

DETAILED GRADING PLAN

LOT 56 IN OLDE MILL PHASE III, A SUBDIVISION OF PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

NOTES:

ALL PROPERTY BOUNDARY INFORMATION HAS BEEN PROVIDED BY THE APPROVED SUBDIVISION PLAT BY OTHERS.

THE PROPOSED GRADING REFERS TO THE APPROVED GRADING ON THE FINAL ENGINEERING PLAN DONE BY OTHERS.

WATER AND SEWER SERVICES:
WATER SERVICE TO BE 1 1/2" MIN. TYPE K COPPER MIN. DEPTH 5'.

SANITARY SERVICE TO BE 6" SDR 26 PVC MIN. SLOPE OF 1%

SANITARY & WATER SERVICES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

MIN. SEPARATION OF WATER AND SANITARY SERVICES 10'

EROSION CONTROL:
TO BE APPLIED PER THE ILLINOIS URBAN MANUAL, LATEST EDITION

CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION TO DETERMINE IF ANY CONFLICTS EXIST, THE DESIGN ENGINEER MUST BE NOTIFIED PRIOR TO START OF CONSTRUCTION. FOR BUILDING LINES, EASEMENTS AND OTHER RESTRICTIONS NOT SHOWN HEREON REFER TO YOUR DEED, CONTRACT, TITLE POLICY, ZONING ORDINANCE, ETC.

FOR UNDERGROUND UTILITY LOCATIONS AND PRIOR TO ANY CONSTRUCTION, CONTACT J.U.L.I.E., TOLL FREE 1-800-892-0123

CURRENT ZONING = R-3 RESIDENTIAL

BENCHMARK:
"X" MARKED ON THE BACK OF CURB IN FRONT OF THE FIRE HYDRANT ACROSS FROM LOT 56.
ELEV.=693.87

ORDERED BY:
TSK BUILDERS

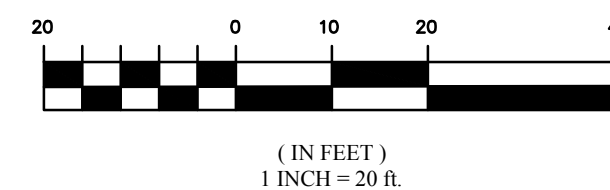
LOT COVERAGE

| | |
|-------------------------|-----------------|
| LOT AREA | = 13,500 SF |
| BUILDING AREA | = 4,046 SF |
| DRIVEWAY | = 956 SF |
| WALKS | = 171 SF |
| TOTAL % COVERAGE | = 38.31% |

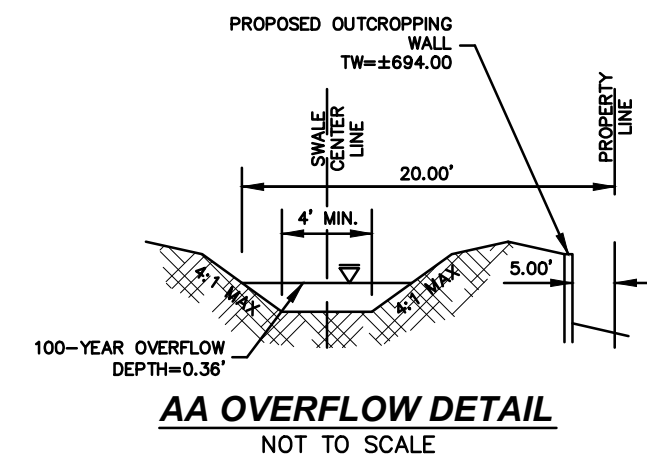
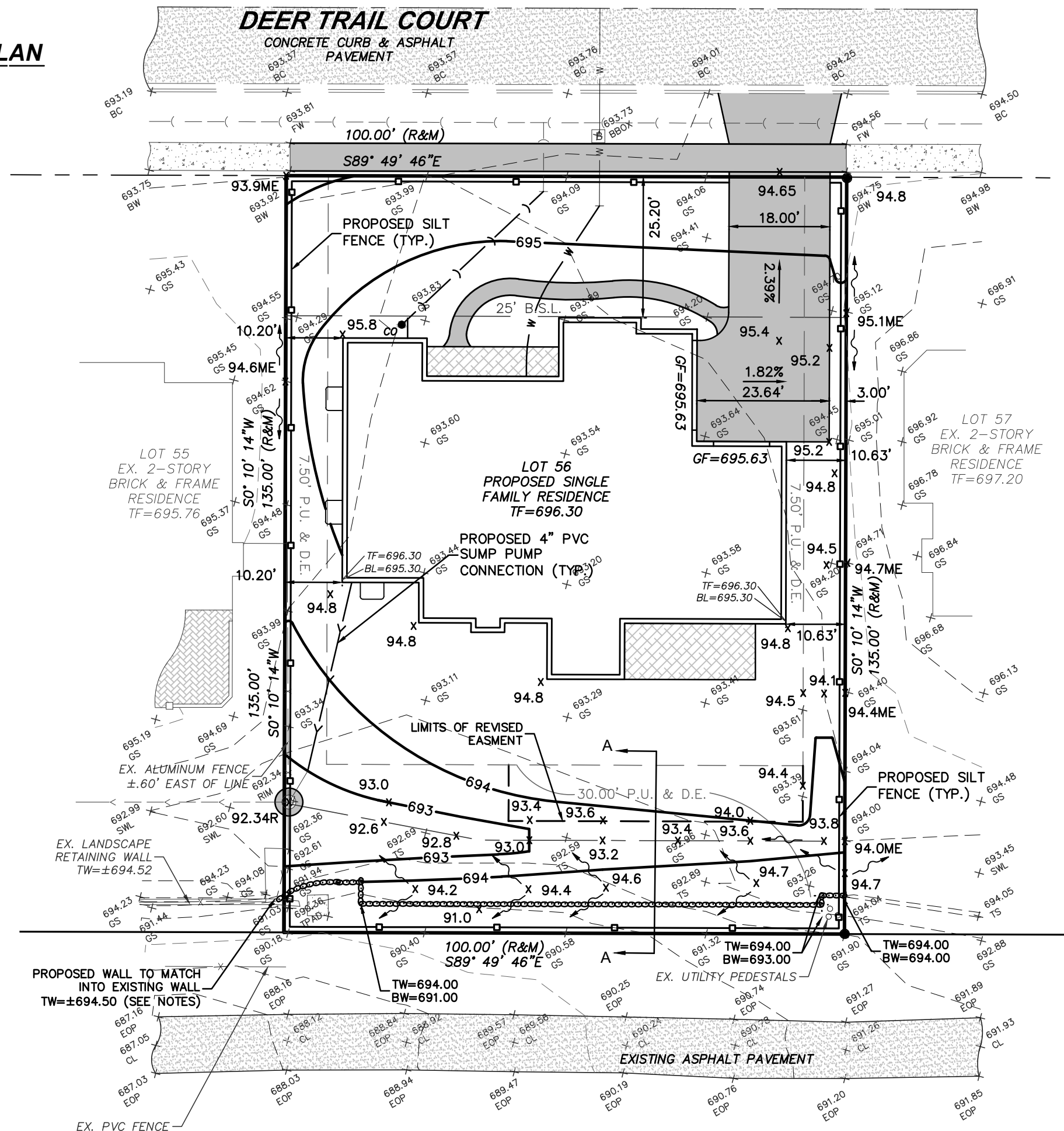


EXP: 11/30/19

GRAPHIC SCALE



PROPOSED PLAN

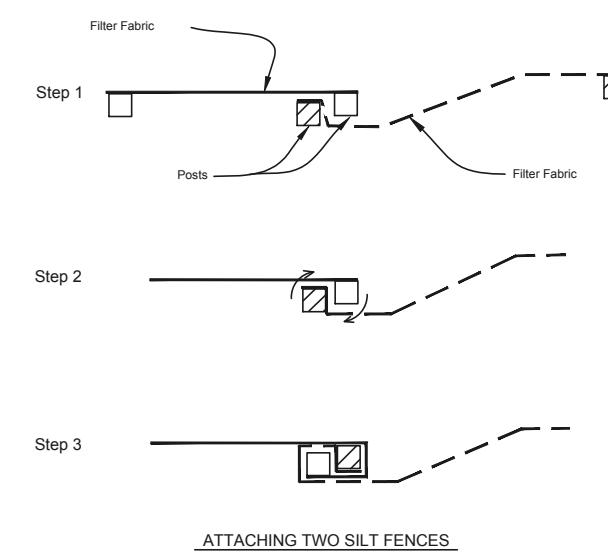


NOTE: THE PROPOSED LANDSCAPE OUTCROPPINGS ARE SHOWN FOR GRADING PURPOSES ONLY AND SHALL BE DESIGNED BY OTHERS. THE PROPOSED OUTCROPPINGS SHALL NOT EXCEED 3' IN HEIGHT AND SHALL BE CONSTRUCTED UNDER THE LANDSCAPING CONTRACT. MMEI MAKES NO REPRESENTATION AS TO THE STRUCTURAL DESIGN OF THE PROPOSED LANDSCAPE OUTCROPPINGS.

LEGEND

| EXISTING | PROPOSED |
|---------------------------------------|---------------------------------------|
| --- SANITARY SEWER | --- SANITARY SEWER |
| --- STORM SEWER | --- STORM SEWER |
| □ CATCH BASIN | ■ CATCH BASIN |
| ○ OPEN LID MANHOLE | ● OPEN LID MANHOLE |
| ○ CLOSED LID MANHOLE | ● CLOSED LID MANHOLE |
| □ INLET | ■ INLET |
| W WATER MAIN | W WATER MAIN |
| ⊗ VALVE | ⊗ VALVE |
| ⊕ HYDRANT | ⊕ HYDRANT |
| ⌒ HEADWALL | ⌒ HEADWALL |
| △ FLARED END | △ FLARED END |
| ⊙ STREET LIGHT | ⊙ STREET LIGHT |
| ⊕ UTILITY POLE | ⊕ UTILITY POLE |
| □ B-BOX | ■ B-BOX |
| ○ RETAINING WALL | ○ RETAINING WALL |
| □ SILT FENCE | ■ SILT FENCE |
| --- CONTOUR | --- CONTOUR |
| → 100-YEAR OVERFLOW PATH | → 100-YEAR OVERFLOW PATH |
| ⊕ STORM STRUCTURE W/ INLET PROTECTION | ⊕ STORM STRUCTURE W/ INLET PROTECTION |
| ⊗ EX. TREE TO BE REMOVED | ⊗ EX. TREE TO BE REMOVED |

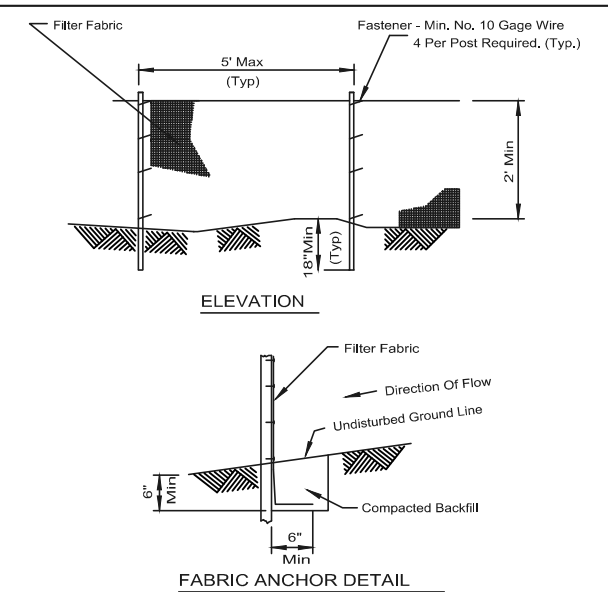
SILT FENCE PLAN



- Place the end post of the second fence inside the end post of the first fence.
- Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
- Drive both posts a minimum of 18 inches into the ground and bury the flap.

| | |
|----------|----------------|
| Project | IL-620(W) |
| Design | SHEET 2 OF 2 |
| Checked | DATE: 12/01/19 |
| Approved | |

SILT FENCE PLAN



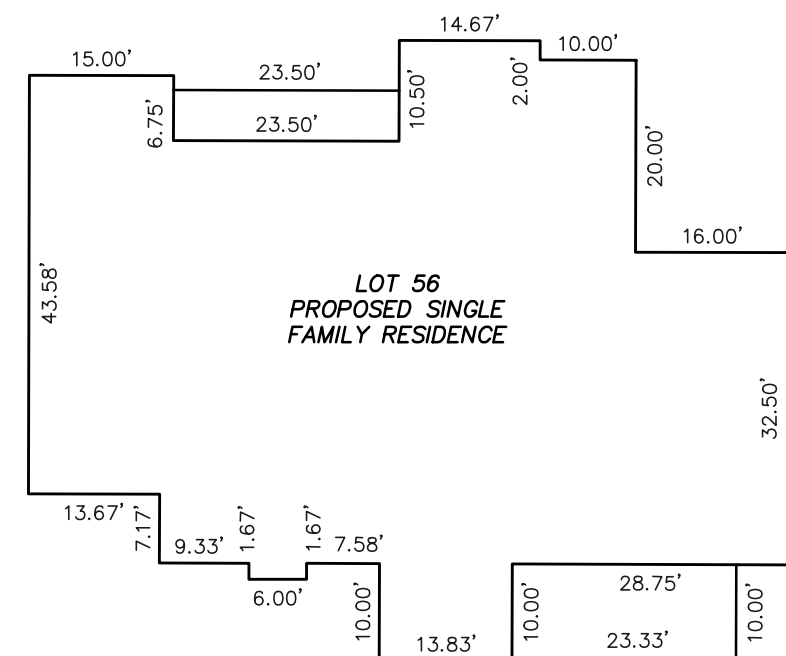
- Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
- Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class with equivalent opening size of at least 30 for nonwoven and 50 for woven.
- Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

| | |
|----------|----------------|
| Project | IL-620 |
| Design | SHEET 1 OF 2 |
| Checked | DATE: 12/01/19 |
| Approved | |

PAVEMENT LEGEND

| | |
|---|------------------------------|
| ■ | PROPOSED CONCRETE PAVEMENT |
| ▨ | PROPOSED DECK |
| ▩ | EXISTING BITUMINOUS PAVEMENT |
| □ | EXISTING CONCRETE PAVEMENT |

NOTE: MARTIN M. ENGINEERING, INC. MAKES NO REPRESENTATION AS TO ACCURACY OF THE FOUNDATION DIMENSIONS SHOWN BELOW. FOR ACTUAL DIMENSIONS OF HOME & PROPOSED WINDOW WELL LOCATIONS, REFER TO FOUNDATION PLAN PREPARED BY OTHERS.



ABBREVIATIONS:

| | | | |
|-------------|------------------------------------|----------|--|
| P.U. & D.E. | PUBLIC UTILITY & DRAINAGE EASEMENT | XXX.XXTC | TOP OF CURB ELEVATION |
| N.F. | NO FENCE | XXX.XME | MATCH EXISTING ELEVATION |
| N.A. | NO ACCESS | (XX.X) | EXISTING SPOT GRADE PER APPROVED ENGINEERING PLANS |
| L.C. | LANDSCAPE COVENANT | XXX.XX | EX. AS-BUILT GRADE & DESCRIPTION |
| B.S.L. | BUILDING SETBACK LINE | XX | |
| TF | TOP OF FOUNDATION | XXX.X | SPOT GRADE W/ FLOW DIRECTION |
| GF | GARAGE FLOOR | XXX.X | |
| LO | LOOK OUT | | NOTE: ADD 600 TO ALL PROPOSED SPOT GRADES |
| WO | WALK OUT | | |
| WW | WINDOW WELL | | |
| DS | DOWN SPOUT | | |
| BL | BRICK LEDGE | | |
| SP | SUMP PUMP | | |
| TL | TREE LINE | | |

LOT 56 ~ OLDE MILL, PHASE III

ORLAND PARK, ILLINOIS

DETAILED GRADING PLAN

MARTIN M. Engineering, Inc.

SITE DESIGN CIVIL ENGINEERS & SURVEYORS
20123 OAKWOOD DRIVE
MOKENA, ILLINOIS 60448
VOICE: (708) 995-1323
FAX: (708) 995-1384

| | | |
|--------------------|-----------------|-------------------|
| DRAWN BY: BMM | CHECKED BY: BMM | |
| SCALE: 1"=20' | DATE: 11/20/18 | |
| JOB NUMBER: 18-238 | SHEET: 1 OF 1 | |
| # | DATE | DESCRIPTION |
| 1. | 12/07/18 | PER CLIENT REVIEW |
| 2. | 01/22/19 | PER CLIENT REVIEW |

| Lot 56 ~ Olde Mill, Orland Park | | | | | |
|---|--------------------------------|--|-----------|-------------|---------------|
| Water Flow Through Open Channels - South Swale | | | | | |
| | | | | | (S) |
| slope (S): | vertical fall (ft) | 1.46 | | | 0.0152 |
| | horizontal distance (ft) | 95.9 | | | |
| | | | | | (R) |
| hydraulic radius (R) | | (x-sectional area/wetted perimeter) | | | 0.284 |
| | if known: | x-section (sq ft) | | | |
| | | wetted perimeter (ft) | | | |
| R can alternatively be calculated from geometric shape | | | | | |
| (choose ONE appropriate shape) | | | | | |
| | | | | x-section | wet perimeter |
| OR | rectangle: | width (ft) | | | |
| | | water depth (ft) | | | |
| OR | semicircle: | diameter (ft) | | | |
| OR | trapezoidal ditch: | width at base (ft) | 4 | 1.99 | 7.00 |
| | | side slope (run/rise) | 4 | | |
| | | water depth | 0.36 | | |
| coefficient of roughness (n) | (select from chart) | 0.025 | | | |
| | Earthen channels, unvegetated | | | | |
| | | straight, uniform | 0.02 | | |
| | | rubble sides | 0.03 | | |
| | | jagged and irregular | 0.04 | | |
| | Vegetated, earthen ditches | | | | |
| | | Dense vegetation, <2.5" high | 0.03-0.10 | | |
| | | Dense vegetation, >10" high | 0.05-0.20 | | |
| | Concrete- or wood-lined canals | | | | |
| | | smooth concrete or wood | 0.015 | | |
| | | rubble surface | 0.03 | | |
| | Natural stream channels | | | | |
| | | clean, straight, flowing full | 0.03 | | |
| | | moderately stoney, weeds, flowing full | 0.035 | | |
| | | very weedy | 0.07-0.15 | | |
| Calculated water velocity (v) | | | | 2.13 | ft/second |
| Rate of discharge (Q), (velocity times x-section) | | | | 4.23 | cfs |