

Appendix “A”
Jefferson Parish
Department of Engineering
Gravity Sanitary Sewer System General Standard Notes*1

* These notes shall be referenced and shall be included, in their entirety, unedited and unabridged, in all Jefferson Parish Projects as follows:

- *New subdivisions* – attach these notes to plans as Appendix “A”.
- *All other projects* – include these notes in Specification Booklets, which include any work related to the Parish Gravity Sanitary Sewer System. Insert a copy of these notes, on green paper, at the end of the “Gravity Sanitary Sewer System Technical Specification” Section of the Specification Booklet. Any Deviations and / or Variations from these General Standard Notes shall be tabulated under the heading of “Deviations From Jefferson Parish Gravity Sanitary Sewer System General Standard Notes” and shall be included in the “Sanitary Sewer System Technical Specification Section of the Specification Booklet.

1. NOTIFICATION:

CONTRACTORS SHALL NOTIFY THE DEPARTMENT OF SEWERAGE AT 736-6661 AND THE DEPARTMENT OF ENGINEERING, INSPECTION DIVISION AT 736-6793, 48 HOURS PRIOR TO ANY FIELD WORK RELATING TO JEFFERSON PARISH SANITARY SEWER SYSTEM. **IN ADDITION TO THIS GENERAL NOTIFICATION REQUIREMENT, THE CONTRACTOR IS RESPONSIBLE TO NOTIFY INDIVIDUALS AND OFFICES AS REQUIRED BY DIFFERENT SECTIONS OF THESE STANDARD NOTES.**

2. MINIMUM MAIN SIZE

THE MINIMUM ACCEPTABLE SIZE FOR NEW GRAVITY SEWER LINES IS 8 INCHES IN DIAMETER.

3. MATERIAL

POLYVINYL CHLORIDE (PVC) GRAVITY PIPE 4 INCHES THROUGH 15 INCHES IN DIAMETER (MAINS AND LATERAL SERVICE CONNECTIONS) SHALL MEET ASTM SPECIFICATION D-3034 (LATEST REVISION), DR26 WITH MINIMUM PIPE STIFFNESS OF 115 PSI. PVC PIPE LARGER THAN 15 INCHES IN DIAMETER SHALL MEET ASTM SPECIFICATION F-679 WITH MINIMUM PIPE STIFFNESS OF 115 PSI. FITTINGS SHALL MEET ASTM

¹ Jefferson Parish Department of Engineering “Gravity Sanitary Sewer System General Standard Notes”, Originated - December 2002.

SPECIFICATION D-3034 (LATEST REVISION), DR35. PIPE SECTIONS AND FITTINGS SHALL BE INTEGRAL CAST BELL AND ELASTOMERIC GASKET AS RECOMMENDED BY THE MANUFACTURER AND ASTM SPECIFICATION D-3212. INSTALLATION OF THE SEWER GRAVITY LINES SHALL CONFORM TO ASTM SPECIFICATIONS D-2321.

4. DESIGN VELOCITIES & DESIGN SLOPES

SEWER MAINS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE MEAN VELOCITIES, WHEN FLOWING FULL, OF NOT LESS THAN 2.0 FEET PER SECOND, BASED ON MANNING'S FORMULA USING AN "N" VALUE OF 0.011. MINIMUM DESIRED SLOPE FOR AN 8 INCH MAIN IS 0.40%. SLOPES SLIGHTLY LESS THAN THE DESIRED SLOPE OF 0.40% (0.40% TO 0.30%) WILL BE PERMITTED TO AVOID EXCEEDING MAXIMUM DEPTH REQUIREMENT FOR SEWER GRAVITY LINES OF 15 FEET, TO ENABLE TYING TO AN EXISTING GRAVITY SYSTEM, AND MINIMIZING THE NUMBER OF LIFT STATIONS.

5. JACKED AND/OR BORED CASINGS

PIPES INSTALLED IN JACKED AND/OR BORED CASINGS SHALL HAVE A MINIMUM TARGET SLOPE OF 0.50%. PIPES INSTALLED IN CASINGS SHALL BE "RESTRAINED PVC C-900" AND ADEQUATELY BRACED WITH APPROVED CASING SPACERS TO CONTROL THE SLOPE, PREVENT PIPE FLOTATION AND PIPE DEFLECTION WITHIN THE CASING.

6. DIRECTIONAL DRILLING OF HDPE PIPE

DIRECTIONAL DRILLING OF HDPE GRAVITY MAINS AND/OR SERVICE CONNECTIONS WILL NOT BE PERMITTED.

7. NEW SERVICE CONNECTIONS

SERVICE CONNECTIONS SHALL BE 6-INCH IN DIAMETER AND SHALL BE INSTALLED IN ACCORDANCE WITH JEFFERSON PARISH SEWER STANDARD DETAILS. SERVICE CONNECTIONS SHALL EXTEND FROM MAIN TO PROPERTY LINE.

8. TRENCH CONSTRUCTION

TRENCH CONSTRUCTION FOR THE GRAVITY SANITARY SEWER LINES SHALL BE DETERMINED BY THE EXISTING SOIL TYPE AND THE DEPTH OF

INSTALLATION. REFER TO JEFFERSON PARISH SEWER STANDARD DETAIL SHEET (LATEST REVISION, 05-30-00). USE SOIL TYPE []. **ONLY HARDWOOD SUCH AS OAK SHALL BE ALLOWED FOR SHEETING, BRACING, AND FOUNDATION LUMBER.**

TIMBER SHEETING AND BRACING SHOWN (JEFFERSON PARISH SEWER STANDARD DETAIL SHEET, LATEST REVISION) FOR SANITARY SEWER TRENCHES ARE THE MINIMUM REQUIRED TO CONTROL THE WIDTH OF THE EXCAVATED TRENCH AND TO SAFEGUARD THE INTEGRITY OF THE SANITARY SEWER FOUNDATION, BEDDING AND BACKFILL. IN ADDITION TO THESE MINIMUM REQUIREMENTS, THE CONTRACTOR MUST PROVIDE SUFFICIENT AMOUNT OF SHEETING AND BRACING TO INSURE SAFE WORKING CONDITIONS FOR HIS WORKMEN.

BACKFILL ALL TRENCHES WITHIN STREET RIGHT-OF-WAY WITH PUMPED RIVER SAND.

9. INFILTRATION

NO INFILTRATION IS ALLOWED WITHIN THE GRAVITY SANITARY SEWER SYSTEM (MANHOLES, MAINS & SERVICE CONNECTIONS).

10. CLEARANCE

GRAVITY SEWER MAINS SHALL BE INSTALLED FOUR (4) FEET FROM PROPERTY LINES (CENTERLINE OF MAIN TO PROPERTY LINE = 4 FEET). A SIX (6) FOOT MINIMUM HORIZONTAL SPACING (EDGE TO EDGE) SHALL BE MAINTAINED BETWEEN GRAVITY SEWER LINES (MAIN & SERVICE CONNECTIONS) AND WATER MAINS.

SEWER LINES SHALL NOT BE INSTALLED CLOSER THAN 10 FEET (MEASURED HORIZONTALLY) FROM ANY BUILDING FOUNDATION, WALL OR BUILDING OVERHANG. THIS 10 FOOT CLEARANCE MAY BE REDUCED TO 6 FEET IN AREAS HAVING COMMERCIAL ZONING WITH LIMITED RIGHT-OF-WAY AND WITH APPROVAL OF THE JEFFERSON PARISH ENGINEERING DEPARTMENT.

GRAVITY SEWER MAINS CROSSING WATER MAINS MUST BE INSTALLED BELOW WATER MAINS WITH A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER MAIN JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.

SEWER SERVICE CONNECTIONS MAY CROSS OVER WATER MAINS WITH A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER SERVICE CONNECTION TO MAINTAIN LINE AND GRADE. ONLY TYPE III, IV & V SEWER STANDARD TRENCH (SEE JEFFERSON PARISH SEWER STANDARD DETAILS) SHALL BE PERMITTED. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER MAIN JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.

WHEN SANITARY SEWER LINES ARE PARALLEL TO WATER LINES, THE CLEARANCE SHALL BE A MINIMUM OF 6 FEET (MEASURED HORIZONTALLY).

IF ANY OF THE ABOVE CONDITIONS CANNOT BE MET, DUE TO FIELD CONDITIONS, THE “10 STATE STANDARDS” ((PHONE (518) 439-7286, WEB SITE: WWW.HES.ORG)) GUIDELINES CAN BE FOLLOWED, WITH APPROVAL OF THE JEFFERSON PARISH ENGINEERING DEPARTMENT.

MINIMUM CLEARANCE BETWEEN A SEWER LINE AND ANY PRIVATE UTILITY LINE SHALL BE 6 FEET (MEASURED HORIZONTALLY). PRIVATE UTILITIES SHALL BE INSTALLED IN PRIVATE SERVITUDES.

11. MANHOLES

MANHOLES’ MANUFACTURING, CONSTRUCTION, AND INSTALLATION SHALL BE PER “LATEST REVISIONS OF ALL APPLICABLE ASTM SPECIFICATIONS” AND “MANUFACTURER’S SPECIFICATIONS AND REQUIREMENTS”. FIBERGLASS MANHOLES AS WELL AS BRICK, CAST-IN-PLACE AND PRECAST CONCRETE MANHOLES MAY BE SPECIFIED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, FOR MANHOLES, TO THE PARISH’S CONSULTANT ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. ALL CONCRETE USED IN CONSTRUCTION OF CAST-IN-PLACE AND PRECAST CONCRETE MANHOLES, INCLUDING THE TOP SLAB, SHALL INCLUDE XYPEX IN THE MIX REGARDLESS OF ANY SPECIAL COATING THAT MAY HAVE BEEN SPECIFIED FOR CERTAIN MANHOLES AND/OR WET WELLS. XYPEX ADMIX C-1000 SHALL BE INCORPORATED INTO ALL MORTAR MIXES USED IN SANITARY SEWER MANHOLES (BRICK, CAST-IN-PLACE, AND PRECAST CONCRETE). THE DOSAGE SHALL BE 3 % BY WEIGHT OF THE PORTLAND CEMENT. MIXING AND APPLICATION SHALL BE AS PER MANUFACTURER’S SPECIFICATIONS AND REQUIREMENTS. AN ALTERNATE TO THIS WOULD BE TO APPLY TWO COATS OF XYPEX TO THE INTERIOR MORTAR SURFACE OF THE BRICK MANHOLE AS PER MANUFACTURER’S SPECIFICATIONS. THIS TWO COAT

SYSTEM IS ONE COAT OF XYPEX CONCENTRATE FOLLOWED BY ONE COAT OF XYPEX MODIFIED. MANHOLE STEPS SHALL NOT BE INSTALLED IN SANITARY SEWER MANHOLES.

ALL XYPEX ADMIX SHALL INCLUDE A DYE SO IT CAN BE DISTINGUISHED FROM CONCRETE WITHOUT XYPEX EXCEPT TOP SLAB OF LIFT STATION WET WELLS AND VALVE PITS WHICH SHOULD NOT HAVE ANY DYE.

FIBERGLASS, POLYMER CONCRETE; BY "U.S. COMPOSITE PIPE, INC." OR APPROVED EQUAL, OR CONCRETE "FORTIFIED WITH CONSHIELD" (IN ADDITION TO XYPEX), IS REQUIRED FOR LIFT STATION WET WELLS, MANHOLES WITHIN CLOSE PROXIMITY (100 FEET) OF LIFT STATIONS, DEEP (8 FEET AND ABOVE) MANHOLES AND ANY MANHOLE WHICH IS OR WILL BE RECEIVING A FORCE MAIN.

FIBERGLASS AND PRECAST MANHOLES ARE THE CHOICES FOR SHALLOWER MANHOLES.

BRICK AND CAST-IN-PLACE MANHOLES MAY BE SPECIFIED ONLY WHEN FIELD CONDITIONS AND OR CONFLICTS WILL REQUIRE FLEXIBILITY IN DESIGN AND CONSTRUCTION OF THE MANHOLES.

INTERVALS BETWEEN SANITARY SEWER MANHOLES SHALL BE MAXIMUM OF 350 FEET.

MINIMUM DEPTH FOR SEWER MANHOLES AND MAINS SHALL BE 3.5 FEET. DROP SEWER MANHOLES SHALL BE INSTALLED WHEN THE VERTICAL DISTANCE FROM THE MANHOLE INVERT TO THE SEWER MAIN INVERT EXCEEDS THREE (3) FEET.

12. LIFESAVER STAINLESS STEEL STOPPERS

CONTRACTOR SHALL INSTALL "LIFESAVER STAINLESS STEEL STOPPERS" INSERTS IN SANITARY SEWER MANHOLES IN ACCORDANCE WITH JEFFERSON PARISH STANDARDS.

13. SERVICE CONNECTIONS AND CLEANOUTS

SERVICE CONNECTIONS SHALL BE MINIMUM 6-INCH IN DIAMETER AND SHALL BE INSTALLED IN ACCORDANCE WITH JEFFERSON PARISH SEWER STANDARD DETAILS. SERVICE CONNECTIONS SHALL EXTEND FROM MAIN TO PROPERTY LINE.

SEWER SERVICE/HOUSE CONNECTIONS CONNECTED TO A TERMINAL MANHOLE SHALL BE CONNECTED AT THE INVERT OF THE TERMINAL MANHOLE.

ALL LOTS MUST ULTIMATELY HAVE A FUNCTIONING “JEFFERSON PARISH MAINTAINED CLEANOUT”. IF A LOT DOES NOT HAVE SUCH A CLEANOUT, ONE MUST BE PROVIDED UNDER THIS CONTRACT.

ALL VACANT LOTS MUST BE PROVIDED WITH A SEWER SERVICE / HOUSE CONNECTION (HC) AND A CLEANOUT. SEWER HC, WHERE PRACTICAL, SHALL BE INSTALLED PERPENDICULAR TO THE SEWER MAIN. ALL SEWER HC INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY PLUGGED. LOCATION OF ALL HC SHALL BE MARKED BY IMPRESSING LETTERS HC IN THE FACE OF STREET CURB IN ACCORDANCE WITH THE REQUIREMENTS OF JEFFERSON PARISH STANDARDS (SEE SEWER STANDARD DETAILS). END OF HC SHALL BE MARKED BY INSTALLING A 2" X 12"- OAK BOARD (MINIMUM THREE FEET (3') OF EXPOSED HEIGHT) VERTICALLY AT THE END OF HC.

14. EXISTING SANITARY SEWER SERVICE CONNECTIONS

EXISTING SANITARY SEWER SERVICE CONNECTIONS, IF DISTURBED OR WHICH WILL BE LOCATED UNDER A PROPOSED NEW ROADWAY PAVEMENT SHALL BE REPAIRED, ADJUSTED OR REPLACED AS FOLLOWS:

- If the existing sanitary sewer house connection is made of PVC material, any repairs or adjustments shall be allowed only by removal and replacement of sections of the house connection in kind. Use of rubber couplings such as fernco couplings will not be permissible under roadways. Only SDR-35 Repair Couplings will be allowed for repair of the existing PVC sanitary sewer house connections under roadways.
- If the existing sanitary sewer house connection is made of any material other than PVC material (*Clay, Concrete, and Armco Truss, etc.*), repairs or adjustments shall not be allowed. These connections shall be replaced with PVC pipe and fittings from the main to the property line or to the Jefferson Parish maintenance cleanout, whichever is practical.
- Bedding and backfill of the sanitary sewer house connections must be as indicated on Jefferson Parish Sewer Standard Detail Sheet (latest revision).
- No siphons will be allowed.

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- When sewer house connections are being connected to existing lined mains or newly lined mains, “LMT wyes or tees” (or approved equal) shall be used to connect the house connection to the main. *The following sample specifications {Downloaded from LMK Technologies’ site (http://www.performanceliner.com/vacatee/mainline_tap/installation_specs/)} shall be followed for this product:*

Installation Specifications for Mainline Liner Connection **Lined Main Tap™ (LMT™)**

1. INTENT

It is the intent of this specification to provide a cost effective installation of a sewer lateral tap to a rehabilitated mainline pipe providing a VNLC™ (verifiable non-leaking connection).

2. GENERAL

The LINE MAIN TAP™ (LMT™) product and process consists of locating the service connection within the mainline pipe by the most effective means available to the installer. The most common method utilized and associated with the LMT™ process consists of inserting a video camera with an internal sonde either through the lateral service and pushing the camera to the mainline pipe or from main pipe to the service location. Locating the service location is achieved with a receiving unit and marked on the surface. Once the service connection has been located an access pit is made by conventional excavation exposing the main pipe at the lateral connection. Then, a 2-foot section of the original host pipe is broken away, exposing the new stand-alone mainline liner. (Pipe within a pipe, CIPP/Folded Pipe) Prepare the surface of the mainline liner by removing any excess resin or debris to provide a *smooth clean surface. Grinding may be necessary. The opening in the mainline liner may be circular or elliptical to accommodate a WYE or TEE shaped LMT™ saddle. The LMT™ is connected to a new section of PVC pipe (4” or 6” SDR 26 or SDR 35) utilizing a solvent weld or a push gasket joint. An adhesive/sealant is applied to the underside of the LMT™ saddle. The LMT™/PVC pipe assembly is snapped onto the exterior of the mainline liner. The LMT™ saddle is attached to the mainline liner encompassing more than fifty percent (50%) of the mainline liner diameter. The LMT™ saddle is a self-supporting component, which allows the resin to cure without affecting the integrity of the seal to the mainline liner. Then the section of new PVC pipe is connected to the existing lateral pipe using a non-shear leak-free coupling. The excavated access pit is back filled and the site is restored according to the*

engineer's specifications. The process shall be LMT™ (LINED MAIN TAP™) by LMK® Technologies or equal.

3. MATERIAL

The material shall be a molded PVC saddle sized to encompass more than 50% of the mainline liner. The saddle boss shall be either solvent welded or a push-gasket bell. The adhesive/sealant shall be designed for structurally adhering to CIPP, PVC, Modified PVC or PE pipe.

4. FINAL ACCEPTANCE

Upon completion, the installer will deliver an internal CCTV video of the main/lateral connection to the owner. The owners will review the documentation and the site to determine that the scope of work is complete and the work is satisfactory.

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15. SHIELDED REPAIR COUPLINGS

SHIELDED REPAIR COUPLINGS (4" THROUGH 15") SHALL BE DESIGNED FOR MAKING SEWER CONNECTIONS, REPAIRS AND FITTINGS INSERTIONS. THESE COUPLINGS SHALL BE SUITABLE FOR CONNECTING PLAIN END OF ANY MATERIAL COMBINATIONS OF CLAY, CONCRETE, CAST IRON, PLASTIC, ETC. SHIELDED REPAIR COUPLINGS SHALL HAVE STAINLESS STEEL SHEAR RINGS AND STAINLESS STEEL HARDWARE ("NUT AND BOLT CLAMP DESIGN" ONLY). SHIELDED REPAIR COUPLINGS SHALL BE "FERNCO'S 5000 SERIES STRONG BACK RC COUPLINGS" OR "MISSION RUBBERS' ARC". ASTM C1173-08.

16. CONFLICT MANHOLES

SEWER GRAVITY MAINS INSTALLED WITHIN CONFLICT MANHOLES SHALL BE DUCTILE IRON PIPE AND HAVE NO JOINTS. DUCTILE IRON PIPES, UP TO 12" IN DIAMETER, ARE AVAILABLE IN 18' AND 20' LAYING LENGTHS (LARGER DIAMETER PIPES ARE LIMITED TO 18' LAYING

LENGTH). FLANGED DUCTILE IRON PIPE MAY BE USED FOR SPANS LONGER THAN 20'.

PVC DR 25, C-900 AND PVC SDR26 PIPE MAY BE ALLOWED IN SMALL CONFLICT MANHOLES (MAXIMUM SPAN OF 5 FEET). THIS HAS TO BE SPECIFIED IN PLANS AND OR SPECS.

17. DUCTILE IRON PIPE

ALL DUCTILE IRON PIPE USED FOR SANITARY SEWER APPLICATIONS SHALL HAVE A FACTORY APPLIED INTERIOR COATING/LINING OF "PROTECTO 401" CERAMIC EPOXY LINING AS PER MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS FOR SANITARY SEWER APPLICATIONS AND FACTORY ASPHALTIC EXTERIOR COATING.

POLYETHYLENE ENCASMENT IN ACCORDANCE WITH ANSI/AWWA C105/A21.5 (MINIMUM 8 MIL THICK) SHALL BE REQUIRED FOR ALL DUCTILE IRON PIPES AND FITTINGS.

18. GREEN PVC C-900 AND C-905 (DR 18) PIPE

POLYVINYL CHLORIDE PVC C-900 AND C-905 PIPE 4 INCHES THROUGH 36 INCHES IN DIAMETER USED FOR SEWER GRAVITY PIPE SHALL BE DR-18 AND SHALL BE GREEN COLOR.

19. MANHOLE CONNECTIONS

MANHOLE CONNECTIONS (CONNECTION OF SEWER PIPES TO MANHOLES) SHALL BE WATERTIGHT. CONNECTION OF PVC SEWER PIPE TO MANHOLES WITH CONCRETE GROUT, WITHOUT SOME FORM OF APPROVED MANHOLE CONNECTOR OR WATER STOP, SHALL NOT BE PERMITTED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MANHOLE CONNECTIONS TO THE PARISH ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

20. SEWER PIPE ABANDONMENT

ALL ABANDONED SEWER LINES (MAINS OR SERVICE CONNECTIONS) UNDER ROADWAYS SHALL BE FILLED WITH FLOWABLE FILL.

21. PRE-CONSTRUCTION AND POST-CONSTRUCTION VIDEO INSPECTIONS (EXISTING SYSTEM ONLY)

THE CONTRACTOR SHALL PERFORM A PRE-CONSTRUCTION AND POST-CONSTRUCTION VIDEO INSPECTIONS OF ANY **EXISTING** GRAVITY SANITARY SEWER PIPE (MAINS OR SERVICE CONNECTIONS), WHICH MAY BE AFFECTED (TO BE DECIDED BY THE JEFFERSON PARISH ENGINEERING DEPARTMENT) BY THE PROJECT, WITHIN THE PROJECT LIMITS AS PER JEFFERSON PARISH DEPARTMENT OF SEWERAGE LATEST “SEWER LINE CLEANING AND VIDEO INSPECTION” SPECIFICATIONS (SEE INSET “A”). A VERY IMPORTANT, AND OFTEN MISSED, REQUIREMENT INCLUDED IN INSET “A” IS THE UPSTREAM AND DOWNSTREAM MANHOLE NUMBERS AND LIFT STATION AREA CODES. IF THIS INFORMATION IS NOT PROVIDED IN THE PLANS AND OR SPECIFICATIONS, THE CONTRACTOR IS RESPONSIBLE FOR ACCRUING THIS INFORMATION PRIOR TO THE VIDEO INSPECTION. (CONTACT MR. CHANEN JOSEPH OF THE ENGINEERING DEPARTMENT, 504-736-6824).

- THE CONTRACTOR MUST CONTACT THE FOLLOWING INDIVIDUALS 48 HOURS PRIOR TO CLEANING AND VIDEOING ANY SEWER SYSTEM:
 - JEFFERSON PARISH ENGINEERING DEPARTMENT UTILITY INSPECTION SUPERVISOR, MR. ROY MULLAN (504-731-4567)
 - THE DESIGNATED JEFFERSON PARISH ENGINEERING DEPARTMENT UTILITY INSPECTOR (NAME AND CONTACT INFORMATION WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING).

- IN ADDITION TO THE ABOVE, THE FOLLOWING INDIVIDUALS MUST BE CONTACTED (ONLY FOR THE REASONS STATED BELOW) AS WELL:
 - JEFFERSON PARISH SEWERAGE DEPARTMENT (LIFT STATIONS & SFM SHUTDOWNS) MR. GLENN MILLER (504-736-6728).
 - JEFFERSON PARISH SEWERAGE DEPARTMENT (GRAVITY LINES AND MANHOLES RELATED EMERGENCIES) MR. STERLING LANE (504- 736-6677).

THE PURPOSE OF PRE-CONSTRUCTION VIDEO INSPECTION WOULD BE TO PROVIDE ADDITIONAL INFORMATION ABOUT THE CONDITION OF THESE LINES BEFORE THE CONSTRUCTION IN ORDER FOR THE PARISH TO

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DETERMINE AND IMPLEMENT APPLICABLE COST EFFECTIVE REHABILITATION AND REPAIR PROGRAMS PRIOR TO CONSTRUCTION. THE PURPOSE OF THE POST-CONSTRUCTION VIDEO INSPECTION WOULD BE TO REFLECT ANY DAMAGE CAUSED BY THE CONSTRUCTION. A COPY OF THESE VIDEOS SHALL BE SENT TO THE JEFFERSON PARISH DEPARTMENTS OF ENGINEERING, IMMEDIATELY, AS THEY BECOME AVAILABLE.

UNLESS OTHERWISE AGREED UPON, BETWEEN THE JEFFERSON PARISH ENGINEERING DEPARTMENT, UTILITY SECTION, AND THE CONTRACTOR, THE PRE-CONSTRUCTION VIDEO INSPECTION MUST BE DONE IMMEDIATELY AFTER THE NOTICE TO PROCEED IS ISSUED. THIS WILL ALLOW AMPLE TIME TO ADDRESS ALL NECESSARY ISSUES RELATING TO THE EXISTING SEWER GRAVITY SYSTEM.

UNLESS OTHERWISE SPECIFIED {SEE NOTE TO THE ENGINEER / DESIGNER, BELOW}, THERE SHALL BE NO DIRECT PAYMENT FOR PRE-CONSTRUCTION AND POST-CONSTRUCTION SEWER LINE CLEANING AND VIDEO INSPECTION.

NOTE TO ENGINEER / DESIGNER

IF APPLICABLE, PLEASE PROVIDE PAY ITEMS FOR “SEWER LINE CLEANING AND VIDEO INSPECTION” FOR MAINS OR SERVICE CONNECTIONS”. THE QUANTITY FOR THESE ITEMS SHALL BE EQUAL TO THE LINEAR FOOTAGE OF THE SEWER GRAVITY PIPE (SPECIFY SIZE) BEING INSPECTED MULTIPLY BY TWO. FOR EXAMPLE, IF THE CONTRACTOR PERFORMS 1400 FEET OF PRE-CONSTRUCTION VIDEO AND ONLY 1250 POST CONSTRUCTION VIDEO, HE WOULD BE COMPENSATED FOR 2650 FEET UNDER THIS ITEM.

22. DEFLECTION, LAMP TESTING AND VIDEO INSPECTION (NEW SYSTEM ONLY):

- A 5% DEFLECTION MANDREL SHALL BE USED TO PERFORM THE DEFLECTION TESTING FOR ALL NEW SEWER GRAVITY LINES.
- DEFLECTION TESTING SHALL BE PERFORMED NO SOONER THAN 31 DAYS AFTER THE PIPE HAS BEEN INSTALLED AND ALL BACKFILL OPERATIONS COMPLETED.

- DEFLECTION TESTING SHALL BE PERFORMED AFTER ALL INFRASTRUCTURES, INCLUDING THE COMPACTED ROADWAY FOUNDATION, HAVE BEEN INSTALLED.
- DEFLECTION TESTING OF ALL GRAVITY LINES AND SUBMITTAL OF A DEFLECTION TESTING REPORT BY AN APPROVED TESTING LAB IS REQUIRED PRIOR TO FINAL INSPECTION.
- THE OWNER, HIS AGENT OR THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING 48 HOURS IN ADVANCE FOR THE INSPECTION OF THE DEFLECTION MANDREL TEST.
- THE MANDREL SHALL BE PULLED THROUGH THE PIPE BY HAND TO ENSURE THAT MAXIMUM ALLOWABLE DEFLECTIONS HAVE NOT BEEN EXCEEDED.
- LAMP TEST OF ALL SEWER GRAVITY LINES SHALL BE PERFORMED BY THE JEFFERSON PARISH ENGINEERING DEPARTMENT DURING FINAL INSPECTION.
- THE CONTRACTOR SHALL PERFORM CLEANING AND VIDEO INSPECTIONS OF ALL NEW SEWER GRAVITY LINES (MAINS AND SERVICE CONNECTIONS) INSTALLED BY HIM AS PART OF FINAL INSPECTION (THERE WILL BE NO DIRECT PAYMENT FOR THIS ITEM). SEWER LINE CLEANING AND VIDEO INSPECTION SHALL BE PERFORMED AFTER ALL INFRASTRUCTURES, INCLUDING THE COMPACTED ROADWAY FOUNDATION, HAVE BEEN INSTALLED. SEWER LINE CLEANING AND VIDEO INSPECTION SHALL BE DONE AS PER JEFFERSON PARISH DEPARTMENT OF SEWERAGE LATEST "VIDEO INSPECTION" SPECIFICATIONS (SEE INSET "A"). COPIES OF THESE VIDEO INSPECTIONS SHALL BE SENT TO THE JEFFERSON PARISH ENGINEERING DEPARTMENT, **IMMEDIATELY** {THE URGENCY LAYS WITH THE FACT THAT THE CONTRACTOR NEEDS PARISH'S **PARTIAL ACCEPTANCE** OF THE SEWER GRAVITY SYSTEM PRIOR TO INSTALLATION OF THE PAVEMENT}. **FINAL ACCEPTANCE** OF THE SEWER SYSTEM WILL BE HAPPEN WHEN THE PROJECT OFFICIALLY IS ACCEPTED.
- **THE CONTRACTOR MUST CONTACT THE FOLLOWING INDIVIDUALS 48 HOURS PRIOR TO CLEANING AND VIDEOING ANY SEWER SYSTEM:**
 - **JEFFERSON PARISH ENGINEERING DEPARTMENT UTILITY INSPECTION SUPERVISOR, MR. ROY MULLAN (504-731-4567)**
 - **THE DESIGNATED JEFFERSON PARISH ENGINEERING DEPARTMENT UTILITY INSPECTOR (NAME AND CONTACT INFORMATION WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING).**

- IN ADDITION TO THE ABOVE, IF THE NEW SEWER SYSTEM IS CONNECTED TO THE EXISTING SEWER SYSTEM, THE FOLLOWING INDIVIDUALS MUST BE CONTACTED (ONLY FOR THE REASONS STATED BELOW) AS WELL:
 - JEFFERSON PARISH SEWERAGE DEPARTMENT (LIFT STATIONS & SFM SHUTDOWNS) MR. GLENN MILLER (504-736-6728).
 - JEFFERSON PARISH SEWERAGE DEPARTMENT (GRAVITY LINES AND MANHOLES RELATED EMERGENCIES) MR. STERLING LANE (504-736-6685).

- THE CONTRACTOR IS ADVISED TO PERFORM PERIODIC DEFLECTION AND LAMP TESTING, AND VIDEO INSPECTION TO ENSURE QUALITY OF HIS WORK.

- THE DEPARTMENT OF ENGINEERING HAS THE RIGHT TO REJECT ANY AND ALL EQUIPMENT, OR WORK, WHICH DOES NOT CONFORM TO SPECIFICATIONS. ANY WORK SO REJECTED SHALL BE REDONE BY THE CONTRACTOR AT HIS OWN EXPENSE.

INSET "A"
JEFFERSON PARISH DEPARTMENT OF SEWERAGE "SEWER LINE CLEANING" AND "VIDEO INSPECTION" SPECIFICATIONS

PART 1: GENERAL

GUIDELINES AND REQUIREMENTS INCLUDE IN THIS SECTION SHALL BE FOLLOWED AND ADHERE TO FOR BOTH "PRE-CONSTRUCTION AND POST-CONSTRUCTION VIDEO INSPECTIONS OF ANY EXISTING SEWER GRAVITY PIPES". SECTION 3.02.12, BELOW, WILL PROVIDE ADDITIONAL GUIDELINES AND REQUIREMENTS APPLICABLE TO NEWLY INSTALLED PIPES.

SEWER LINE CLEANING: THE INTENT OF SEWER LINE CLEANING IS TO REMOVE FOREIGN MATERIALS FROM THE LINES AND RESTORE THE SEWER TO A MINIMUM OF 95% OF THE ORIGINAL CARRYING CAPACITY FOR PROPER VIDEO INSPECTION. A DAILY LOG SHALL BE MAINTAINED TO RECORD THE LOCATION OF THE STRUCTURES AND LINEAR FOOTAGE OF PIPE CLEANED, METHOD OF CLEANING, LINE SIZES, AND VOLUME AND TYPE OF DEBRIS REMOVED.

VIDEO INSPECTION: WHEN CLEANING IS COMPLETED, THE CONTRACTOR SHALL PROCEED WITH THE VIDEO INSPECTION.

PART 2: EQUIPMENTS

THE EQUIPMENT USED FOR THE CLEANING WORK ON THIS PROJECT SHALL BE A HIGH VELOCITY COMBINATION SEWER CLEANER AND VACUUM TRUCK SUPPLYING WATER AT A MINIMUM OF 80 GPM, AND A MINIMUM OF 2000 PSI.

THE VIDEO INSPECTION SHALL BE DONE BY USE OF A COLOR “CLOSED CIRCUIT TELEVISION” INSPECTION SYSTEM. PRIOR TO VIDEO INSPECTION, THE CAMERA INSPECTION SYSTEM MUST BE APPROVED BY THE PARISH OF JEFFERSON. EQUIPMENT QUESTIONS SHALL BE DIRECTED TO:

MR. PABLO SAN MARTIN
JEFFERSON PARISH DEPT. OF PUBLIC WORKS
INVESTIGATION- REHAB SECTION
4901 JEFFERSON HWY, SUITE B SUITE 107
JEFFERSON, LA 70121
PSANMARTIN@JEFFPARISH.NET
504-736-6686
504-736.6695

PART 3: EXECUTION

3.01 GENERAL

IF THE CLEANING OF AN ENTIRE SECTION CANNOT BE SUCCESSFULLY PERFORMED FROM ONE MANHOLE, THE EQUIPMENT SHALL BE RE-SETUP TO THE NEXT MANHOLE IN SUCCESSION AND CLEANING ATTEMPTED AGAIN. IF SUCCESSFUL CLEANING CANNOT BE PERFORMED, IT SHALL BE ASSUMED THAT A MAJOR BLOCKAGE EXISTS AND THE CLEANING EFFORTS SHALL BE ABANDONED UNTIL AN EXCAVATION AND “POINT REPAIR” CAN BE MADE BY THE PARISH OF JEFFERSON SUPPLIED FORCES AND THE CLEANING OPERATION MAY BE RESUMED. AFTER REMOVAL OF THE BLOCKAGE THE CONTRACTOR SHALL AGAIN CLEAN THE LINE SECTION, AT NO ADDITIONAL COMPENSATION. ALL SLUDGE, DIRT, SAND, GREASE, ROCKS, AND OTHER SOLID OR SEMI-SOLID MATERIALS RESULTING FROM THE CLEANING OPERATION SHALL BE REMOVED FROM THE DOWNSTREAM MANHOLE OF

THE SECTION BEING CLEANED. MATERIALS PASSING FROM A MANHOLE SECTION, WHICH COULD CAUSE LINE STOPPAGES, ACCUMULATIONS OF SAND IN WET WELLS OR DAMAGE PUMPING EQUIPMENT, SHALL NOT BE PERMITTED. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR REMOVING MORTAR OR OTHER MATERIAL, WHICH IS SECURELY ATTACHED TO THE PIPE WALLS OR JOINTS.

CLEANING SHALL BE DETERMINED TO BE COMPLETED WHEN VIDEO INSPECTION OF THE PIPE INDICATES THAT ALL LOOSE DEBRIS HAS BEEN REMOVED SO THAT THE ENTIRE PIPE WALL IS VISIBLE.

3.02 PIPE INSPECTION

PIPE INSPECTION SHALL BE ACCOMPLISHED BY THE FOLLOWING METHODS:

1. VIDEO 6" SANITARY OR STORM SEWER SERVICE LATERALS:
 - A. THE CONTRACTOR SHALL PROVIDE A COLOR CLOSED CIRCUIT TELEVISION INSPECTION SYSTEM. THIS SYSTEM SHALL BE USED TO REMOTELY INSPECT SERVICE LATERALS FROM EITHER THE CLEAN OUT OR THE SERVICES LINE/MAINLINE CONNECTION. PICTURE QUALITY SHOULD BE A DEGREE OF QUALITY TO ALLOW A THOROUGH EVALUATION OF SERVICE LATERAL CONDITION.
 - B. REPORTS SHALL BE PROVIDED BOTH WRITTEN AND ELECTRONICALLY TO JEFFERSON PARISH PER PARISH STANDARD REQUIREMENTS.

2. TELEVISION INSPECTION OF 6" THRU 60" MAINLINE PIPE:
 - A. THE CONTRACTOR SHALL USE A PAN AND TILT ARTICULATING LENS CLOSED CIRCUIT COLOR VIDEO SYSTEM TO REMOTELY INSPECT THE PIPE. THE TELEVISION CAMERA USED FOR THE INSPECTION SHALL BE ONE SPECIFICALLY DESIGNED AND CONSTRUCTED FOR SUCH INSPECTION. LIGHTING FOR THE CAMERA SHALL BE SUITABLE TO ALLOW A CLEAR PICTURE OF THE

ENTIRE PERIPHERY OF THE PIPE. THE CAMERA SHALL BE OPERATIVE IN 100% HUMIDITY CONDITIONS. THE CAMERA, TELEVISION MONITOR, THE VIDEO RECORDER, AND OTHER COMPONENTS OF THE VIDEO SYSTEM SHALL BE CAPABLE OF PRODUCING THE PICTURE QUALITY REQUIRED TO PROPERLY EVALUATE THE CONDITION OF THE PIPE BEING INSPECTED.

B. DEPTH OF FLOW SHALL NOT EXCEED THAT SHOWN BELOW FOR THE RESPECTIVE PIPE SIZES AS MEASURED IN THE MANHOLE.

MAXIMUM DEPTH OF FLOW FOR TELEVISION INSPECTION

6" – 10" PIPE.....20% OF PIPE DIAMETER
12" – 24" PIPE.....25% OF PIPE DIAMETER
GREATER THAN 24" PIPE...30% OF PIPE DIAMETER

THE CONTRACTOR SHALL BE REQUIRED TO DEWATER PIPE DIPS AS NECESSARY TO ALLOW THE REQUIRED VISIBILITY. THIS DEWATERING SHALL BE CONSIDERED INCIDENTAL TO THE VIDEO INSPECTION. PICTURE QUALITY AND DEFINITION SHALL BE TO THE SATISFACTION OF THE PROJECT MANAGER.

3. PLUGGING: A SEWER LINE PLUG SHALL BE INSTALLED UPSTREAM OF THE SECTION BEING INSPECTED. AFTER THE WORK HAS BEEN COMPLETED, SEWAGE FLOW SHALL BE RESTORED TO NORMAL.

SEWER PLUGS SHALL BE INSTALLED IN THE INFLUENT PIPE OF A MANHOLE. THE PLUG SHALL BE EQUIPPED WITH AN AIR HOSE TO PERMIT DEFLATION FROM ABOVE GROUND. A STRONG ROPE SHOULD BE ATTACHED TO ENABLE THE PLUG TO BE QUICKLY REMOVED FROM THE MANHOLE. CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT A PLUG FROM BEING PUSHED INTO THE OUTGOING PIPE WHEN STORED SEWAGE IS RELEASED.

4. THE CAMERA SHALL BE MOVED THROUGH THE LINE IN EITHER DIRECTION AT A MODERATE RATE, STOPPING WHEN NECESSARY TO PERMIT PROPER DOCUMENTATION OF THE PIPE'S CONDITION. IN NO CASE SHALL THE TELEVISION CAMERA BE MOVED AT A SPEED GREATER THAN 30 FEET PER MINUTE. MANUAL WINCHES, POWER WINCHES, TV CABLE, AND POWERED REWINDS OR OTHER DEVICES THAT DO NOT OBSTRUCT THE CAMERA VIEW OR INTERFERE WITH PROPER DOCUMENTATION OF THE PIPE CONDITIONS SHALL BE USED TO MOVE THE CAMERA THROUGH THE LINE. IF DURING THE INSPECTION OPERATION THE TELEVISION CAMERA WILL NOT PASS THROUGH THE ENTIRE SECTION DUE TO AN OBSTRUCTION SUCH AS A DROPPED JOINT, CRUSHED PIPE ETC., THE CONTRACTOR SHALL SET UP HIS EQUIPMENT SO THE INSPECTION CAN BE PERFORMED FROM THE OPPOSITE END. IF, AGAIN, THE CAMERA FAILS TO PASS THROUGH THE ENTIRE SECTION BECAUSE OF AN OBSTRUCTION, THE CONTRACTOR SHALL CONTACT THE PARISH OF JEFFERSON OR THE ENGINEER. WHEN MANUALLY OPERATED WINCHES ARE USED TO PULL THE TELEVISION CAMERA THROUGH THE LINE, RADIOS OR OTHER SUITABLE MEANS OF COMMUNICATION SHALL BE SET UP BETWEEN THE TWO ENDS OF THE SECTION BEING INSPECTED TO INSURE GOOD COMMUNICATIONS BETWEEN MEMBERS OF THE CREW.
5. THE IMPORTANCE OF ACCURATE DISTANCE MEASUREMENTS IS EMPHASIZED. MEASUREMENT FOR LOCATION OF DEFECTS AND SERVICE CONNECTIONS SHALL BE DONE WITH A METERING DEVICE LOCATED IN THE VIDEO INSPECTION VAN. THE FOOTAGE READING OF THE COUNTER MUST BE DISPLAYED AT ALL TIMES ON THE MONITOR AND ON VIDEOTAPE. MARKING ON THE CABLE WHICH WOULD REQUIRE INTERPOLATION FOR MANHOLE DEPTH, SHALL NOT BE ALLOWED. ACCURACY OF THE DISTANCE METER SHALL BE CHECKED BY USE OF A TAPE. THE ACCURACY SHALL BE WITHIN 1%.
6. THE LOCATION OF ALL SIGNIFICANT PIPE DEFECTS SHALL BE RECORDED ON THE INSPECTION LOG INCLUDING, BUT NOT LIMITED TO, CRACKED AND MISSING PIPE, DEGREE OF PIPE DETERIORATION, OPEN OR SHIFTED JOINTS, LEAKING JOINTS, LEAK ESTIMATES, CRUSHED PIPE AND

OBSTRUCTION. THE LOG SHALL ALSO SHOW PIPE TYPE, SIZE, DEPTH, MANHOLE LOCATIONS, AND LOCATION OF ALL SERVICE CONNECTIONS. IN ADDITION, AS PART OF THE MAINLINE VIDEO INSPECTION, THE CONTRACTOR SHALL DETERMINE AND RECORD THE STREET NUMBER ADDRESSES OF ALL OBSERVATIONS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF ADDRESSES AND ASSESSED POINT REPAIR FOOTAGES PROVIDED UNDER THIS CONTRACT.
8. AFTER ISSUANCE OF A VIDEO INSPECTION WORK ORDER, BUT PRIOR TO INITIATION OF FIELD INSPECTION WORK, THE CONTRACTOR SHALL FIELD VERIFY THE SURVEY AND MANHOLE LOCATIONS. UPON COMPLETION OF THE MANHOLE SURVEY, THE CONTRACTOR SHALL SUBMIT TO THE PROJECT ENGINEER FOR APPROVAL A COMPLETE MAINLINE INVENTORY OF ALL MANHOLES IN THE WORK ORDER SCOPE. THE CONTRACTOR MUST USE THE PARISH ADDRESSING STANDARD FOR THIS INVENTORY,
9. A DIGITAL MPEG RECORDING, USING PENINSULAR TECHNOLOGY'S SOFTWARE (SEE NOTE 14), SHALL BE MADE, BY THE CONTRACTOR, OF ALL PIPE SECTIONS VIDEO INSPECTED. THE RECORDING SHALL INCLUDE A COMPLETE "COLOR" VIDEO OF THE ENTIRE INSPECTION. THE VIDEO INSPECTION SHALL HAVE THE CAPABILITY OF PERMANENTLY DISPLAYING, ON COMPACT DISCS, INFORMATION CONCERNING THE PIPE INSPECTED, INCLUDING PROJECT NUMBER, DATA, STREET NAME, MANHOLE DESIGNATIONS, SIZE OF PIPE AND THE FOOTAGE COUNTER. THE FOLLOWING FIELDS MUST BE SHOWN THROUGHOUT THE ENTIRE VIDEO:
 - A) DATE.
 - B) UPSTREAM MANHOLE #, INCLUDING LIFT STATION AREA CODE.
 - C) DOWNSTREAM MANHOLE #, INCLUDING LIFT STATION AREA CODE.
 - D) FOOTAGE.
 - E) DIRECTION OF VIDEO [WITH FLOW OR AGAINST FLOW].

THE CONTRACTOR SHALL DELIVER, TO THE PARISH, COMPUTER MEDIA CONTAINING ALL FIELD INVESTIGATION DATA COLLECTED AFTER COMPLETION OF THE INSPECTION. IF INSPECTION IS NOT COMPLETED WITHIN ONE WEEK, THEN THE CONTRACTOR SHALL PROVIDE WEEKLY REPORTS TO THE OWNER. FOR THE DURATION OF THE CONTRACT, THE CONTRACTOR SHALL MAINTAIN A LOCAL LIBRARY CONTAINING A COPY OF ALL VIDEO RECORDING GENERATED ON THIS CONTRACT. ALL CODES SHALL FOLLOW STANDARD JEFFERSON PARISH REQUIREMENTS.

10. VIDEO INSPECTION ACTIVITIES MAY BE COORDINATED WITH DYE FLOODING WHEN DIRECTED BY THE ENGINEER OR PARISH'S PROJECT MANAGER.
11. THE CONTRACTOR SHALL BE PAID FOR THE ACTUAL LINEAR FEET OF PIPE INSPECTED AT THE UNIT BID PRICES FOR THE VARIOUS SIZES OF SEWER PIPES.
12. **NEWLY INSTALLED PIPES:**
 - A) ALL PIPES MUST BE CLEANED AS OUTLINED HEREIN.
 - B) THE OPERATOR SHOULD PLUG OFF ANY ADDITIONAL INCOMING MAINLINES AT THE DOWNSTREAM MANHOLE THAT ARE NOT BEING TELEVISED AT THAT TIME. SET UP THE T.V. TRUCK AT THE UPSTREAM MANHOLE, AND PLUG OFF ANY INCOMING MAINLINES AT THAT MANHOLE.
 - C) ROLL OUT FIRE HOSES TO THE NEAREST FIRE HYDRANT, AND AFTER CLEANING OF THE MAINLINE HAS BEEN COMPLETED (WITHOUT THE RODDER HOSE OR NOZZLE IN THE MAINLINE), BEGIN INDUCING WATER AT THE UPSTREAM MANHOLE USING THE FIRE HOSES FOR APPROXIMATELY 15 MINUTES.
 - D) DISCONTINUE THE INDUCTION OF WATER INTO THE MAINLINE AND WAIT APPROXIMATELY 15 MINUTES SO THAT THE WATER CAN LEVEL OFF. T.V. INSPECTION SHOULD BEGIN ONLY AFTER ALLOWING WATER TO LEVEL OFF.
 - E) THE LINE SHOULD BE VIDEOED WITHOUT THE RODDER HOSE OR NOZZLE DEWATERING THE MAINLINE.
 - F) PIPE TECH SCAN MUST BE USED TO RECORD THE VIDEO INSPECTION. VIDEOS MUST BE SUBMITTED IN

ORIGINAL PIPE TECH FORMAT (PVT FILE). **VIDEOS IN DVD FORMAT WILL NOT BE ACCEPTED!**

13. IN ADDITION TO DIGITAL MPEG VIDEO RECORDINGS, THE CONTRACTOR SHALL PROVIDE AN ANALOG VHS VIDEOTAPE OR COMPACT DISC OF PIPE INSPECTIONS AT THE REQUEST OF THE OWNER.
14. ALL THE DATA GATHERED IN THE FIELD INVESTIGATION SHALL BE INPUT INTO THE GBA MASTER SERIES SEWER SYSTEM MANAGEMENT PROGRAM BY THE CONTRACTOR TO GENERATE REPORTS DETAILING ALL LEAKS IDENTIFIED AND ANY FURTHER EVALUATION OR REPAIR WORK TO BE DONE.
15. ALL DIGITAL VIDEOS GATHERED IN THE TELEVISION INSPECTION SHALL BE DIGITIZED USING PENINSULAR TECHNOLOGY SOFTWARE ONLY. NO OTHER SOFTWARE SHALL BE ACCEPTED.

3.03 DISPOSAL OF MATERIALS FROM CLEANING

1. GENERAL

MATERIALS SHALL BE DISPOSED OF FROM THE WORK SITE NOT LESS OFTEN THAN ONCE AT THE END OF EACH WORK-DAY. THE CONTRACTOR SHALL PROVIDE SATISFACTORY EVIDENCE DAILY TO THE PARISH OF THE AMOUNT OF MATERIAL REMOVED FROM THE PIPES. THESE QUANTITIES SHALL BE SUBJECTED TO CERTIFICATION, AS DEEMED NECESSARY BY THE PROJECT ENGINEER OR OWNER.

ALL MATERIALS REMOVED DURING THE CLEANING SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT NO COST TO THE OWNER. THE DISPOSAL SITE SHALL BE APPROPRIATE FOR THE TYPE OF MATERIAL BEING DISPOSED OF. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE AND FEDERAL GUIDELINES IN DISPOSAL OF THIS MATERIAL.

23. AS-BUILT PLANS

THE CONTRACTOR SHALL FURNISH TO THE JEFFERSON PARISH DEPARTMENT OF ENGINEERING “AS-BUILT” PLANS (ONE DIGITAL CD, IN ACAD 2004 AND PDF FORMATS, ONE MYLAR & THREE BLUE-LINE SETS). AS-BUILT PLANS SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING:

- DISTANCE OF SEWER HOUSE CONNECTIONS (HC) FROM DOWNSTREAM MANHOLES. THIS DISTANCE SHALL BE MEASURED ALONG THE CENTERLINE OF THE MAIN AND SHALL BE EQUAL TO THE DISTANCE FROM THE CENTER OF THE DOWNSTREAM MANHOLE TO THE PROJECTION POINT OF EACH HC (HC AT PROPERTY LINE) ONTO THE MAIN.
- ELEVATION OF SERVICE HOUSE CONNECTIONS AT THE PROPERTY LINE.
- THE INVERT AND TOP OF CASTING ELEVATIONS AND DEPTH OF EACH MANHOLE.
- PIPE INVERTS AT MANHOLES.
- THE CENTER TO CENTER DISTANCES OF CONSECUTIVE MANHOLES.

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