GN # 3 Truncated domes for curb ramps located in public right of way shall meet ADA requirements and shall be constructed using red pre cast truncated domes per pavement details.

GN # 4 Any proposed pavilions or playground areas will need a separate permit from the Building Division. GN # 5 The Contractor is responsible to call Missouri One Call and The City of O'Fallon for the location of utilities. Contact the City

of O'Fallon (636) 379—3814 for the location of City maintained cable for street lights and traffic signals, all other utilities call Missouri One Call 1-800-DIG-RITE. 1-800-344-7483

GN # 6 All proposed utilities and/or utility relocations shall be located underground.

GN # 7 All proposed fencing requires a separate permit through the Building Safety Division. GN # 8 All construction operations and work zone traffic control within the right of way will follow MoDOT or M.U.T.C.D. standards

whichever is more stringent. GN # 9 All free standing signs shall be located a minimum of ten (10) feet away from any right of way line and/or property line and a minimum of three (3) feet from the back of curbing or sidewalk. All signs shall abide by the regulations for visibility at corners, including corners from driveways and the street it intersects per Section 400.260 of the O'Fallon Zoning Code.

GN #10 All subdivision identification or directional sign(s) must have the locations and sizes approved and permitted separately through the Planning and Development Division. GN #11 Materials such as trees, organic debris, rubble, foundations, and other deleterious material shall be removed from the site and disposed of in compliance with all applicable laws and regulations. If the material listed previously are reused, a letter from a

soil Engineer must clarify amount, location, depth. etc. and be approved with the construction plans. Landfill tickets for such disposal shall be maintained on file by the developer. Burning on site shall be allowed only by permit from the local fire district. If a burn pit is proposed the location and mitigation shall be shown on the grading plan and documented by the soils engineer. GN #12 Twenty-four (24) hours prior to starting any of the work covered by the above plans and after approval thereof, the developer shall make arrangements with the Construction Inspection Office to provide for inspection of the work, sufficient in the opinion of the City Engineer, to assure compliance with the plans and specifications as approved.

GN #13 The City Engineer or their duly authorized representative shall make all necessary inspections of City infrastructure, escrow items or infrastructure located on the approved plans.

GN #14 All installations and construction shall conform to the approved engineering drawings. However, if the developer chooses to make minor modifications in design and/or specifications during construction, he/she shall make such changes at his/her own risk. without any assurance that the City Engineer will approve the completed installation or construction. It shall be the responsibility of the developer to notify the City Engineer of any changes from the approved drawings. The developer may be required to correct the installed improvements so as to confirm to the approved engineering drawings. The developer may request a letter from the Construction Inspection Division regarding any field changes approved by the City inspectors.

GN#15 City approval of the construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required by the zoning code.

GN#16 Construction work shall only be allowed during the following hours: October 1 - May 31

7:00 AM to 7:00 PM Monday - Sunday June 1 - September 30

6:00 AM to 8:00 PM Monday - Friday

7:00 AM to 8:00 PM Saturday and Sunday Construction work to be done outside of these hours requires written approval from the City Administrator or City Engineer. GN#17 City approval of the construction site plans does not mean that any building can be constructed on the lots without meeting the building setbacks as required be the Zoning Code.

#### **Erosion Control Notes**

EN # 1 The Permittee shall assume complete responsibility for controlling all siltation and erosion of the project area. The Permittee shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with the clearing operations and be maintained throughout the project until acceptance of the work by City of O'Fallon and as needed by MoDOT. The Permittee's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The City of O'Fallon and as required by MoDOT may at their option direct the Permittee in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement shall be removed immediately. Any depositing of silts or mud in new or existing storm sewers and/or swales shall be removed after each rain and affected areas cleaned to the satisfaction of the City of O'Fallon and as required by MoDOT.'

EN # 2 All erosion control systems are to be inspected and corrected weekly, especially within 48 hours of any rain storm resulting in one-quarter inch of rain or more. Any silt or debris leaving the site and affecting public right of way or storm water drainage facilities shall be cleaned up within 24 hours after the end of the storm.

EN # 3 Erosion control devices (silt fence, sediment basin, etc.) shall be in accordance with St. Charles County Soil and Water Conservation District Erosion and Sediment Control guidelines.

EN # 4 This development is required to provide long term post construction BMP's such as; low impact design, source control and treatment controls that protects water quality and controls run off to maximum extent practical in compliance with Phase II Illicit Storm Water Discharge Guidelines. (Ord. 5082, section 405.245) EN #5 Graded areas shall be seeded and mulched (strawed) within 14 days of stopping land disturbance activities. Unless it can be

shown to the City Engineer that weather conditions are not favorable, vegetative growth is to be established within 6 weeks of stopping grading work on the project. The vegetative growth established shall be sufficient to prevent erosion and the standard shall be as required by EPA and DNR. (70% coverage per square foot) Ord. 5242. Section 405.070

# <u>Grading Notes</u>

GRN #1 Developer must supply City Construction Inspectors with an Engineer's soil reports prior to and during site grading. The soil report will be required to contain the following information on soil test curves (Proctor reports) for projects within the City:

. Maximum dry density 2. Optimum moisture content

3. Maximum and minimum allowable moisture content

4. Curve must be plotted to show density from a minimum of 90% Compaction and above as determined by the "Modified AASHTO T-180 Compaction Test" (A.S.T.M.-D-1157) or from a minimum of 95% as determined by the "Standard Proctor Test ASSHTO T-99. Method C" (A.S.T.M.-D-698). Proctor type must be designated on document.

5. Curve must have at least 5 density points with moisture content and sample locations listed on document

6. Specific gravity 7. Natural moisture content

8. Liquid limit

9. Plastic limit

Be advised that if this information is not provided to the City's Construction Inspector the City will not allow grading or construction activities to proceed on any project site.

GRN #2 All fill placed in areas other than proposed storm sewers, sanitary sewers, proposed roads, and paved areas shall be compacted from the bottom of the fill up in 8" lifts and compacted to 90%%% maximum density as determined by Modified AASHTO T-180 compaction test or 95% of maximum density as determined by the Standard Proctor Test AASHTO T-99. Ensure the moisture content of the soil in fill areas corresponds to the compactive effort as defined by the Standard or Modified Proctor Test. Optimum moisture content shall be determined using the same test that was used for compaction. Soil compaction curves shall be submitted to the City of O'Fallon prior to the placement of fill.

GRN #3 The surface of the fill shall be finished so it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze. GRN #4 All sediment and detention basins are to be constructed during the initial phase of the grading operation or in accordance with the approved SWPPP.

GRN #5 When grading operations are complete or suspended for more than 14 days, permanent grass must be established at sufficient density to provide erosion control on site. Between permanent grass seeding periods, temporary cover shall be provided according to St. Charles County Soil and Water Conservation District — Model Sediment and Erosion Control Regulations. All finished grades (areas not to be disturbed by improvements) in excess of 20%%% slopes (5:1) shall be mulched and tacked at a rate of 100 pounds per 1000 square feet when seeded.

GRN #6 No slopes shall exceed 3 (horizontal): 1 (vertical) unless otherwise approved by the soils report and specifically located on the plans and approved by the City Engineer. GRN #7 All low places whether on site or off shall be graded to provide drainage with temporary ditches.

GRN #8 Any existing wells and/or springs which may exist on the property must be sealed in a manner acceptable to the City of O'Fallon Construction Inspection Department and following Missouri Department of Natural Resources standards and specifications.

GRN #9 (intentionally left blank)

# PREPARED FOR:

### BRINKMANN CONSTRUCTORS

CONTACT: JACOB ENGLERT 16650 CHESTERFIELD GROVE RD. SUITE 100 CHESTERFIELD, MO 63005 PH: (636) 537-9700 F: JEnalert@brinkmannconstructors.com

Grading Notes Continued

GRN #10 All trench back fills under paved areas shall be granular back fill, and compacted mechanically. All other trench back fills may be earth material (free of large clods, or stones) and compacted using either mechanical tamping or water jetting, Granular material and earth material associated with new construction outside of pavements may be jetted, taking care to avoid damage to newly laid sewers. The jetting shall be performed with a probe route on not greater than 7.5 foot centers with the jetting probe centered over and parallel with

the direction of the pipe. Trench widths greater than 10 feet will require multiple probes every 7.5 foot centers. a) Depth, Trench back fills less than 8 feet deep shall be probed to a depth extending half the depth of the trench back fill, but not less than 3 feet. Trench back fill greater than 8 feet in depth shall be probed to half the depth of the trench back fill but not

b) Equipment, The jetting probe shall be a metal pipe with an interior diameter of 1.5 to 2 inches. c) Method, Jetting shall be performed from the lowest surface topographic point and proceed toward the highest point, and from the bottom of the trench back fill toward the surface. The flooding of each jetting probe shall be started slowly allowing slow saturation of the soil. Water is not allowed to flow away from the trench without first saturating the trench.

d) Surface Bridging, The contractor shall identify the locations of the surface bridging (the tendency for the upper surface to crust and arch over the trench rather than collapse and consolidate during the jetting process). The contractor shall break down the bridged areas using an appropriate method such as wheels or bucket of a backhoe. When surface crust is collapsed, the void shall be back filled with the same material used as trench back fill and re-jetted. Compaction of the materials within the sunken/jetted area shall be compacted such that no further surface subsidence occurs.

a) Within City right-of-way. Material is to be placed in eight (8) inch to twelve (12) inch loose lifts and compacted per the approved compaction requirements. One (1) compaction test will be performed every two hundred fifty (250) feet along the centerline for b) Outside of City right—of—way. Material is to be placed in eight (8) inch to twelve (12) inch loose lifts and compacted per the

approved compaction requirements. One (1) compaction test will be performed at two (2) foot vertical intervals and approximately every

one thousand (1,000) cubic yards. GRN #12 Access to the site from any other location other than the proposed construction entrance is strictly prohibited!

### DUCKET CREEK SANITARY DISTRICT NOTES:

1. Underground utilities have been plotted from available information and therefore location shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to any grading or construction of improvements.

2. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals. 3. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.

4. All fill including places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90% of maximum density as determined be the "Modified AASHTO T-180 Compaction Test (ASTM D1557)". All tests shall be verified be a soils engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proof-rolling and compaction.

5. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system. the contractor will be required to install a brick bulkhead on the downstream side of the first new manhole constructed when connecting into

6. All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be responsibility of the sewer contractor. 7. It is the responsibility of the contractor to adjust all sanitary sewer manholes (that area affected by the development) to finish grade.

8. Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat 9. All sanitary sewer construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District. 10. The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination of inspection. 11. All sanitary sewer building connections shall be designed so that the minimum vertical distance from the low point of the basement to the

flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the pipe plus the vertical distance of 2.5 feet. 12. All sanitary sewer manholes shall be watertight in accordance with MDNR specification 10 csr-20-8.120(6)(F) 1

13. All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe. SDR-35 or equal, with "clean"  $\frac{1}{2}$  inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipr shall consist of same size "clean" or "minus" stone from springline of pipe to 6 inches above the top of pipe. Final backfill material shall be of suitable material removed from excavation except as other material is specified. Debris, frozen material, large rocks or stones, or other unstable materials shall not be used within 2 feet from top of pipe. 14. All sanitary and storm sewer trench backfills shall be water jetted. Granular backfill will be used under payement areas.

15. All pipe shall have positive drainage through manholes. Flat invert structures not allowed. 16. Epoxy coating shall be used on all sanitary sewer manholes that receive pressurized mains.

17. All creek crossings shall be lined with rip—rap as directed by District inspectors.

18. Brick shall not be used on sanitary sewer manholes.

19. Existing sanitary sewer service shall not be interrupted. 20. Maintain access to existing residential driveways and streets.

21. Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot/Mission-type couplings will not be allowed.

22. Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the

23. "type N' Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required. 24. All sanitary sewer system work shall be conducted under the inspection of a representative of the District. All work may not require inspection but the Districts representative may designate specific areas that must be inspected before the work is backfilled. All testina must be witnessed by the District's inspector and the contractor shall furnish all testing equipment as approved by the District. Testing shall

- A mandrel test of all gravity sewers using a mandrel with a diameter that has a diameter 95% of the inside pipe diameter. If the mandrel test fails on any section of pipe, that section of pipe shall be uncovered and replaced. No expansion devices will be allowed to be used "force" the pipe that is deformed back into round. Any string lines used in mandrel testing shall be removed after testing is completed. Deflection testing cannot be conducted to 30 days after final backfill.

— An air pressure test of all gravity sewers to a pressure of 5 psi with no observed drop in pressure during a test period of 5 minutes. - A vacuum test of all manholes for a period of 1 minute and the vacuum shall be 10" of mercury and may not drop below 9" of mercury at the end of the 1 minute test.

# Storm Sewer Notes

STM # 1 All Storm Sewer installation is to be in accordance with M.S.D. standards and specifications except as modified by the City of

STM # 2 Brick shall not be used in the construction of storm sewer structures. Pre cast concrete structures are to be used unless otherwise approved by the City of O'Fallon. STM # 3 A 5/8" trash bar shall be installed horizontally in the center of the opening(s) in all curb inlets and area inlets.

STM # 4 HDPE pipe is to be N-12WT or equal and to meet ASTM F1417 water tight field test.

STM # 5 Encase with concrete both sanitary and storm sewer at crossing when storm sewer is within 18 inches above sanitary sewer. Add concrete cradle to only RCP storm sewer and encase HDPE storm sewer when it is more than 18 inches above sanitary line. Show on

STM # 6 The storm sewers should run diagonally through the side yards to minimize any additional utility easements required.

STM # 7 All concrete pipes will be installed with 0-ring rubber type gaskets.

STM # 8 Connections at all storm structures are to be made with A-lock joint or equal.

ADDITIONAL CITY OF O'FALLON NOTES:

2. ALL IDENTIFICATION OR DIRECTIONAL SIGN(S) MUST HAVE THE LOCATIONS AND SIZES APPROVED ND PERMITTED SEPARATELY THROUGH THE PLANNING AND DEVELOPMENT DIVISION.

STM # 9 Pre cast concrete inlet covers are not to be used.

STM #10 The swale in the detention basins shall have a minimum 1%%% longitudinal slope and be lined with a permanent erosion control blanket that will allow infiltration of storm water.

STM #11 All storm sewer shall be reinforced concrete pipe or H.D.P.E. pipe. All structures and flared end sections must be concrete. Manufacturing specifications must be followed and details provided for the installation of H.D.P.E. pipe. H.D.P.E. pipe will not be allowed for detention basin outflows, final pipe run to detention basins, creek discharge or other approved means.

STM #12 The discharge point of all flared end sections shall be protected by rip rap or other approved means.

STM #13 Rip rap shown at flared end sections will be evaluated in the field by the Engineer, Contractor, and City Inspectors after installation for effectiveness and field modified, if necessary to reduce erosion on and off site. STM #14 Add 1" minus rock back fill to all storm sewer that lie within the 1:1 shear plane of the road.

STM #15 The City will allow the following markers and adhesive procedures only as shown in the table below or an approved equal. "Peel and Stick" adhesive pads will not be allowed.

Manufacturer	Size	Adhesive	Style	Message (Part #)	Website
ACP International	3.875"	Ероху	Crystal Cap	No Dumping Drains to Waterway (SD—W—CC)	www.acpinternational.com
DAS Manufacturing, Inc.	4"	Ероху	Standard	No Dumping Drains to Stream (#SDS)	www.dasmanufacturing.com

#### Water Notes

WN # 1 Fire hydrants shall be a maximum of 600' apart. Local fire district approval is required.

WN # 2 Coordinate with the water company on the location of water meters.

WN # 3 All water main must have a minimum of 42" of cover. (City water mains)

WN # 4 Provide water valves to isolate the system. WN # 5 All water mains shall be class 200 SDR 21 or equal with locator/tracer wires

WN # 6 DISINFECTING: Disinfecting shall be accomplished by placing sufficient hypo chlorite granule (HTH) in each section of pipe to achieve a chlorine residual in the pipeline, upon initial filling, of 50 mg/L (PPM). HT. tablets will not be allowed. Following completion of the pipeline, it shall be slowly filled with water and a sample will be taken immediately and the chlorine residual must be 50 mg/L or greater. The solution shall be allowed to stand for 24 hours and a sample shall then be taken. The chlorine residual after 24 hours shall be 30 mg/L or greater. If the piping shows insufficient chlorine residuals in either test, the piping shall be re-chlorinated by the injection of hypo chlorite solution until satisfactory results are achieved. All disinfecting shall be done by the contractor. Only the testing to determine the chlorine residual will be done by the City.

WN # 7 PRESSURE TESTING: Immediately following disinffection, the piping shall be pumped to a pressure (at the lowest point in the project) of 150 psi or higher where the working pressure is higher than 150 PSI as determined by the City. In such cases, the pressure shall be as pecified by the City and two pressure tests shall be conducted. The first test shall be with the fire hydrant auxiliary valve open and be to 50 PSI. The second test shall be with the fire hydrant auxiliary valve closed and be to the higher pressure as directed by the City. All pumping equipment and pressure gauges shall be provided by the contractor. After achieving the test pressure, the piping shall be left closed for a period of two (2) hours. At the end of this time the pressure drop shall not exceed 2 psi. In addition, if the pressure appears, in judament of the City's representative, to be continuing to drop, the test shall be continued for another two (2) hours and if any further drops occur, the test shall be considered a failure. If the pressure test fails, the contractor will be required to find and correct the source of the leakage. If this requires draining of the pipeline, when the leakage is corrected, the pipeline must be re-disinfected and the pressure tested again until satisfactory result are achieved. Any MDNR required dechlorination will be performed by

WN # 8 All tops for valves, meters, and manholes are to be constructed to within 1 inch (0.08') of finish grade. Grading around structure tops on slopes need to be accounted for.

### <u>Water Notes</u>

WN #10 BACTERIOLOGICAL TESTING:

After satisfactory disinfection and pressure testina, a sample shall be taken by the contractor in the presence of a City representative and submitted to a laboratory approved by the Missouri Department of Natural Resources and the City for bacteriological analysis. After 24 hours, a second sample shall be taken in a like manner and submitted for analysis. The two samples taken on consecutive days ,a minimum of 24 hours apart, must be found to be "safe" by the testing laboratory, and copies of the test results must be supplied to the City. If the samples are not found to be "safe" further flushing and/or disinfection as directed by the City shall be conducted by the contractor until "safe" samples on two consecutive test days are achieved. Following successful bacteriological testing and a determination by the City that the samples are "safe", the mains may be placed into service.

#### Roadway Notes

RN # 1 All paving (public and private) to be in accordance with St. Louis County Standards and Specifications except as modified by the City O'Fallon ordinances

RN # 2 If the intersecting road does not have a curb, then the curb on the new entrance shall begin 10' from the edge of the existing road. RN # 3 Provide 6" of concrete over 4" of MoDot type 1 or type 5 aggregate rock or asphalt equivalent for minor residential streets per City Code

RN # 4 Multi-use trail (when required) Shall have a minimum of 3" Type "C" Asphalt over 4" aggregate base per City requirements.

RN # 5 Type C (BP-1) Compaction requirements shall be 98%%% minimum density according to St. Charles Co. Standard Specifications.

RN # 6 Provide pavement striping at any point where the multi-use trail crosses existing or proposed pavement RN # 7 All street stub-outs over 250' in length will require a temporary turnaround.

RN # 8 All sub grade in cut or fill will need to conform to the City of O'Fallon Compaction requirements RN # 9 Material Testing And Frequency. Materials for construction shall be tested and inspected per the appropriate ASTM code or at the City

Engineer's discretion. The developer's engineer shall perform the following quality control quidelines: a. Cylinders/compressive strength. One (1) set of four (4) cylinders within the first fifty (50) cubic yards and one (1) set per one hundred

(100) cubic vards thereafter. One (1) cylinder must be tested at seven (7) days, one (1) at fourteen (14) days and two (2) at twenty—eight (28) days. If the first (1st) cylinder does not meet specifications at twenty—eight (28) days, then the second (2nd) cylinder must be held and tested at day fifty-six (56) b. Percent air and temperature. First (1st) truck batch each day and two (2) thereafter until a consistency is encountered. Once a

consistency is encountered, then tests will be performed in conjunction with the concrete cylinders. c. Slump. First (1st) truck batch each day and two (2) thereafter until a consistency is encountered. Once a consistency is encountered,

then tests will be performed in conjunction with the concrete cylinders. d. If concrete is batched from more than one (1) plant, then the aforementioned guidelines will be applicable to each plant.

2. Sub grade and base.

a. Proof roll as described in Section 405.210(B). b. One (1) compaction test per two hundred fifty (250) feet of mainline paving, three (3) tests per intersection, five (5) tests within cul-de-sacs and one (1) test per repair slab. c. Gradation test for sub base material.

a. One (1) set of compaction tests per two hundred fifty (250) feet of mainline. One (1) set includes three (3) tests across the paved land

b. One (1) bulk density test per paving operation. RN #10 Approval Of Sub grade And Base (Sub base). The City Engineer or representative shall approve the sub grade before any base is placed

thereon and shall approve the base before concrete or surface course is placed. The sub grade and base shall be so constructed that it will be

RN #11 In all fill areas in the roadways, soil tests shall be submitted and approved by the City Engineer for each foot of fill and at least one (1) test and an average of one (1) test within every two hundred fifty (250) feet. RN #12 No traffic will be allowed on new concrete pavement until it has cured for seven (7) days and it reaches three thousand five hundred (3,500)

psi within 28 days. Concrete payements shall not be approved unless it reaches a strength of four thousand (4,000) psi.Cylinders/compressive

strength. One (1) set of four (4) cylinders within the first fifty (50) cubic yards and one (1) set per one hundred (100) cubic yards thereafter. One (1) cylinder must be tested at seven (7) days, one (1) at fourteen (14) days and two (2) at twenty—eight (28) days. If the first (1st) cylinder does not meet specifications at twenty-eight (28) days, then the second (2nd) cylinder must be held and tested at day fifty-six (56). RN #13 Prior to placement of agaregate base material on sub grade and prior to placement of pavement on base material, the sub grade and base must be proof-rolled with a fully loaded (ten (10) ton load) tandem truck or equivalent tire vehicle with one (1) pass down each driving lane no

faster than three (3) miles per hour. If soft spots are detected, or pumping, rutting or heaving occurs greater than one (1) inch at the subgrade, the roadbed shall be considered unsatisfactory and the soil in these greas shall be remediated to the depth indicated by the contractor's esting firm and approved by a representative of the City Engineer. RN #14 Sub grade and base beneath pavements shall be compacted to St. Charles County Highway Department specifications. The moisture range shall be determined by the Standard or Modified Proctor Density Method AASHTO T-99 and within -2/+4 percentage points of the optimum

moisture content RN #15 The entire width and length will conform to line, grade and cross section shown on the plans or as established by the engineer. If any settling or washing occurs, or where hauling results in ruts or other objectionable irregularities, the contractor shall improve the sub grade or bask to the satisfaction of the City before the pavement is placed. Additional rolling or methods to verify compaction shall be at the discretion of the

City Engineer. Tolerance allowed on all lines, grades and cross sections shall be plus or minus four—hundredths (+0.04) feet.

RN #16 Utility Work Prior To Base Construction. No base course work may proceed on any street until all utility excavations (storm and sanitary sewers water, gas, electric, etc.) have been properly back filled with granular material, crushed stone or gravel mechanically tamped in ten (10) inch lifts. Utilities installed after sub grade preparation shall be bored. Compaction requirements shall follow St. Charles County standards (2006). RN #17 Equipment calibration. The developer's contractors and subcontractors must have their equipment calibrated by the following minimum

standards

b. Cylinder compression—annually by independent calibration service. c. Batch scales——monthly

d. Nuclear testing devices—every six (6) months.

e. Proctor equipment—every six (6) months.

f. Slump cone——monthly RN #18 All permanent traffic control will be per M.U.T.E.D. or MoDot standards. S1-1 from the M.U.T.C.D. manual will be used at all crosswalk locations accompanied with ether w16-9p or w16-7p signs.

RN #19 All traffic signals, street signs, sign post, backs and bracket arms shall be painted black using Carboline Rust Bond Penetrating Sealer SG and Carboline 133 HB paint (or equivalent as approved by City of O'Fallon and MoDOT).

# PWSD#2 NOTES

1. PUBLIC WATER SUPPLY DISTRICT NO. 2 REQUIRES (1) WEEK NOTICE BEFORE THE START OF CONSTRUCTION. 2. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ANY CITY OR MODOT PERMITS NECESSARY TO WORK ALONG THE ROADWAYS. COPIES OF THESE PERMITS NEED TO BE PROVIDED TO THE WATER DISTRICTS PRIOR

3. ALL OFFSITE RESTORATION MUST BE RESTORED WITH SOD UNLESS OTHERWISE REQUESTED BY THE

4. ALL THE EXISTING WATER AND SANITARY SEWER FACILITIES SUCH AS VALVES, MANHOLES, AND FIRE HYDRANTS ON THE WATER DISTRICTS EXISTING FACILITIES NEED TO BE LEFT OR BROUGHT TO GRADE.

5. WATER DISTRICT REQUIRES 42" MINIMUM AND 72" MAXIMUM COVER OVER ITS EXISTING WATER MAIN. 6. ALL PRIVATE FIRE HYDRANTS ARE TO BE PAINTED RED PER PWSD NO. 2 SPECIFICATIONS 7. AT LEAST 10' OF HORIZONTAL SEPARATION IS REQUIRED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND STRUCTURES.

8. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS. 9. ALL WATER SERVICE LINES, FIRE LINES, AND PRIVATE WATER MAINS MUST BE INSTALLED PER PWSD#2 SPECIFICATIONS.

City of O'Failon Standard Notes and Details — Nov. 2017

O **PROJECT** 

DESCRIPTION

CITY/UTIL COMMENTS 03-14-2022

02-24-2022

1 CITY COMMENTS

ONSCIPLING,

J. MEKKIN E-28288

OUIS, (314)

LEONARD J. MEERS PROFESSIONAL ENGINEER

GENER,

Page No.

P+Z No.

Approval Date: City No.