatus and garbage truck maneuverability
- development is by right, R-15 district
- public improvements will be installed including sidewalk and curb and gutter
- subdivision is being accessed from Arborfield Drive (except lot 50)
- the homes are being built within the subdivision to maintain development under the Built Upon Area (BUA) of <24%
- subdivision is adjacent to the City of Charlotte limits at Echo Forest apartments (along Pineville-Matthews Rd) and Hugh Forest Subdivision. There is no access to either of these locations.
- developer cannot get building permits or sell lots until final plat(s) are recorded
- final plats for Phase I (lots 1- 17 and 43-49) have already been recorded

Proposal/Solution:

The attached preliminary plat does meet all the R-15 requirements and conditions that are necessary for approval. The proposed preliminary plat complies with the Matthews UDO.

Financial Impact:

There will be 48 new homes added to the tax base, one less than previously approved.

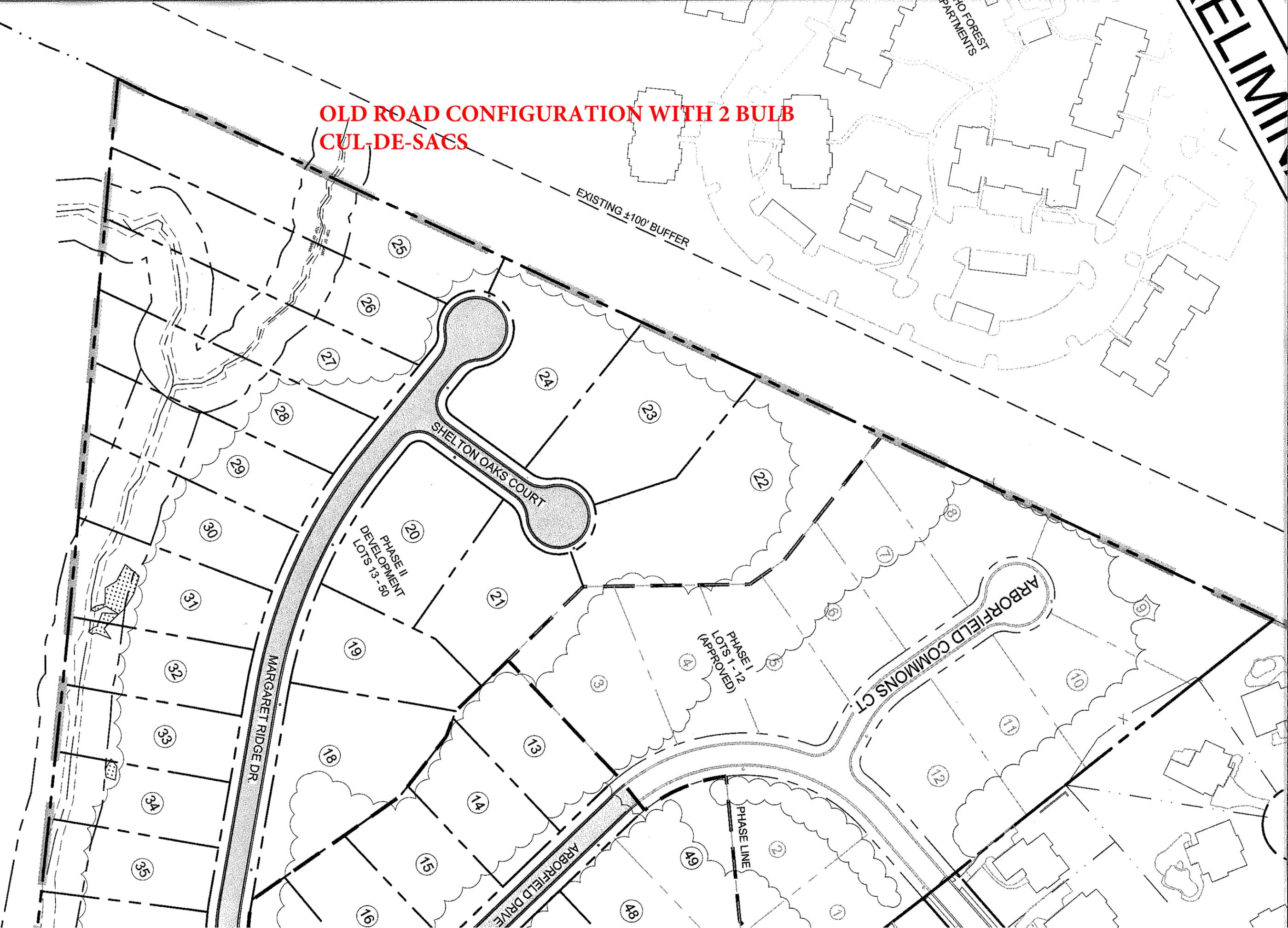
Related Town Goal(s) and/or Strategies:

Economic Development/Land Use Planning: to enhance the quality of life of the citizens by aggressively pursuing a balanced tax base; and by planning for orderly growth and development.

Recommended Motion/Action:

Staff recommends approval of the preliminary plat as presented.

**OLD ROAD CONFIGURATION WITH 2 BULB
CUL-DE-SACS**



*LOT 42 (PHASE IIB) HAS BEEN ALLOCATED 0 SF OF AREA TO MAINTAIN LOT NUMBERING OF THE PLAT - PHASE 2 MAP 1 DUE TO PHASE IIB LOT RECONFIGURATION AND WILL NOT BE PLATTED

NEW ROAD CONFIGURATIN WITH HAMMERHEAD CUL-DE-SAC

PC BUFFER
R.B. PHARR & ASSOC. SURVEY DATA

MOUNTABLE CONC. CURB
& PAVING CAPABLE OF
SUPPORTING 80,000 LBS.
FOR FIRE ACCESS

FUTURE PHASE IIB/
DEVELOPMENT
LOTS 18 - 39
EPM #352163

EXISTING WETLAND,
R ALTA SURVEY

SHELTON OAKS COURT
95' PUBLIC R/W DEDICATION

EXISTING SEASONAL
STREAM PER R.B.
PHARR & ASSOC.
SURVEY DATA

CBU CONC.
PAD

DIRECTIONAL
CURB RAMPS,
TYP.

UOS
3.68 AC
160275.46 SF

APPROX. LOC. PROP.
STREET LIGHTS, TYP.

EACH LOT TO RECEIVE 3/4"
WATER METER AND 4"
SEWER LATERAL

MARGARET
RIDGE DR.
95' PUBLIC R/W DEDICATION

EXISTING DISTURBED OPEN SPACE;
87 TOTAL ACRES

13' WATER
ESMT.

PC / SWIM BUFFER
R.B. PHARR & ASSOC. SURVEY DATA

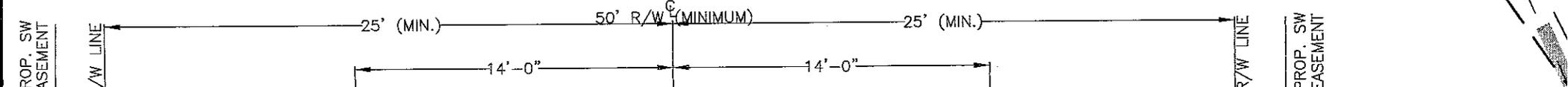
EXISTING PERENNIAL STREAM

UPLAND ZONE
STREAM SIDE ZONE

EXISTING WETLANDS,
R ALTA SURVEY
55 TOTAL
(WETLAND ACRES)
FILL ALLOWED IN
WETLANDS / SWIM
BUFFER, TYP.

EMORY OAK DRIVE

SECOND MEANS OF INGRESS / EGRESS DEEMED
NOT FEASIBLE PER MEETING WITH RANDY
RAZIER, COUNTY FIRE MARSHALL ON
SEPTEMBER 29, 2016 DUE TO THE SITE'S
TOPOGRAPHY AND LANDLOCKED CHARACTER



Parcel #	Area	Parcel #	Area	Parcel #	Area
1	20717	18	31597	35	19974
2	18144	19	19339	36	17375
3	23898	20	20935	37	16488
4	18264	21	22951	38	19897
5	18803	22	27619	39	20023
6	16074	23	34377	40	24167
7	18088	24	38785	41	22862
8	19473	25	47070	42*	0
9	28863	26	33345	43	16908
10	20172	27	33869	44	18185
11	17619	28	32996	45	18753
12	22961	29	27005	46	17577
13	17931	30	26219	47	15537
14	16282	31	22877	48	15000
15	15845	32	20341	49	17882
16	16726	33	16645	50	204055
17	22369	34	16852		

*LOT 42 (PHASE B) HAS BEEN ALLOCATED 0 SF OF AREA TO MAINTAIN LOT NUMBERS OF THE PLAT - PHASE 2 MAP 1 DUE TO PHASE B LOT RECONFIGURATION AND WILL NOT BE PLATTED

30' PC BUFFER PER R.B. PHARR & ASSOC. SURVEY DATA

EXISTING WETLAND, PER ALTA SURVEY

EXISTING SEASONAL STREAM PER R.B. PHARR & ASSOC. SURVEY DATA

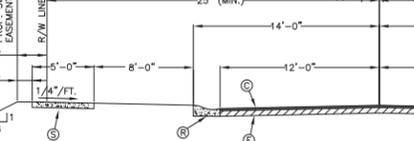
EACH LOT TO RECEIVE 1/2" WATER METER AND 4" SEWER LATERAL

UNDISTURBED OPEN SPACE: ±8.87 TOTAL ACRES

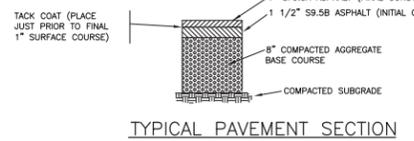
35' PC / SWIM BUFFER PER R.B. PHARR & ASSOC. SURVEY DATA

EXISTING WETLANDS, PER ALTA SURVEY (±0.55 TOTAL WETLAND ACRES) NO FILL ALLOWED IN WETLANDS / SWIM BUFFER, TYP.

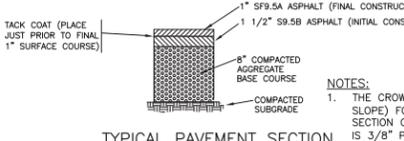
SECOND MEANS OF INGRESS / EGRESS DEEMED NOT FEASIBLE PER MEETING WITH RANDY FRAZIER, COUNTY FIRE MARSHALL ON SEPTEMBER 29, 2016 DUE TO THE SITE'S TOPOGRAPHY AND LANDLOCKED CHARACTER



PAVEMENT SCHEDULE
 (C) 2.5" BITUMINOUS CONCRETE SURFACE COURSE, TYPE S9.5B AND S9.5A (SEE LEFT)
 (E) 8" COMPACTED AGGREGATE BASE COURSE
 (G) 2'-0" VALLEY GUTTER
 (S) 4" CONCRETE SIDEWALK



1 MATTHEWS TYPICAL LOCAL RESIDENTIAL STREET SECTION
SCALE: NTS



2 MATTHEWS TYPICAL LOCAL LIMITED RESIDENTIAL STREET SECTION
SCALE: NTS

LEGEND

- PROPERTY LINE
- PHASE LINE
- UNDISTURBED OPEN SPACE
- COMMON OPEN SPACE

DEVELOPMENT DATA:

TAX PARCEL ID: 22706103, 22706163, 22706283, 22706284, 22706501, 22706502, 22706503, 22706504, 22706532, 22706533, 22706534, 22706535, 22706536, 22706537, 22706538, 22706539, 22706540, 22706541, 22706544, 22706545, & 22706546

TOTAL SITE AREA: 429.20 ACRES
 TOTAL ACRES IN NEW LOTS: ±29.10 ACRES

ZONING: R-15
 PROPOSED USE: LOW DENSITY, SINGLE-FAMILY

LOTS PROPOSED: 49 LOTS
 DENSITY PROPOSED: OVERALL: 1.39 DU / AC
 MIN. LOT SIZE: 15,000 SF
 ±15,000 SF (LOT 48)
 80' (MIN. @ SETBACK)

SMALLEST LOT: 40'
 MIN. LOT WIDTH: 10'
 FRONT SETBACK: 10'
 MIN. SIDE YARD: 55'
 MIN. REAR YARD: 35'

HOA MAINTAINED OPEN SPACE
 REQUIRED OPEN SPACE: 45 LOTS x 1/8 ACRE = 1.29 ACRES
 PROVIDED OPEN SPACE: ±2.76 ACRES

PROPOSE FEES-IN-LIEU FOR EACH NEW SINGLE-FAMILY LOT INSTEAD OF LAND DEDICATION FOR PUBLIC RECREATION

TOTAL ACRES: ±35.29
 TOTAL CURRENT TAX VALUE: \$2,455,300
 TAX VALUE PER ACRE: \$69,574.95
 TOTAL NEW BUILDING LOTS: 45
 NUMBER OF ACRES REQUIRED: 1.29
 FOR LAND DEDICATION (1/8 ACRE PER NEW LOT)
 ESTIMATED FEE IN-LIEU-OF LAND DEDICATION: \$89,453.51
 ESTIMATED FEE PER LOT (BASED ON 45 LOTS): \$1,944.64

FLOOD PLAIN PANEL NO.: 3710447900K - DATED 02/19/2014

UNDISTURBED OPEN SPACE CALCULATION (LESS THAN 24% BUILT UPON AREA):

TOTAL SITE AREA: ±35.29 AC
 MINIMUM 25% UNDISTURBED OPEN SPACE REQUIRED: ±8.82 AC
 UNDISTURBED OPEN SPACE PROVIDED: ±8.87 ACRES OR 25.13%

GENERAL NOTES:

- THIS PROJECT PROPOSES TO DEVELOP UNDER "LOW DENSITY" WATER QUALITY REQUIREMENTS, AND AS SUCH, BUILT-UPON AREA (BUILDINGS, PAVING, ETC.) ARE LIMITED. CURRENTLY, EACH LOT IS ALLOCATED 44,996 SF OF BUILT-UPON AREA (BUA), MAXIMUM. LARGER LOTS MAY BE GRANTED A HIGHER ALLOCATION AS APPROPRIATE, BUT THAT PAVING MUST BE REMOVED FROM THE BUA ALLOCATION FOR THE REMAINING LOTS.
- PROPOSED BUA (INFRASTRUCTURE; INCLUDES 15' X 8' DRIVEWAY APRON) TOTAL ACRES: ±35.29 AC
 BUA TO REMAIN: ±1.02 AC
 NET ACRES: ±34.27 AC
 24% BUA AVAILABLE: ±8.22 AC
 BUA USED IN R/W: ±2.72 AC
 NET BUA FOR LOTS: ±5.51 AC
 PROPOSED # OF NEW LOTS*: 48
 BUA AVAILABLE PER LOT: ±4,996 SF
 % OF PROPOSED IMPERVIOUS: ±24.00%
- * 910 REVERDY LANE (LOT 49) IS EXCLUDED FROM LOT COUNT BECAUSE IT PROPOSES NO NEW BUA.
- BUILDER SHALL PREPARE AND SUBMIT AN AS-BUILT IMPERVIOUS SURVEY FOR EACH LOT PRIOR TO C.O.
- AN OVERALL BUA SURVEY SHALL BE PROVIDED AND NOTED ON THE UNDISTURBED OPEN SPACE EASEMENT PLAT
- DEVELOPER SHALL PREPARE AND SUBMIT AN AS-BUILT SURVEY FOR THE PROPOSED RIGHT-OF-WAY FOR PUBLIC DEDICATION.
- PROJECT TO BE SEWERED BY CHARLOTTE - MECKLENBURG UTILITY DEPARTMENT (CMUD)
- COMMON AREAS WILL BE OWNED/MAINTAINED BY THE HOA.

PROPOSED ROAD SECTIONS

ARBORFIELD DRIVE: LOCAL RESIDENTIAL - 50' R / W
 ARBORFIELD COMMONS COURT: LOCAL LIMITED - 44' R / W
 MARGARET RIDGE DRIVE: LOCAL RESIDENTIAL - 50' R / W
 SHELTON OAKS COURT: LOCAL RESIDENTIAL - 50' R / W

PROPOSED SAN, SEWER / PEDESTRIAN ACCESS EASEMENT WITH 5' WIDE HARDWOOD MULCH PATH

PROPOSED ROAD SECTIONS

ARBORFIELD DRIVE: LOCAL RESIDENTIAL - 50' R / W
 ARBORFIELD COMMONS COURT: LOCAL LIMITED - 44' R / W
 MARGARET RIDGE DRIVE: LOCAL RESIDENTIAL - 50' R / W
 SHELTON OAKS COURT: LOCAL RESIDENTIAL - 50' R / W

EPM REFERENCE NUMBERS

- #350027 SKETCH / CONCEPT PLAN
- #351356 PHASE 1 CONSTRUCTION PLAN
- #352163 PHASE 2 CONSTRUCTION PLAN
- #356721 RECOMBINATION PLAT
- #357250 PHASE 1 LOT GRADING & EROSION CONTROL PLAN
- #357692 MINOR REVISION TO APPROVED SKETCH / CONCEPT PLAN 01
- #359285 PHASE 1 MAP 1 PLAT
- #359885 MINOR REVISION TO APPROVED PHASE 1 LOT GRADING & EROSION CONTROL PLAN
- #362122 MAJOR REVISION TO APPROVED PHASE 1 LOT GRADING & EROSION CONTROL PLAN
- #367085 PHASE 2 MAP 1 PLAT
- #368558 MAJOR REVISION TO APPROVED SKETCH / CONCEPT PLAN 02
- #371348 PHASE 2 CONSTRUCTION PLAN/RAP
- #372821 MAJOR REVISION TO APPROVED SKETCH / CONCEPT PLAN 03

PAVEMENT NOTES:

- SUBGRADE MUST BE TESTED BY AN INDEPENDENT TESTING LAB, AND HAVE A DENSITY OF 100% IN ACCORDANCE WITH AASHTO-199; BASE COURSE MUST HAVE A DENSITY OF 90% FOR B.C.B.C. AND 100% FOR A.B.C. IN ACCORDANCE WITH AASHTO-1180. SURFACE COURSE SHALL BE COMPACTED TO A DENSITY OF 95%. ALL TESTS TO BE CONDUCTED BY AN INDEPENDENT TESTING FIRM AT THE DEVELOPERS EXPENSE, AND THE RESULTS SENT TO MECKLENBURG COUNTY ENGINEERING DEPARTMENT AND TO THE STREET MAINTENANCE DEPARTMENT FOR THE TOWN.
- FINAL ONE (1) INCH OF ASPHALT TO BE APPLIED WHEN DEVELOPMENT HAS 80% OCCUPANCY.
- FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS OF 80,000 POUNDS

This Plan Is A Preliminary Design. NOT Released For Construction.

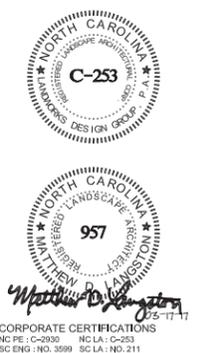


No.	Date	By	Description
1	01/25/17	SDW	RTAP SUBMITTAL - 01/25/2017
2	02/20/17	SDW	REVIEW COMMENTS - 02/16/2017
3	03/17/17	SDW	REVIEW COMMENTS - 03/06/2017



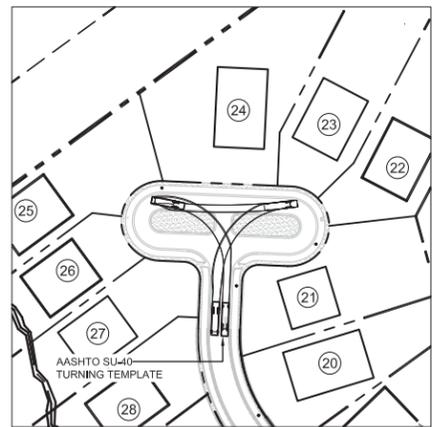
STEVENS GROVE
 TOWN OF MATTHEWS, MECKLENBURG COUNTY,
 NORTH CAROLINA
 MATTHEWS ARBORFIELD, LLC
 121 WEST TRADE STREET, 28TH FLOOR
 CHARLOTTE, NC 28202

PRELIMINARY PLAT

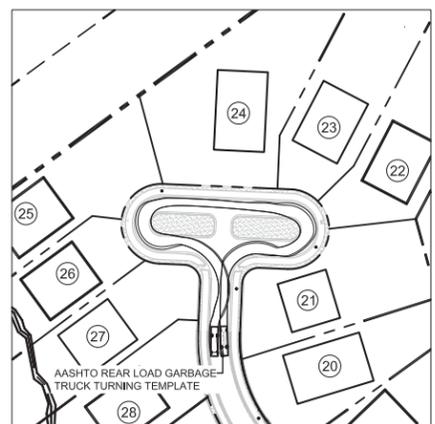


Project Manager: MDL
 Drawn By: SDW
 Checked By: SSW
 Date: 08/15/2015
 Project Number: 14025

Sheet Number: L-201



TURNING TEMPLATE - FIRE TRUCK
SCALE: 1" = 100'



TURNING TEMPLATE - GARBAGE TRUCK
SCALE: 1" = 100'



GENERAL NOTES:

1. APPLICANT HAS AGREED TO OBSERVE THE DRAINAGE FEATURE FLOWING WITHIN AND ADJACENT TO THE WESTERN AND SOUTHERN PROPERTY BOUNDARY WITH THE TOWN OF MATTHEWS ENGINEER TO DOCUMENT EXISTING STREAM BANK CONDITIONS PRIOR TO THE BEGINNING OF CONSTRUCTION OF THE SUBJECT PROPERTY, APPLICANT AND THE TOWN ENGINEER WILL OBSERVE THE DRAINAGE FEATURE ONCE THE INITIAL ROAD PAVING IS COMPLETE (MINUS FINAL LIFT OF ASPHALT) TO DETERMINE IF ANY ABNORMAL DEGRADATION HAS OCCURRED DUE SOLELY TO THE PERMITTED DEVELOPMENT ON THE PROPERTY. IF STREAM BANK DEGRADATION IS OBSERVED IN SPECIFIC AREAS ON THE SUBJECT PROPERTY AND DETERMINED TO BE THE RESULT OF APPLICANT'S PERMITTED DISTURBANCE, THEN APPLICANT WILL EMPLOY THE SERVICES OF A CERTIFIED WETLANDS OR STREAM RESTORATION SPECIALIST TO RE-STABILIZE THE BANKS IN THOSE AREAS AND TO DOCUMENT THE REPAIRS FOR THE TOWN OF MATTHEWS
2. CLEARING LIMITED TO AREAS OF INFRASTRUCTURE AND LIMITS OF DISTURBANCE, SELECTIVE CLEARING TO OCCUR ON LOTS AS SHOWN
3. MASS GRADING NOT PROPOSED FOR THIS PROJECT, SOME ADDITIONAL LOT GRADING MAY BE REQUIRED TO PREPARE LOTS FOR BUILDER
4. PROJECT WILL UTILIZE SOIL EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES IN ACCORDANCE WITH STATE OF NORTH CAROLINA AND MECKLENBURG COUNTY TO LIMIT EXCESS WATER AND SEDIMENTATION FROM LEAVING THE PROJECT SITE

TREE CANOPY REQUIREMENTS

OVERALL TREE CANOPY REQUIREMENTS

REQUIRED TREE CANOPY (R-15): 20%

CALCULATED TREE CANOPY AREA
(SA - U) x 0.2 = RTC
SA: TOTAL SITE AREA (SQUARE FEET)
U: ANY UTILITY EASEMENTS, ROAD RIGHTS-OF-WAY, OR OTHER AREA ALLOWED TO BE EXCLUDED (SQUARE FEET)
RTC: REQUIRED TREE CANOPY (SQUARE FEET)
(SA - U): NET LAND DISTURBANCE AREA (NLD) (SQUARE FEET)
(1,537,274 - 19,514) x 0.2 = RTC
1,517,760 x 0.2 = RTC
RTC = 303,552 SF

PRESERVED TREE CANOPY PROVIDED: ±448,140 SF
PHASE I NEWLY PLANTED LARGE MATURING STREET TREES: 32 x 2,000 SF = 64,000 SF
PHASE I NEWLY PLANTED SMALL MATURING STREET TREES: 4 x 400 SF = 1,600 SF
PHASE II NEWLY PLANTED STREET TREES: 91 x 2,000 SF = 182,000 SF
TOTAL TREE CANOPY PROVIDED: ±695,740 SF

LEGEND

- PROPERTY LINE
- PHASE LINE
- COMMON OPEN SPACE (±120,226 SF)
- PROPOSED TREE SAVE AREAS (±448,140 SF)
- SELECTIVE CLEARING (±236,664 SF)

TOTAL SITE ALLOWABLE BUA (SF) SUMMARY CHART

SITE AREA	1,537,232.40 (35.29 AC.)
BUA TO REMAIN	44,385
NET SITE AREA	1,492,847.40
24% BUA AVAILABLE	358,283.38
TOTAL MAX LOT BUA (SF)	4996,237
TOTAL MAX ROW BUA (SF)	118,464
TOTAL MAX SITE BUA (SF)	358,283.38
TOTAL MAX SITE BUA (%)	24%
UNDISTURBED OPEN SPACE	
REQUIRED (SF)	384,199
PROVIDED (SF)	393,782

This Plan Is A Preliminary Design. NOT Released For Construction.

0' 100' 200' 400'
SCALE: 1"=100'

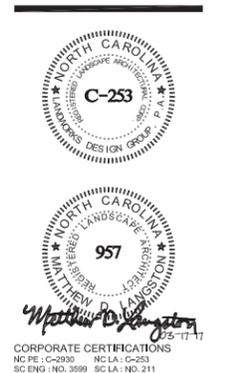
REVISIONS:

No.	Date	By	Description
SEE PLAN ATTACHED LIST	01/25/17	SDW	RTAP SUBMITTAL - 01/25/2017
SEE PLAN ATTACHED LIST	02/20/17	SDW	REVIEW COMMENTS - 02/16/2017
SEE PLAN ATTACHED LIST	03/17/17	SDW	REVIEW COMMENTS - 03/06/2017

Landworks
Design Group, P.A.
7821 Little Avenue, Suite 111
Charlotte, NC 28226
704-941-8104 Fax: 704-941-8104

STEVENS GROVE
TOWN OF MATTHEWS, MECKLENBURG COUNTY,
NORTH CAROLINA
MATTHEWS ARBORFIELD, LLC
121 WEST TRADE STREET, 28TH FLOOR
CHARLOTTE, NC 28202

SUBDIVISION CLEARING PLAN



CORPORATE CERTIFICATIONS
NC PE: C-2533 NC L.S.: C-2533
SC ENG: NO. 3599 SC L.S.: NO. 211

Project Manager: MDL
Drawn By: SDW
Checked By: SSW
Date: 08/15/2015
Project Number: 14025
Sheet Number: L-301
SHEET # 3 OF 3