EXHIBIT D: CHURCHILL TECHNOLOGY & BUSINESS PARK ROADS AND INFRASTRUCTURE ENGINEERING DRAWINGS

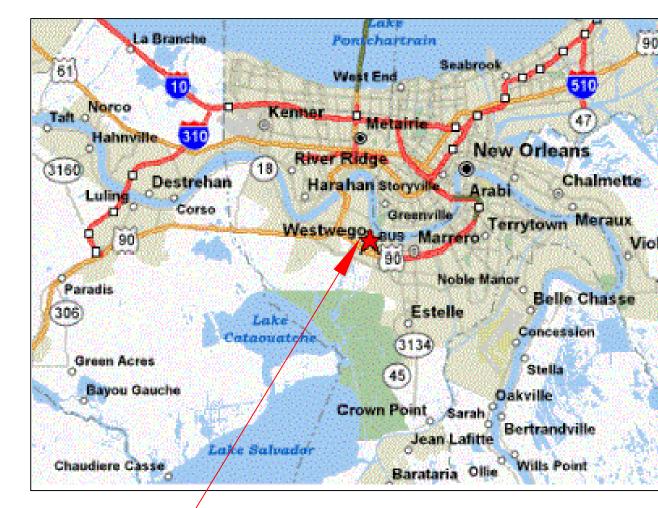
RFP NUMBER: 171116

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	DF SHEETS
1	TITLE SHEET
2 - 2a	TYPICAL SECTIONS
3	EXISTING SITE SURVEY
4	EXISTING SITE PLAN (FROM CLEARING AND SURCHARGING PROJECT)
5	REQUIRED SITE PLAN
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10	STREET LIGHT AND UTILITY PLAN
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18	JEFFERSON PARISH STANDARD DETAILS — SEWER
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21	DOTD STANDARD DETAILS — CB—O1 (BRICK)
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111	LANDSCAPE DETAILS
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CHURCHILL TECHNOLOGY AND BUSINESS PARK — ROADS AND INFRASTRUCTURE JEFFERSON PARISH, LOUISIANA A/E PROJECT NO. 20-0504 JEFFERSON PARISH ECONOMIC DEVELOPMENT AND PORT DISTRICT (JEDCO), OWNER JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS PUBLIC WORKS PROJECT NO. 2005-019B-RB ECONOMIC DEVELOPMENT ADMINISTRATION

PROJECT NO. 08-01-03995



PROJECT LOCATION

LOCATION MAP

EXECUTIVE DIRECTOR LUCIEN GUNTHER

DEPUTY DIRECTOR OF OPERATIONS GAYE FREDERIC

JEFFERSON PARISH COUNCIL

PARISH PRESIDENT AARON F. BROUSSARD

JOHN F. YOUNG JR. THOMAS J. CAPELLA

COUNCIL-AT-LARGE COUNCIL CHAIRMAN

COUNCIL MEMBERS

CHRIS L. ROBERTS DISTRICT 1 ELTON M. LAGASSE DISTRICT 2 BYRON L. LEE DISTRICT 3 LOUIS J. CONGEMI DISTRICT 4 DISTRICT 5 JENNIFER L. SNEED



VICINITY MAP

PLANS PREPARED BY AND RECOMMENDED FOR APPROVAL:

RICHARD C. MEYER, P.E. MEYER ENGINEERS, LTD.

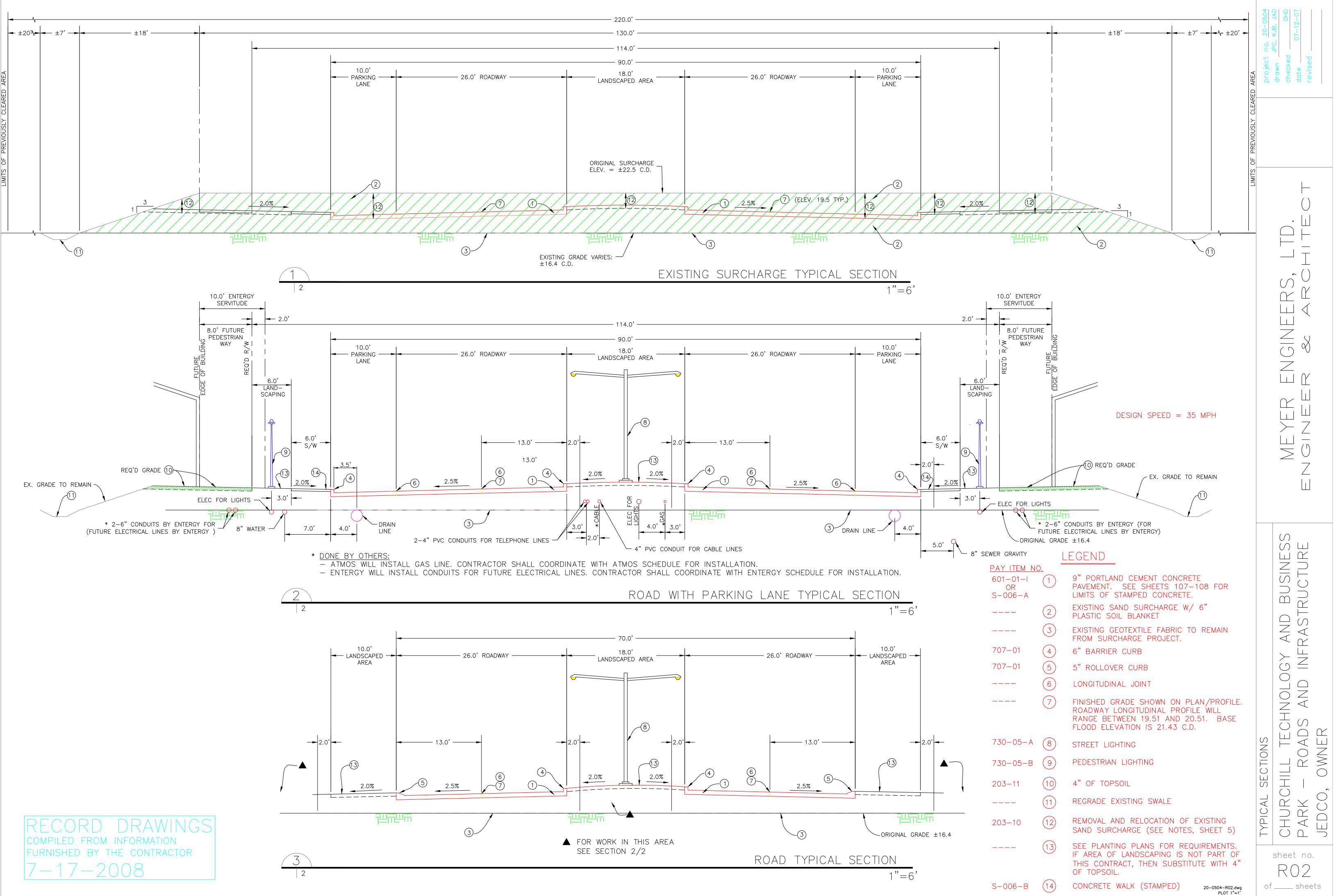
APPROVED:

MARK DREWES, P.E. DIRECTOR, JEFFERSON PARISH DEPARTMENT OF ENGINEERING

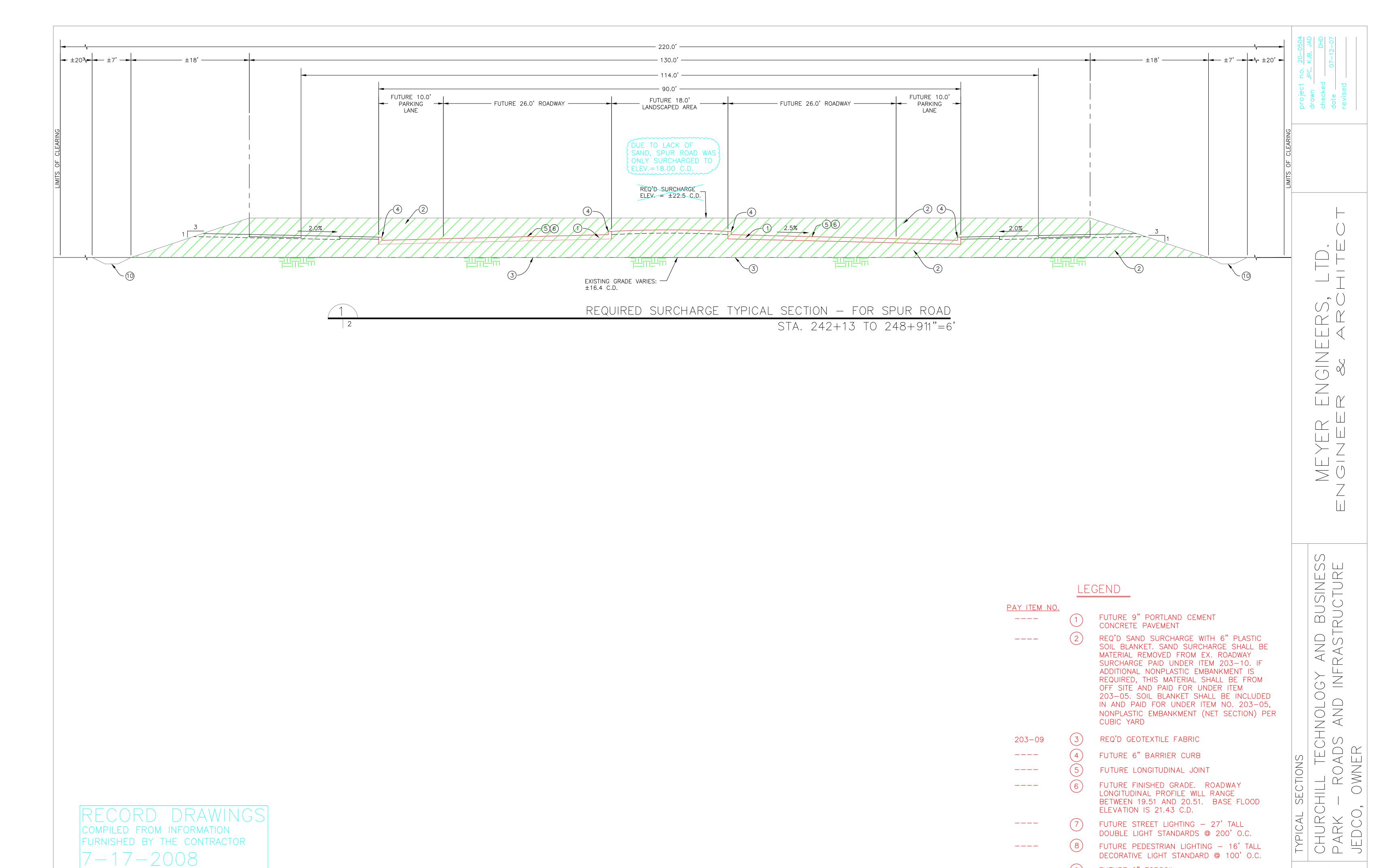
FURNISHED BY THE CONTRACTOR 7-17-2008

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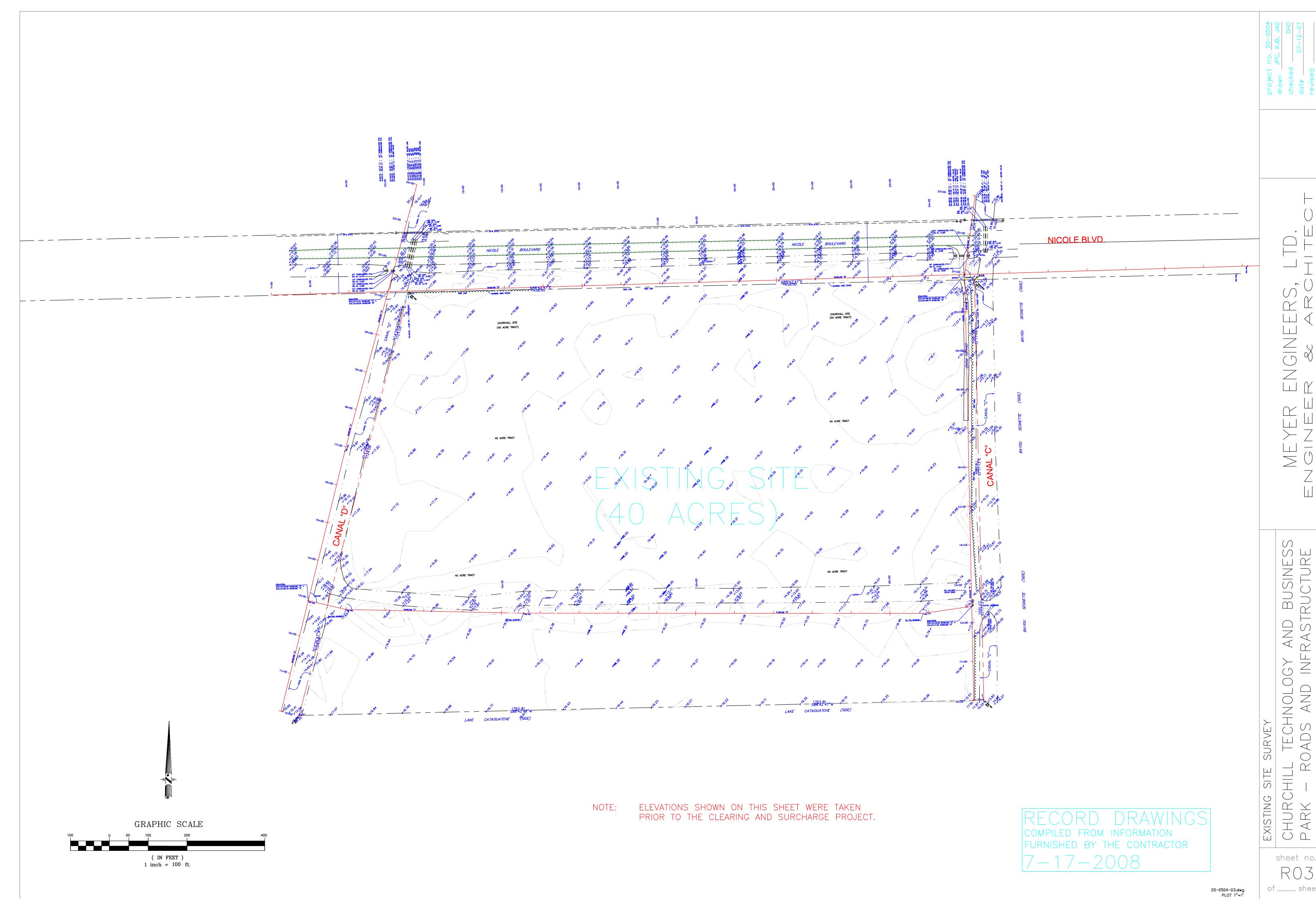


REVISED 3-17-2009

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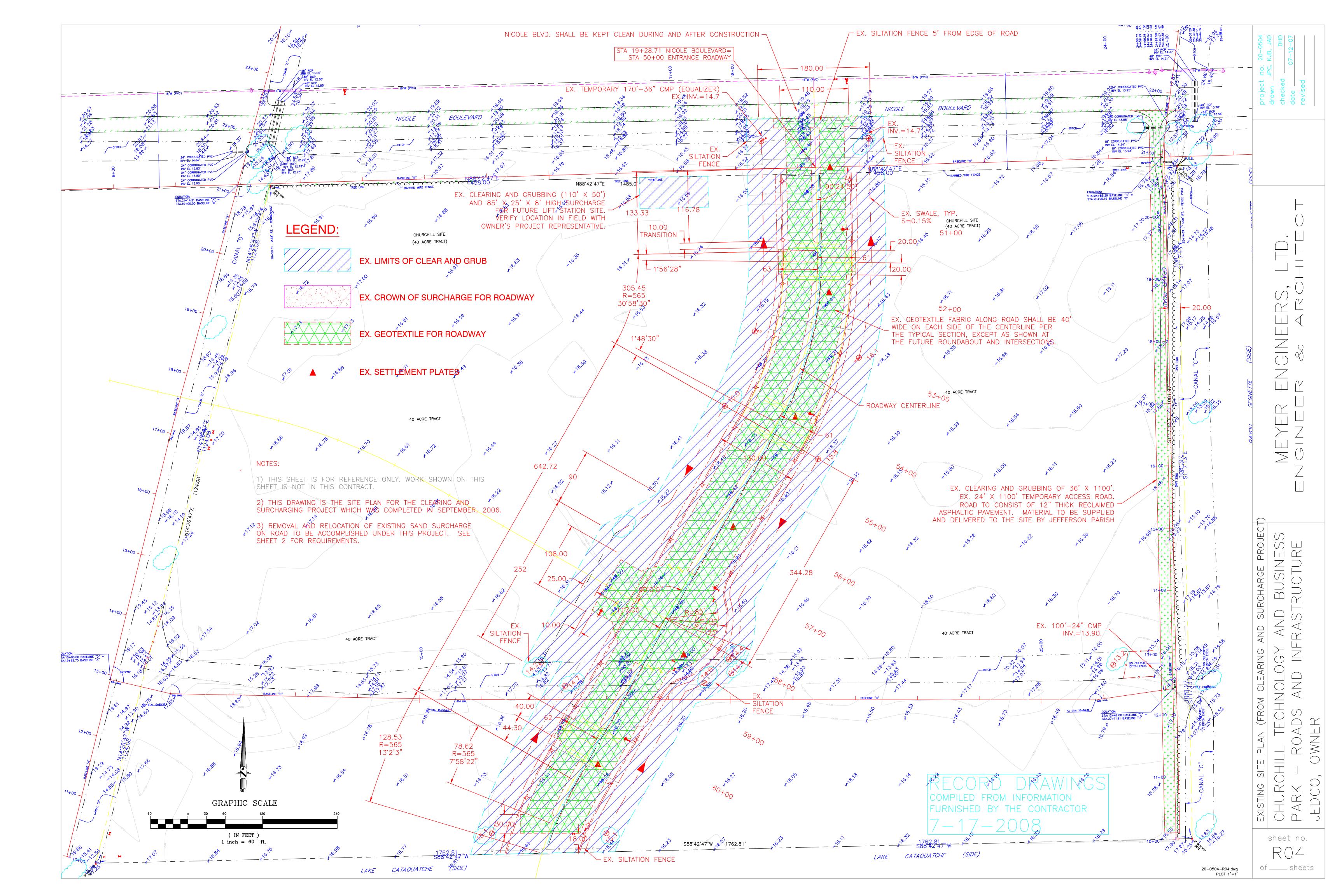
FUTURE 6" TOPSOIL

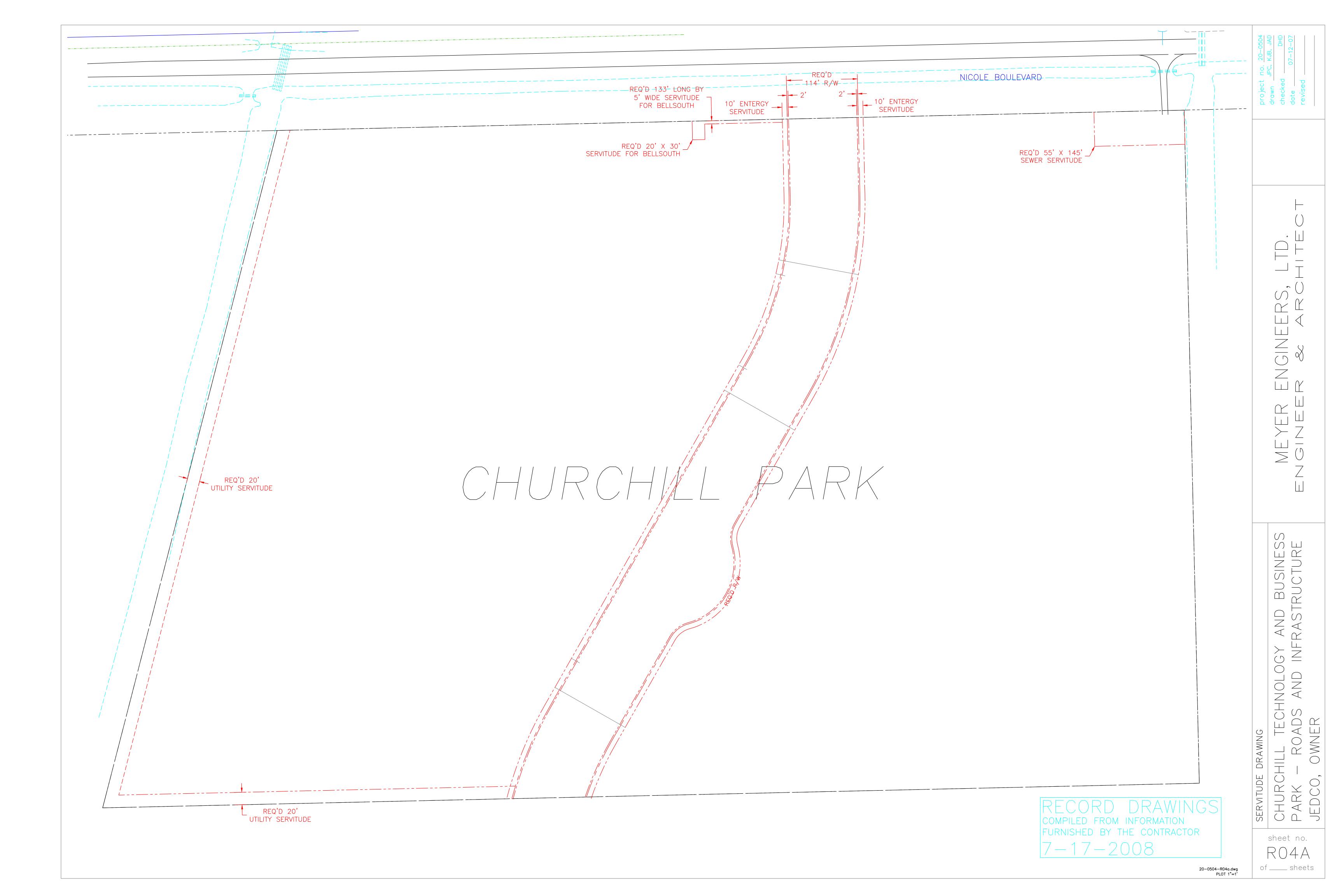
REQ'D SWALE

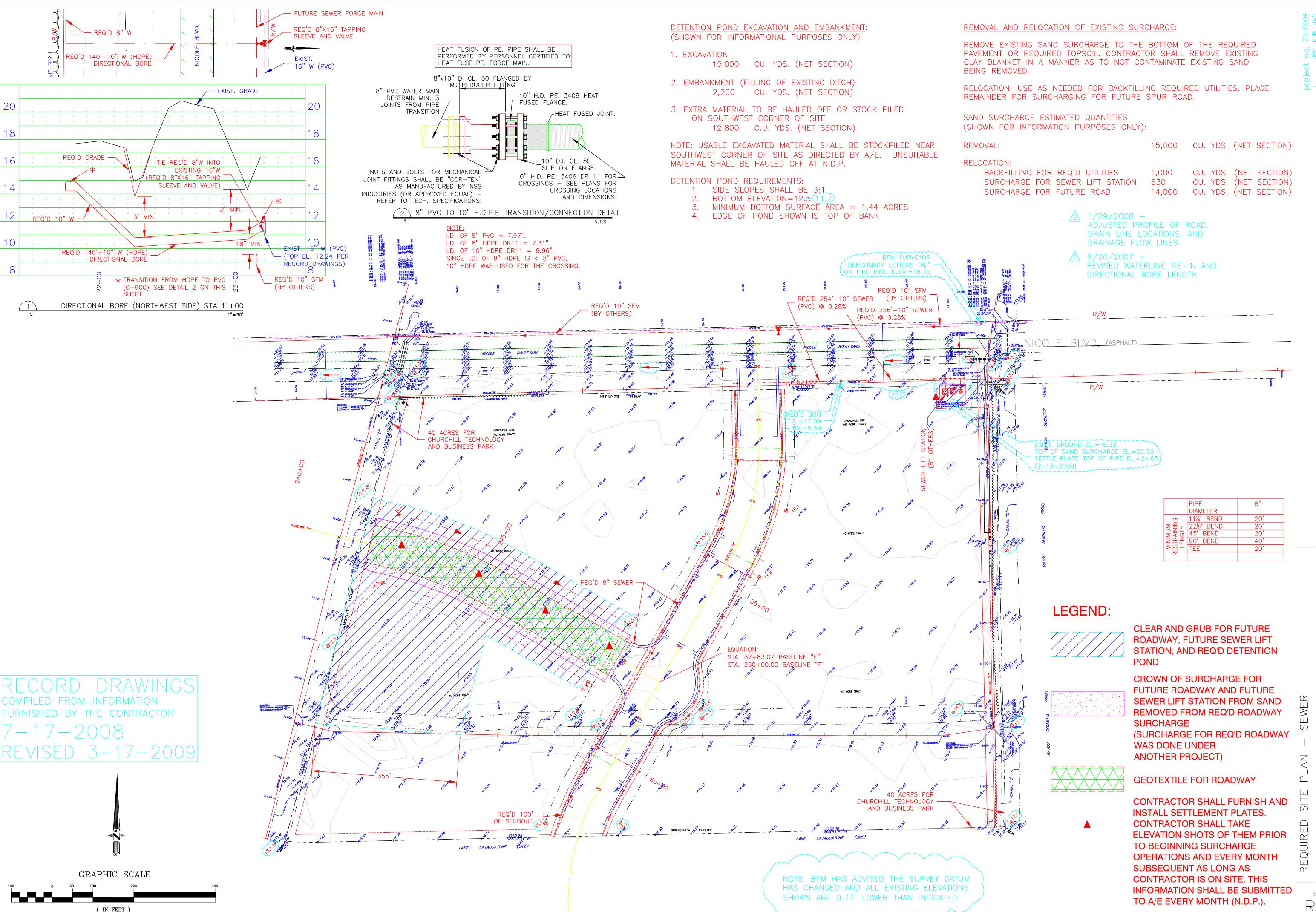


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PARK - R
JEDCO, OV

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1 inch = 100 ft.

project no. 20-0504
drawn JPC, KJB, JAD
checked DHD
date 07-12-07
revised

RERS, LTD.

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CHILL TECHNOLOGY AND BUSINESS
- ROADS AND INFRASTRUCTURE

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R05-S

2. CONTRACTOR SHALL PROTECT ADJACENT PROPERTY AND IMPROVEMENTS FROM DAMAGE AND REPLACE ANY PORTIONS DAMAGED THROUGH HIS OPERATION AT HIS OWN COST. ALL REPAIR WORK SHALL BE SUBJECT TO THE APPROVAL OF THE A/E.

3. CONTRACTOR SHALL NOT DAMAGE TREES OUTSIDE OF WORK AREA. IF DAMAGED, CONTRACTOR SHALL REPLACE AT HIS OWN COST. CONTRACTOR SHALL USE A CHAIN SAW TO CUT ROOTS OF TREES EXPOSED DURING EXCAVATION. CONTRACTOR SHALL NOT BREAK ROOTS BY PULLING THEM WITH DIGGING MACHINES. ROOT AND BRANCH PROTECTANT SHALL BE SPRAYED OR PAINTED ON BRANCHES OR ROOTS WHICH HAVE BEEN CUT.

4. PROTECT FROM DAMAGE ALL EXISTING TREES, PLANTING AND LAWNS OUTSIDE OF WORK AREA. ALL STREET SIGNS, FENCES, SHRUBBERY, ETC. RELOCATED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL LOCATION AND IN ORIGINAL CONDITIONS.

5. PROPERTY LINE, RIGHT OF WAY AND/OR SERVITUDES SHOWN ARE THE LIMIT OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON PLANS.

6. EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT EXISTING UTILITIES WHEN EXCAVATING IN THESE AREAS SO AS NOT TO DAMAGE OR DISRUPT THESE UTILITIES. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO EXCAVATION.

7. CAVITIES OR TRENCHES LEFT BY REMOVAL WORK SHALL BE BACKFILLED TO THE LEVEL OF SURROUNDING GROUND WITH GRANULAR MATERIAL.

8. ALL EXISTING DRAINAGE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.

9. DRAIN STRUCTURES SHALL BE REMOVED AND REPLACED IF THEY INTERFERE WITH CONSTRUCTION. IF DAMAGED, CONTRACTOR SHALL REPLACE DRAIN STRUCTURES USING LIKE MATERIALS. DRAINAGE STRUCTURES SHALL BE RELOCATED TO PROVIDE POSITIVE DRAINAGE. CONTRACTOR TO OBTAIN ELEVATIONS AND DOCUMENT (I.E., PHOTOS, VIDEO, ETC.) PRIOR TO REMOVAL. (NO DIRECT PAYMENT).

10. FLOW LINES TO BE ADJUSTED BY CONTRACTOR UPON APPROVAL OF A/E IF PROPOSED FLOW LINES CONFLICT WITH EXISTING UTILITIES (AT NO EXTRA COST TO OWNER).

11. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN SERVICES, SUPPLYING MATERIALS, AND LABOR NECESSARY TO PROVIDE SHEETING, SHORING AND BRACING OR SUPPORTS AS REQUIRED TO PROVIDE A SAFE WORKING CONDITION FOR CONTRACTOR'S PERSONNEL AND TO PROVIDE FOR PROTECTION OF UTILITIES, BUILDINGS, LEVEES, AND STRUCTURES. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH THESE REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE SYSTEM TO WITHSTAND LATERAL PRESSURE. THE OWNER HAS PAID FOR A GEOTECHNICAL REPORT ADDRESSING CONSTRUCTION OF THE PROJECT. IT IS AVAILABLE FOR REVIEW AT THE A/E'S OFFICE. SHEET DESIGN AND INSTALLATION SHALL BE INCLUDED IN THE COST OF THE PIPE OR STRUCTURAL INSTALLATION.

12. ALL AREAS AFFECTED BY CONSTRUCTION SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE.

13. CONTRACTOR SHALL VERIFY TOP OF CASTING ELEVATIONS PRIOR TO ORDERING MANHOLES.

14. CONTRACTOR SHALL REGRADE ALL AREAS AFFECTED BY CONSTRUCTION, WHICH IS DELINEATED BY THE CLEARING LIMITS, TO PROVIDE POSITIVE DRAINAGE. WORK SHALL BE IN A WORKMAN LIKE MANNER AND IN ACCORDANCE WITH A/E REQUIREMENTS. IF CONTRACTOR DETERMINES THAT ANY AREAS AFFECTED BY CONSTRUCTION CANNOT BE REGRADED TO DRAIN, CONTRACTOR SHALL DOCUMENT (I.E., TAKE ELEVATIONS, PICTURES, ETC.) EXISTING CONDITIONS PRIOR TO CONSTRUCTION (N.D.P.).

15. SIDEWALK SHALL BE 6'-0" WIDE X 4" THICK MINIMUM. PROVIDE TOOLED JOINTS AT INTERVALS EQUAL TO THE WIDTH OF SIDEWALK AND EXPANSION JOINTS EVERY 20'-0". INCLUDE WELDED WIRE FABRIC.

16. CONTRACTOR SHALL AT ALL TIMES CONDUCT HIS OPERATIONS AS TO INSURE THE LEAST INCONVENIENCE TO THE GENERAL PUBLIC AND ADJACENT PROPERTY OWNERS.

17. CONTRACTOR SHALL COORDINATE AND PAY FOR THE DE-ENERGIZING AND RE-ENERGIZING OF POWER LINES FOR CONSTRUCTION PURPOSES AS REQUIRED BY LOCAL, STATE, AND FEDERAL AGENCIES.

18. CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES OR DEPARTMENTS LISTED BELOW PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF THERE ARE ANY OTHER UTILITIES IN THE AREA AND TO CONTACT THE APPROPRIATE UTILITIES.

ENTERGY — KEN MARTINEZ	(504)365-3632
ATMOS — BRIAN BLUM	(504)362-5258
BELLSOUTH - LLOYD MASSEY	(504)364-6801
COX COMMUNICATIONS - MITZI MANCUSO	(504)304-8091
J.P. STREETS DEPT.	(504)349 - 5800
J.P. ENGINEERING DEPTINSPECTION- VALERIE THOMASSIE	(504)736-6793
J.P. WATER DEPT.	(504)736-6744
J.P. SEWER DEPT.	$(504)^{7}36 - 6661$

19. CONTRACTOR SHALL NOTIFY THOSE AFFECTED BY CONSTRUCTION 24 HOURS PRIOR TO DISRUPTION OF WATER, SEWER OR OTHER UTILITY SERVICE. UTILITY SERVICES SHALL BE PROMPTLY REPAIRED AND NOT REMAIN OUT OF SERVICE OVERNIGHT.

20. CONTRACTOR SHALL BRACE ENTERGY AND BELLSOUTH POLES ADJACENT TO EXCAVATION. BRACING SHALL REMAIN IN PLACE AFTER BACKFILLING UNTIL COMPACTION STANDARDS HAVE BEEN MET. COMPLETE WORK PROMPTLY ONCE EXCAVATION HAS BEGUN ADJACENT TO POLES.

21. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DIRECTLY WITH THE APPROPRIATE UTILITY COMPANIES TO HAVE THE UTILITIES RELOCATED.

22. THE EXISTING WATER MAIN MUST NOT BE OUT OF SERVICE FOR MORE THAN FOUR (4) HOURS DURING TIE—IN, AND SHUT OFF SHOULD BE DONE UNDER THE DIRECT SUPERVISION OF JEFFERSON PARISH ENGINEERING/WATER DEPARTMENT.

23. THE CONTRACTOR SHALL FURNISH THE OWNER WITH AN "AS-BUILT" PLAN SHOWING THE DISTANCE FROM DOWNSTREAM MANHOLE TO EACH SERVICE CONNECTION AS MEASURED AGAINST THE FLOW, THE DEPTH OF EACH MANHOLE, CENTER TO CENTER DISTANCE BETWEEN THEM, THE TYPE AND SIZE OF SEWER PIPE INSTALLED.

24. CONTRACTOR SHALL MAINTAIN TEMPORARY EROSION CONTROL AS DESCRIBED IN SECTION SP.43 OF THE SPECIFICATIONS, PER THE US ARMY CORPS OF ENGINEERS PERMIT, WHICH WILL BE PROVIDED BY THE ENGINEER.

25. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL BE REQUIRED. THIS PLAN MUST BE DEVISED AND IMPLEMENTED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL EMPLOY SILTATION CONTROLS AROUND THE CONSTRUCTION SITE SUCH THAT ERODED MATERIAL IS PREVENTED FROM ENTERING ADJACENT WATERWAYS OR EXISTING DRAINAGE.

26. AT NO DIRECT PAYMENT THE CONTRACTOR SHALL PROVIDE A WHEEL WASH OPERATION PRIOR TO LEAVING THE CONSTRUCTION SITE. ALL VEHICLES MUST HAVE THEIR WHEELS WASHED CLEAN OF MUD AND DEBRIS SO THAT NO MUD OR DEBRIS IS DEPOSITED ON THE EXISTING STREETS.

27. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT MIGRATION OF MATERIALS AND SEDIMENTS FROM THE SITE TO PUBLIC ROADS AND DRAINAGE SYSTEMS.

28. THE WRAP DIRECTION OF WOVEN ENGINEERING (GEOTEXTILE) FABRIC SHALL BE PERPENDICULAR TO DIRECTION OF ROADWAY.

29. GEOTEXTILE FABRIC SHALL BE CLASS 'S' IN ACCORDANCE WITH THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2000 EDITION, SECTION 1019. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

30. CONTRACTOR SHALL REMOVE EXISTING DRAINAGE CULVERTS CONSTRUCTED UNDER THE SAND SURCHARGE. N.D.P

31. ALL EXISTING/PROPOSED DRAINAGE & SEWERAGE LINES SHALL BE TIED INTO EXISTING/PROPOSED STRUCTURES @ NDP.

32. HANDICAP RAMPS REQUIRED AT ALL INTERSECTIONS.

33. AREAS BETWEEN THE OUTER EDGE OF THE SWALES ALONG THE ROAD AND THE LIMITS OF THE LANDSCAPING SHALL BE SEEDED.

34. PROVIDE WATER SERVICE LINES AND SEWER SERVICE LINES AS DIRECTED IN FILED BY PROJECT ENGINEER

35. THE EDA SIGN AS DESCRIBED IN THE SPECIFICATIONS SHALL BE CONSTRUCTED WITHIN 10 DAYS OF THE NOTICE TO PROCEED.

GRAVITY SANITARY SEWER SYSTEM

1. 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 SANITARY SEWER SYSTEM.

2. SANITARY SEWERAGE GRAVITY LINES (MAINS AND LATERAL SERVICE CONNECTIONS) SHALL BE PVC SDR 26 PIPE CONFORMING IN ALL RESPECTS TO ASTM SPECIFICATIONS D-3034. PIPE SECTIONS AND FITTINGS SHALL BE INTEGRAL CAST BELL AND ELASTOMERIC GASKET AS RECOMMENDED BY THE MANUFACTURER AND ASTM SPECIFICATIONS D-3212. INSTALLATION OF THE SEWER GRAVITY LINES SHALL CONFORM TO ASTM SPECIFICATIONS D-2321.

3. 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.

4. DIRECTIONAL DRILLING OF HDPE GRAVITY MAINS FOR STREET AND CANAL CROSSINGS SHALL BE PERMITTED ONLY BY SPECIAL APPROVAL OF THE DEPARTMENT OF SEWERAGE. HDPE PIPE SHALL BE DR 11 OR STRONGER PIPE WITH MINIMUM TARGET SLOPE OF 0.50%.

5. 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.

6. 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, 5–30–00). USE SOIL TYPE [2].

7. TIMBER SHEETING AND BRACING SHOWN, FOR SANITARY SEWER TRENCHES, ARE 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.

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

9. DEFLECTION TESTING:

- A 5% DEFLECTION MANDREL SHALL BE USED TO PERFORM THE DEFLECTION

TESTING.

- 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 ROADWAY, 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 ACCEPTANCE.

 THE OWNER, CONTRACTOR OR HIS AGENT SHALL CONTACT THE DEPARTMENT OF ENGINEERING 24 HOURS IN ADVANCE FOR THE INSPECTION OF THE DEFLECTION MANDREL TEST.

10. GRAVITY SEWER MAINS SHALL BE INSTALLED FOUR (4) FEET FROM PROPERTY LINES MINIMUM HORIZONTAL SPACING (EDGE TO EDGE) SHALL BE MAINTAINED BETWEEN GRAVITY SEWER LINES (MAINS & SERVICE CONNECTIONS) AND WATER MAINS.

11. 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.

12. 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, SHEET 18] SHALL BE PERMITTED.

13. THE LOCATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES. HE SHALL ALSO TAKE NECESSARY PRECAUTIONS TO PROTECT ALL UTILITIES. JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS IS NOT RESPONSIBLE FOR ANY COMPENSATION FOR THE REPAIR OR RELOCATION OF EXISTING UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATION.

14. DROP SEWER MANHOLES SHALL BE INSTALLED WHEN THE VERTICAL DISTANCE FROM THE MANHOLE INVERT TO THE SEWER MAIN INVERT EXCEEDS THREE (3) FEET.

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

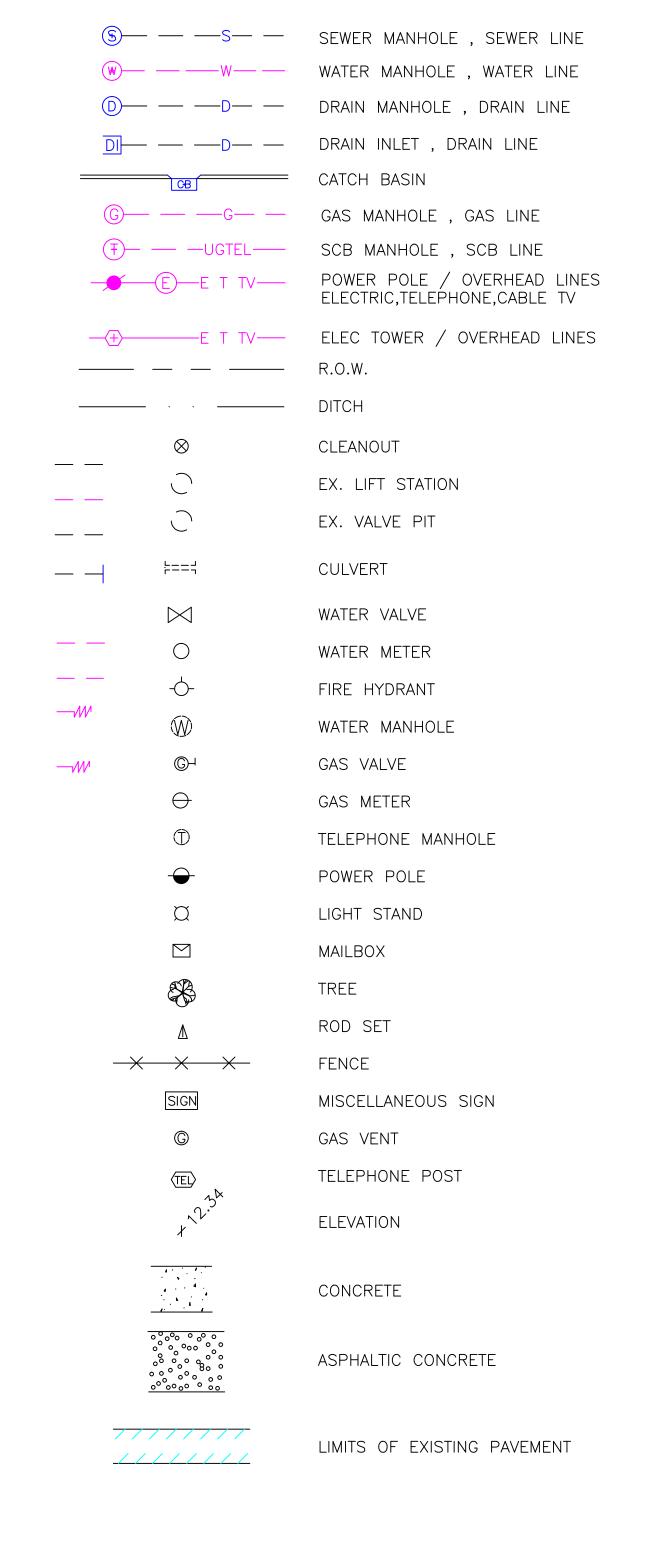
16. ALL LOTS MUST BE PROVIDED WITH A SEWER SERVICE / HOUSE CONNECTION (HC). SEWER HC, IF PRACTICAL, SHALL BE INSTALLED PERPENDICULAR TO THE SEWER MAIN. ALL SEWER HC INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY PLUGGED. LOCATION OF ALL HC SHALL BE MARKED BY IMPRESSING LETTERS HC IN THE FACE OF STREET CURB IN ACCORDANCE WITH THE REQUIREMENTS OF JEFFERSON PARISH STANDARDS [SEE SEWER STANDARD DETAILS, SHEET 18]. 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.

17. 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 JEFFERSON PARISH ENGINEERING DEPARTMENT FOR APPROVAL.

18. 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 JEFFERSON PARISH ENGINEERING DEPARTMENT 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 (OR APPROVED EQUAL) 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 THE MORTAR MIX WHEN BUILDING BRICK MANHOLES. 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

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

LEGEND OF SYMBOLS (EXISTING)



COMPILED FROM INFORMATION

20. THE CONTRACTOR SHALL FURNISH "AS-BUILT" PLANS (ONE SET OF PLANS AND

VERIFICATION OF COMPLIANCE, AND TO THE JEFFERSON PARISH DEPARTMENT OF

- ELEVATION OF SERVICE CONNECTIONS AT THE PROPERTY LINE.

- THE CENTER TO CENTER DISTANCES OF CONSECUTIVE MANHOLES.

SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING:

PIPE INVERTS AT MANHOLES.

SPECIFICATIONS) TO THE OWNER (JEDCO), THROUGH THE ENGINEER OF RECORD FOR

ENGINEERING (ONE DIGITAL CD, ONE MYLAR & THREE BLUE-LINE SETS). AS-BUILT PLANS

DISTANCE OF HC FROM DOWNSTREAM MANHOLES. THIS DISTANCE SHALL BE

PROJECTION POINT OF EACH HC (HC AT PROPERTY LINE) ONTO THE MAIN.

- THE INVERT AND TOP OF CASTING ELEVATIONS AND DEPTH OF EACH MANHOLE.

DISTANCE FROM THE CENTER OF THE DOWNSTREAM MANHOLE TO THE

MEASURED ALONG THE CENTERLINE OF THE MAIN AND SHALL BE EQUAL TO THE

TURNISHED BY THE CONTRACTOR

LEGEND OF SYMBOLS (NEW)



TRAFFIC NOTE

1. FOR TRAFFIC CONTROL DEVICES IN WORK ZONES, THE CONTRACTOR SHALL DESIGN AND APPLY ALL SIGNALS, PAVEMENT MARKINGS, CHANNELIZING DEVICES, AND WARNING SIGNS IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2000 EDITION AS REVISED.

2. CHANNELIZING AND DELINEATION DEVICES SHALL BE USED TO MARK ALL CONSTRUCTION AREAS. THESE SHALL BE TYPE II AND/OR TYPE III BARRICADES AND/OR BARRELS, ALL FULLY REFLECTORIZED AND WITH LIGHTS.

3. ALL EXISTING OR TEMPORARY TRAFFIC CONTROL DEVICES (MARKINGS, SIGNS, ETC.), NO LONGER REQUIRED, SHALL BE REMOVED OR OBLITERATED BY THE CONTRACTOR. THE ORIGINAL ROADWAY CONDITIONS SHALL BE RESTORED BY THE CONTRACTOR.

4. ALL TRAFFIC CONTROL DEVICES NOT APPLYING TO AN APPROPRIATE SITUATION SHALL BE COVERED OR REMOVED.

5. ALL EXCAVATIONS SHALL BE COVERED, BACKFILLED, OR PROTECTED AND FULLY DELINEATED AT NIGHT AND WHEN WORK IS NOT IN PROGRESS.

6. CONTRACTOR SHALL CHECK TRAFFIC CONTROL DEVICES ON A DAILY BASIS WHEN BEGINNING AND ENDING THE WORK DAY, AS A MINIMUM. ON WEEKENDS & HOLIDAYS, THEY SHALL BE CHECKED AT A MINIMUM OF ONCE PER

7. FLAGMAN AND/OR SHERIFF'S CONTROL SHALL BE PROVIDED AS NEEDED FOR SAFETY.

8. DURING CONSTRUCTION, ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE A/E, THE OWNER, OR THE CONTRACTOR SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

9. ALL MATERIALS/MACHINES SHALL BE STORED OUTSIDE OF ROAD SURFACE CREATING NO SIGHT DISTANCE PROBLEMS, AND FULLY DELINEATED AS IN NOTE NO. 2.

10. CONTRACTOR SHALL PROVIDE TEMPORARY PEDESTRIAN ACCESS IF CONSTRUCTION BARRICADES ARE BLOCKING THE EXISTING SIDEWALK.

11. PERMANENT SIGNING WILL BE DESIGNED AND CONSTRUCTED BY THE JEFFERSON PARISH DEPARTMENT OF TRAFFIC.

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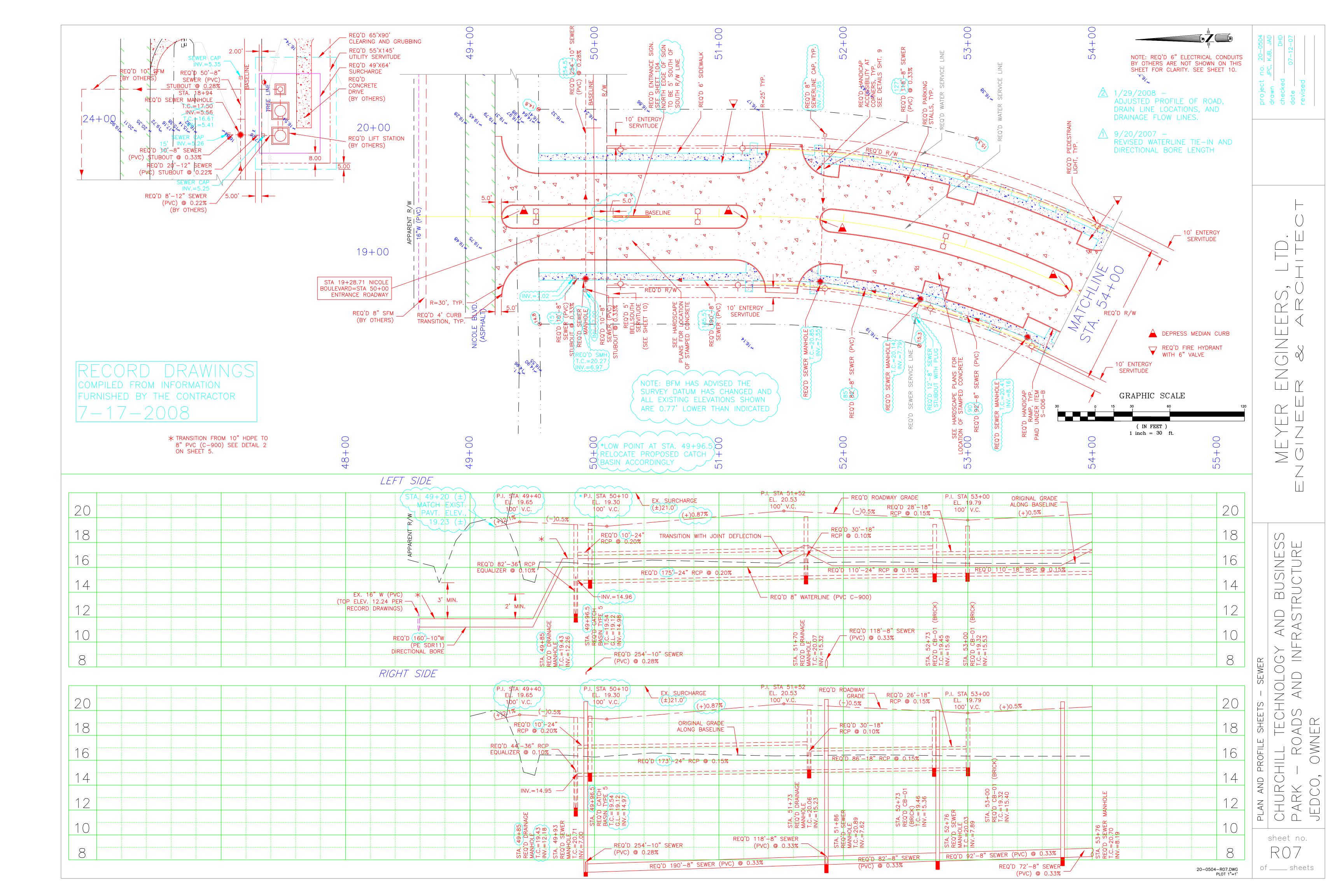
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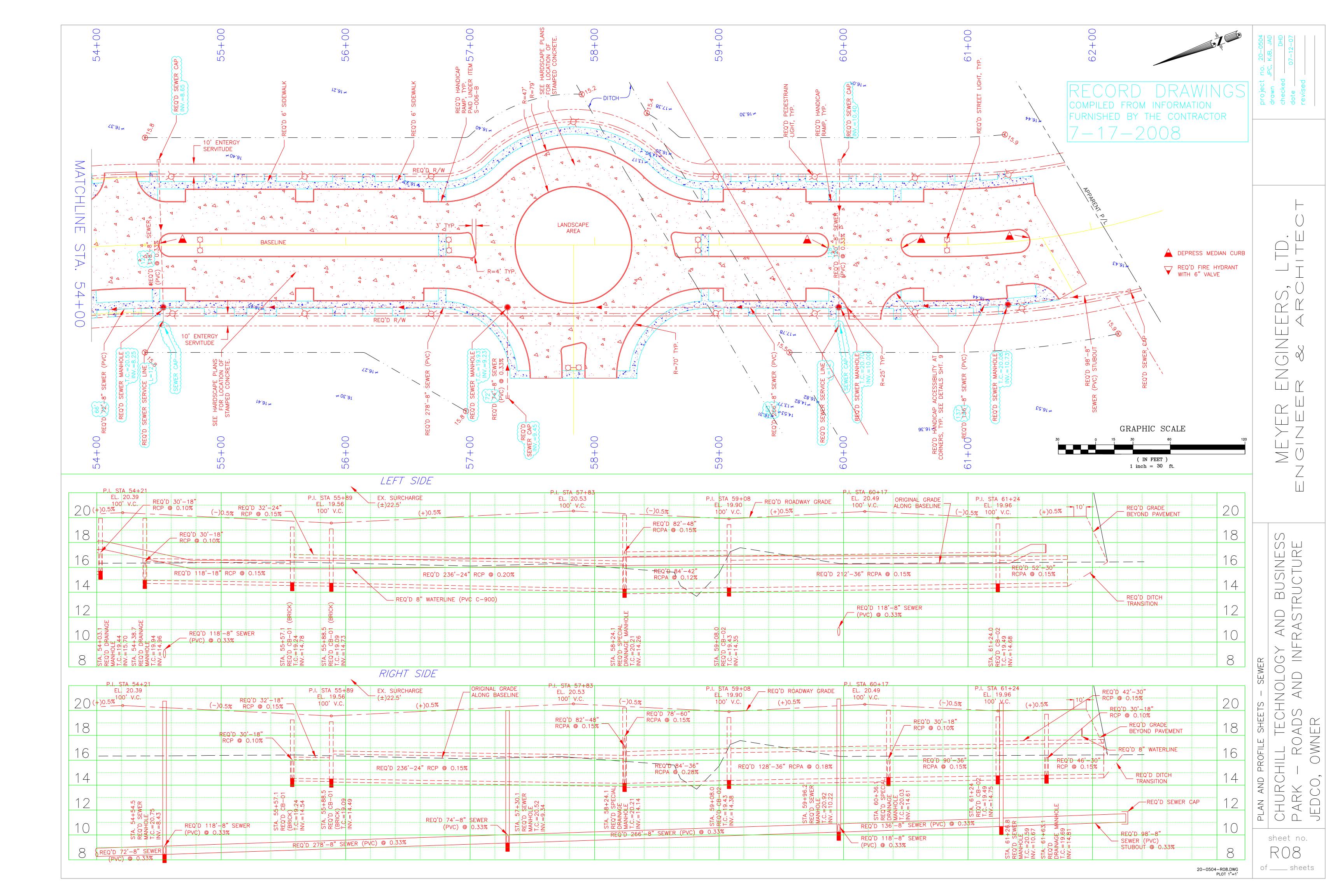
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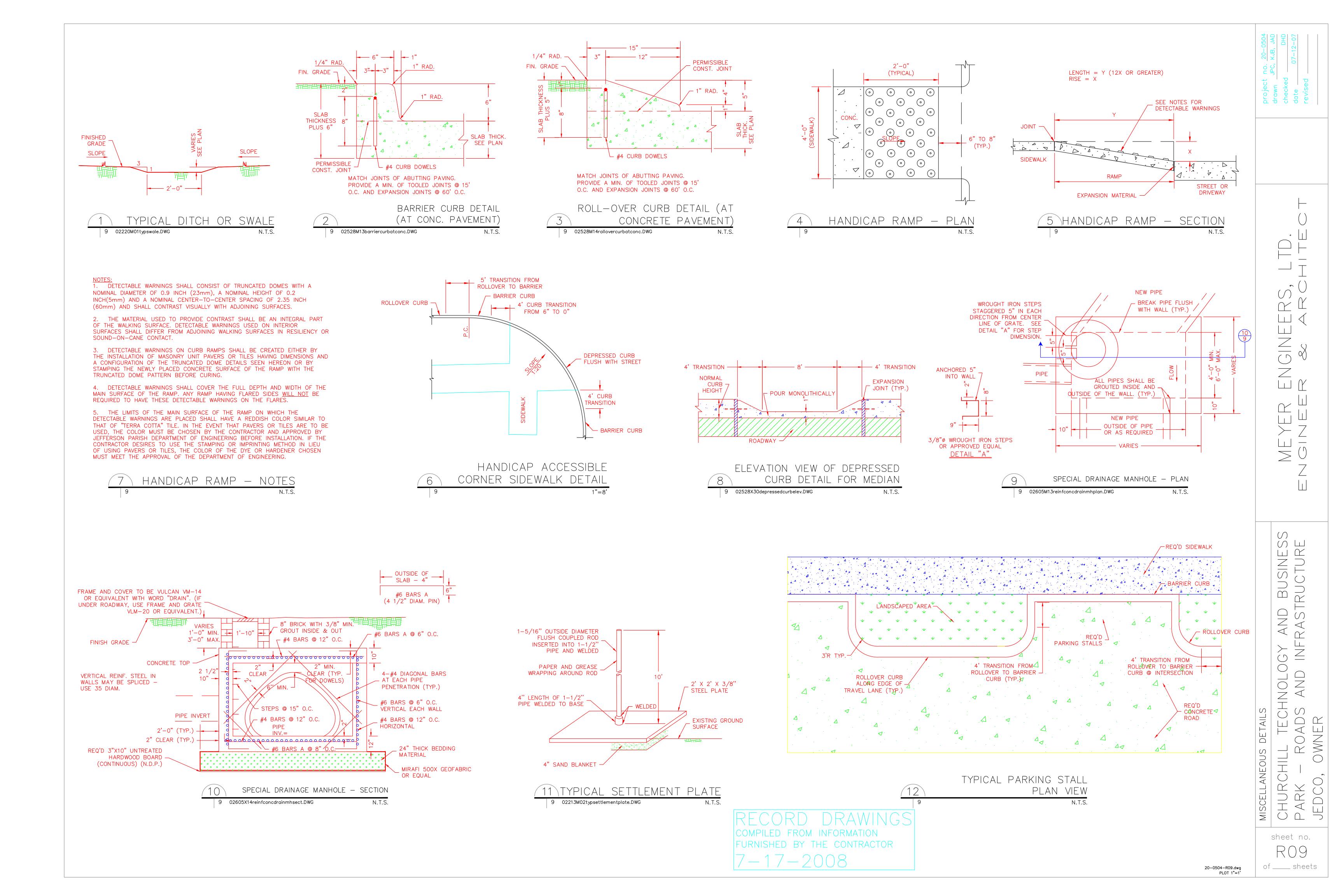
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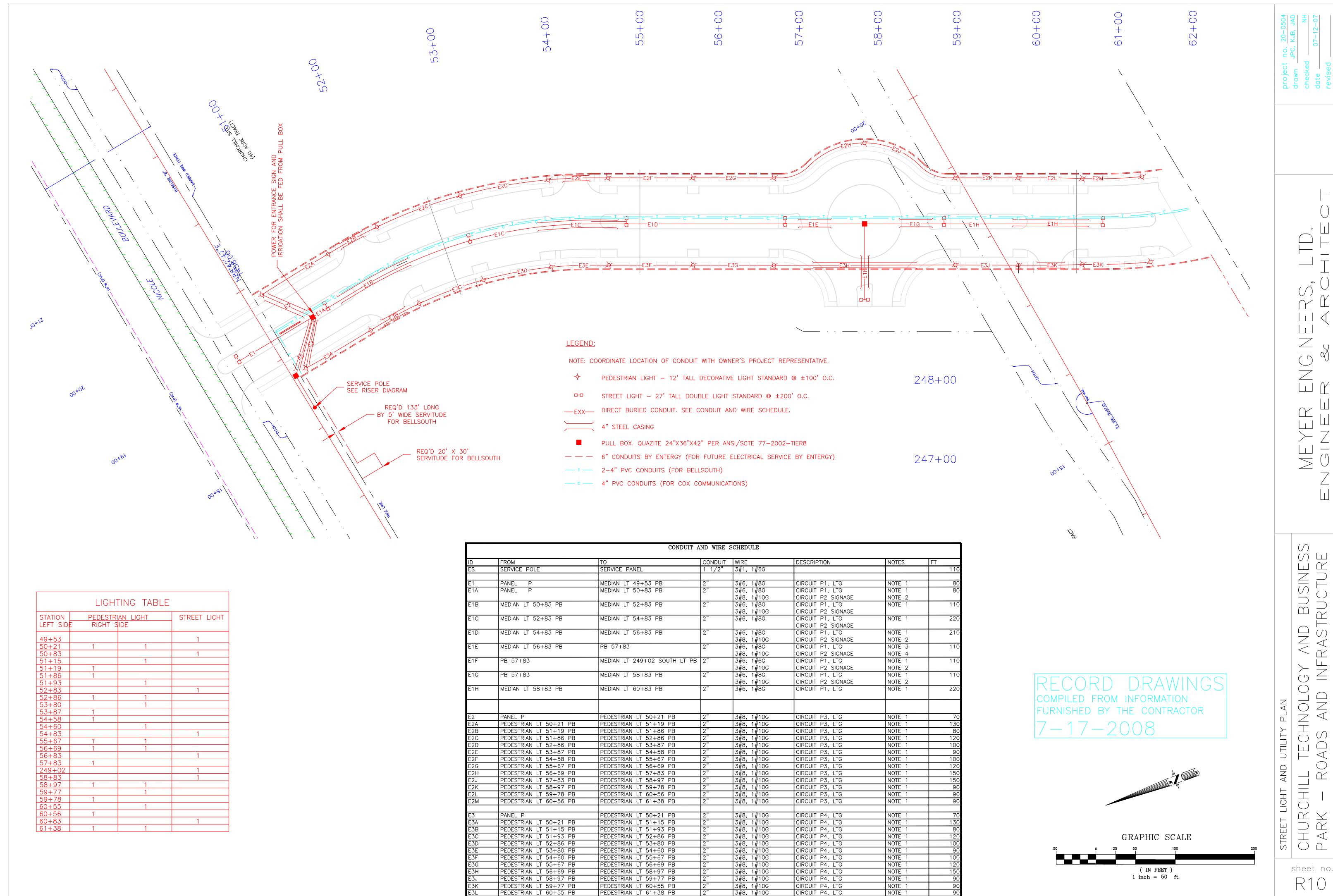
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PEDESTRIAN LT 61+38 PB

PEDESTRIAN LT 60+55 PB

CIRCUIT P4, LTG

STREET LIGHT AND UTILITY PLAN
CHURCHILL TECHNOL(
PARK - ROADS AND
JEDCO, OWNER

20-0504-R10.DWG PLOT 1"=1'

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UNDERGROUND STREET LIGHTING NOTES: 250W HIGH PRESSURE SODIUM

1. ALL WIRING, POLES, DUCT LINE, GUY ANCHORS, APPARATUS, DEVICES, FIXTURES, EQUIPMENT AND FOUNDATION SHALL CONFORM TO JEFFERSON PARISH REQUIREMENTS, ORDINANCE #3919, LATEST REVISIONS, OTHER APPLICABLE ORDINANCES OR RESOLUTIONS AND THEIR STANDARD DETAILS FOR CONSTRUCTION OF SAME. ALL WIRING SHALL BE SUBSURFACE.

2. THE ELECTRICAL CONTRACTOR SHALL SECURE ALL PERMITS FOR HIS WORK AND ARRANGE FOR ALL INSPECTIONS REQUIRED UNDER ORDINANCE

3. THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT A COMPLETE UNDERGROUND STREET LIGHTING SYSTEM AS SHOWN IN THE PLANS AND AS COMPLIED WITH

4. THE ELECTRICAL CONTRACTOR SHALL SECURE APPROVALS FOR HIS WORK IN WRITING FROM THE JEFFERSON PARISH DEPARTMENT OF INSPECTION AND CODE ENFORCEMENT, DIVISION OF ELECTRICAL INSPECTION AND SHALL PRESENT THE APPROVAL TO THE OWNER BEFORE FINAL PAYMENT.

5. THE LOCATION SHOWN ON THE PLANS OF EXISTING UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL CAREFULLY VERIFY THESE LOCATIONS AND TAKE WHATEVER PRECAUTIONS NECESSARY TO AVOID DAMAGE TO EXISTING UTILITIES.

6. STREET LIGHTS TO BE DOUBLE ARMS IN THE MEDIAN. POLES SHALL BE SEAMLESS SPUN ALUMINUM WITH 12 FOOT ARMS AND 27 FOOT MOUNTING HEIGHT OF FIXTURE, EIGHT (8") INCH DIAMETER AT BASE TAPER TO FOUR (4") INCH DIAMETER AT TIP, WITH PULL BOXES, AS MANUFACTURED BY LUMARK (COPPER LIGHTING), MODEL #RTA8L27AAT10 OR APPROVED EQUAL.

7. FOUNDATIONS FOR STREET LIGHT AND PEDEDSTRIAN LIGHT STANDARDS SHALL BE PILE SUPPORTED UNLESS SPECIFICALLY WAIVED, IN WRITING, BY THE DIRECTOR OF THE DEPARTMENT OF INSPECTION AND CODE ENFORCEMENT OR OTHERWISE SHOWN ON THE PLANS. CONDITIONS OF WAIVER SHALL BE BASED ON THE SOIL CONDITIONS DETERMINED BY THE U.S.D.A. SOIL CONSERVATION SERVICE SOIL SURVEY AND SUCH REQUEST FOR WAIVER SHALL BE ACCOMPANIED BY A STATEMENT FROM THE A/E REGARDING THE SOIL CONDITIONS IN THE AREA. PILING SHALL BE A.N.S.I. CLASS 9 TREATED TIMBER PILES 30 FEET LONG (PAID UNDER ITEM 804-02-B). PILES SHALL BE PRESSURE TREATED WITH A MINIMUM PRESERVATIVE RETENTION OF 8.0 LBS./CUBIC FEET.

8. THE INSULATION OF THE UNDERGROUND CABLE SHALL BE TYPE RHH/RHW U.S.E. IN PVC CONDUIT BURIED AT MINIMUM 36 INCH COVER.

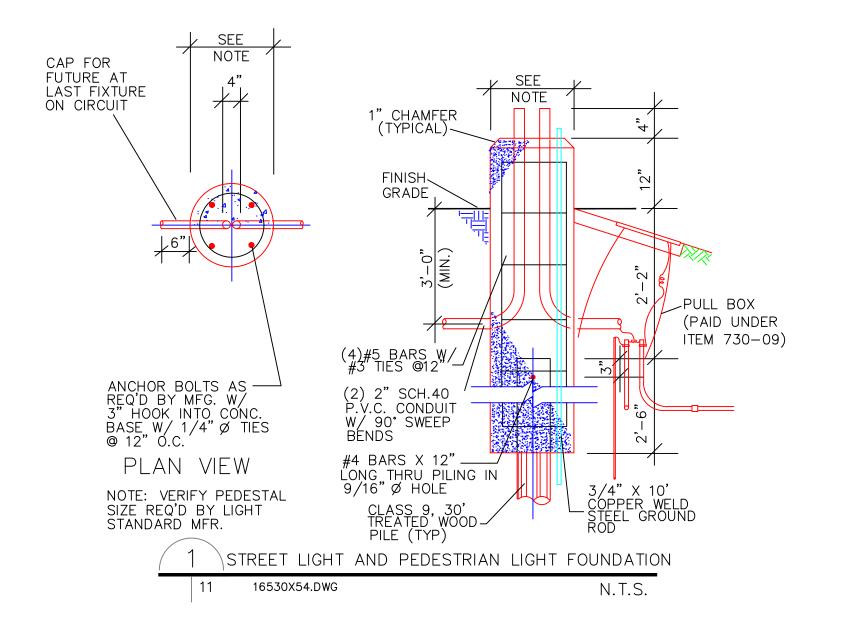
9. THE FIXTURES SHALL BE HIGH PRESSURE SODIUM, 250 WATT, 240 VOLT COBRA FIXTURES WITH PHOTOCELLS AS MANUFACTURED BY THOMAS & BETTS, CATALOG NUMBER 125-0H133 OR APPROVED EQUAL. INCLUDE REFLECTOR ASSEMBLY. ALSO, INSTALL 2-10 AMP IN-LINE FUSES IN FUSE HOLDERS WITH BOOTS IN THE HAND HOLE OF EACH POLE WITH CIRCUITS FEEDING LIGHTS.

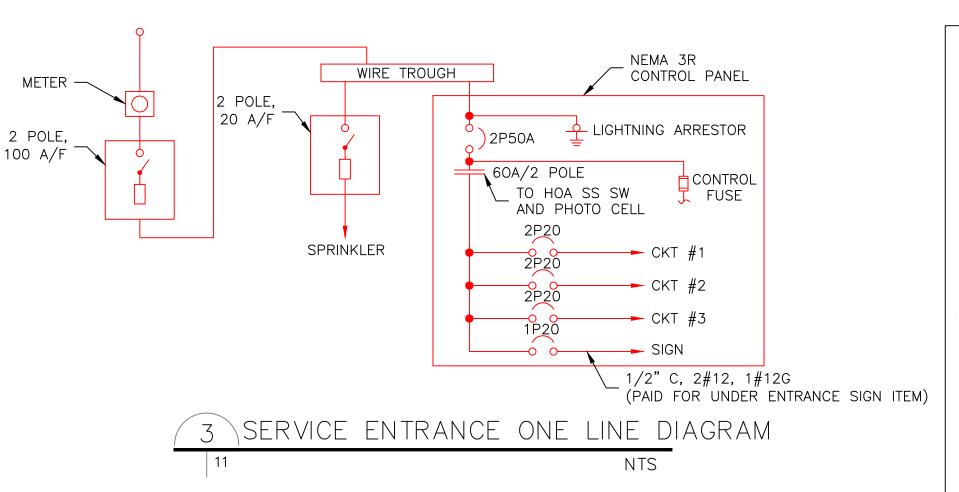
10. STREET LIGHT STANDARDS WILL BE SERVED FROM ENTERGY FEED

11. ALL WORK MUST CONFORM TO THE REQUIREMENTS OF THE DEPARTMENTS OF INSPECTION AND CODE ENFORCEMENT, PUBLIC WORKS, PUBLIC UTILITIES; THE ACCOMPANYING PROJECT SPECIFICATIONS AND OTHER SUCH PARISH OR STATE STANDARDS THAT MIGHT BE APPLICABLE.

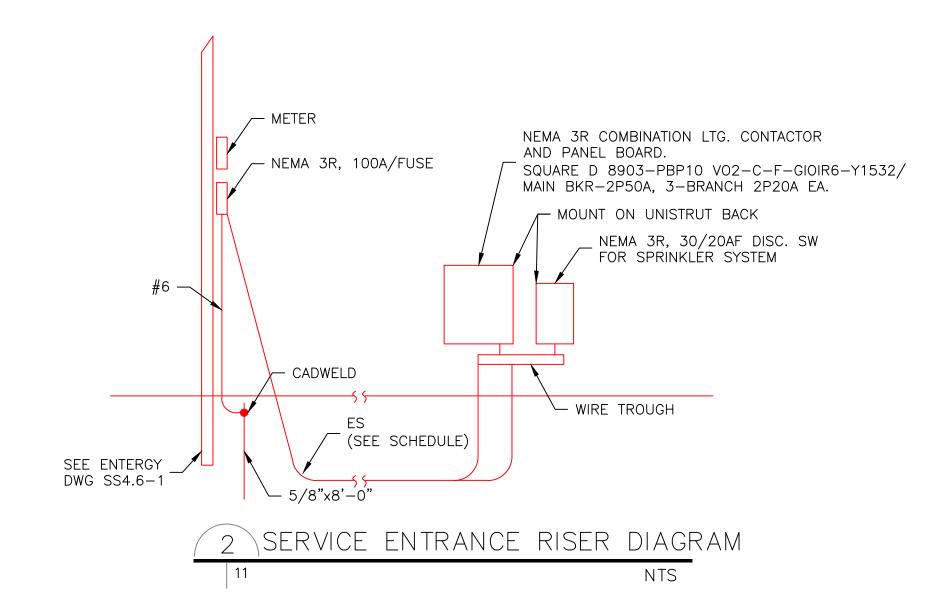
12. THE REQUIRED STREET LIGHTS SHALL BE LOCATED AS GENERALLY SHOWN ON THESE PLANS. LIGHTS SHALL BE CENTERED IN THE MEDIAN, 25 FEET FROM A CROSSOVER OR INTERSECTION, AND SPACED AT 200 FOOT MAXIMUM DISTANCE. CONTRACTOR SHALL STAKE OUT THE STREET LIGHTS IN THE FIELD AND NOTIFY THE A/E 48 HOURS PRIOR TO COMMENCEMENT OF THE PILE DRIVING OPERATIONS. NOTIFY JEFFERSON PARISH STREET LIGHTING FOR INSPECTIONS (504)736-6940.

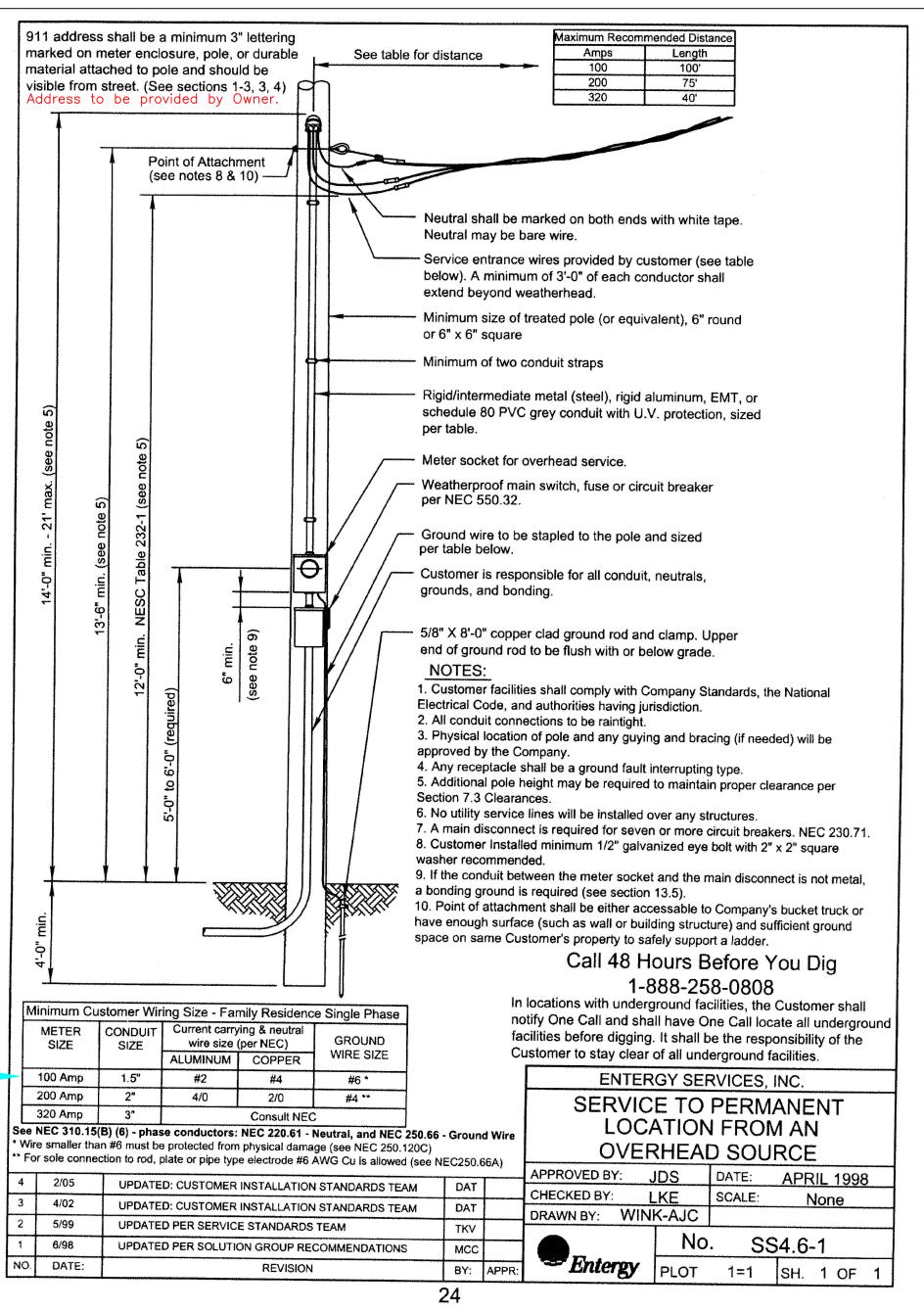
13. STREET LIGHT TO BE PLACED ON PROJECTION OF PROPERTY LINE OR CENTER LINE OF LOT UNLESS SHOWN OTHERWISE.





NOTE: FOR PEDESTRIAN LIGHTS AND ENTRANCE SIGN LIGHTING, SEE SHEET 103.





RECORD DRAWINGS COMPILED FROM INFORMATION FURNISHED BY THE CONTRACTOR 7-17-2008

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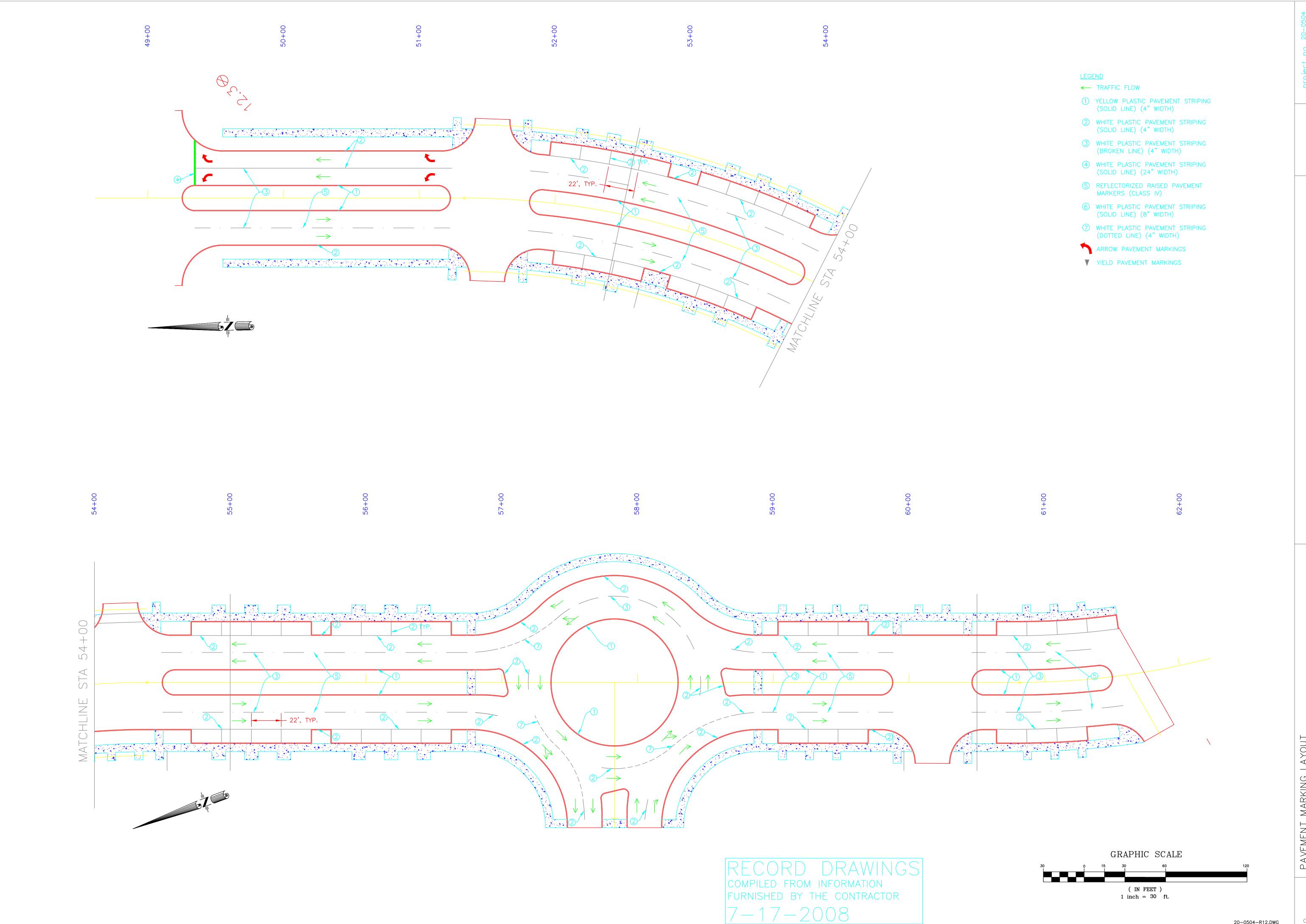
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LIGHT

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20-0504-R11.DWG PLOT 1"=1



MEYER ENGINEERS, LTD. Engineer & Architect

PAVEMENT MARKING LAYOUT

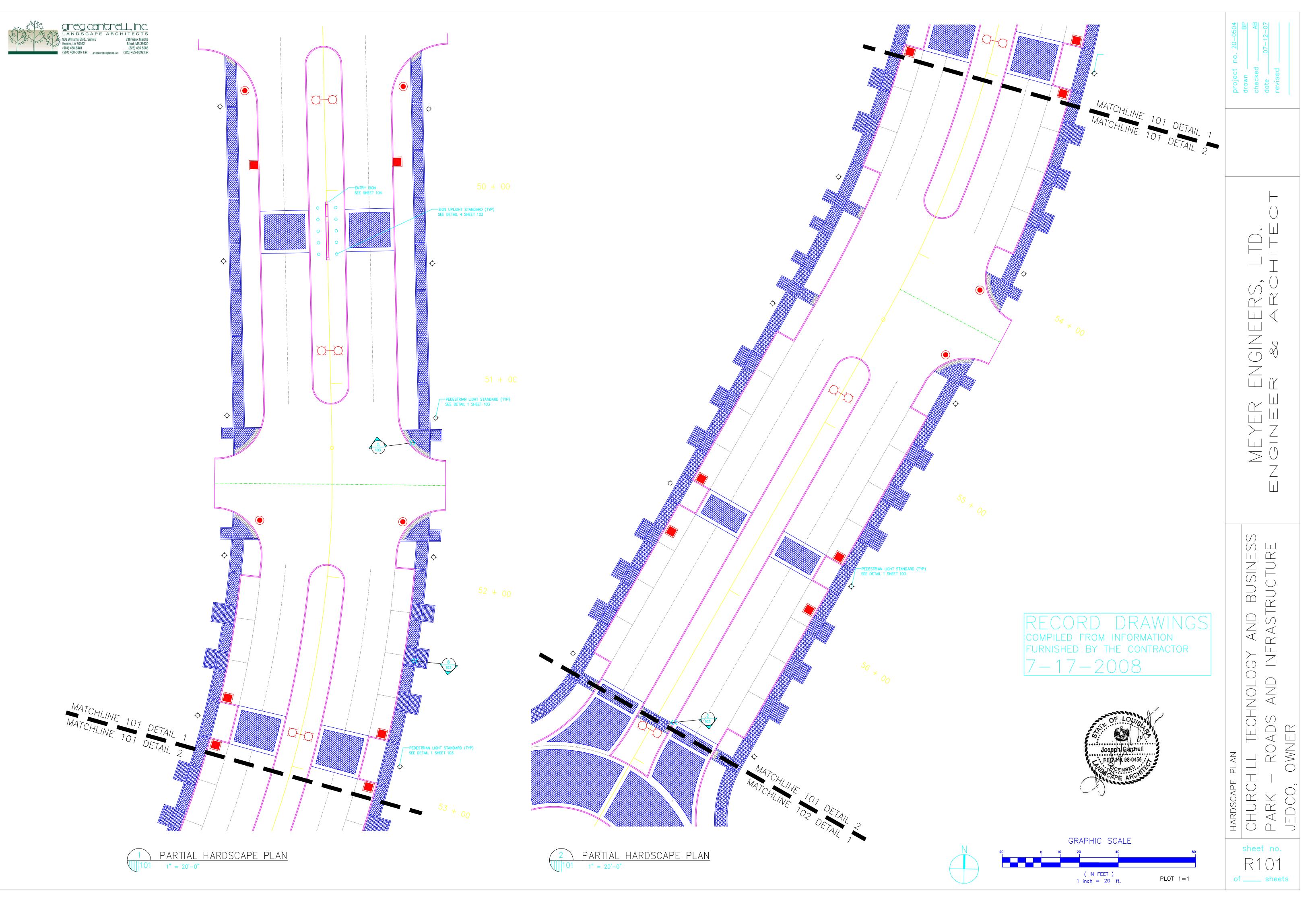
CHURCHILL TECHNOLOGY AND BUSINESS

PARK — ROADS AND INFRASTRUCTURE

JEDCO, OWNER

sheet no.
R12
of ____ sheets

20-0504-R12.DWG PLOT 1"=1'



TECHNOLOGY AND BUSINESS ADS AND INFRASTRUCTURE

sheet no. R101 of ____ sheets