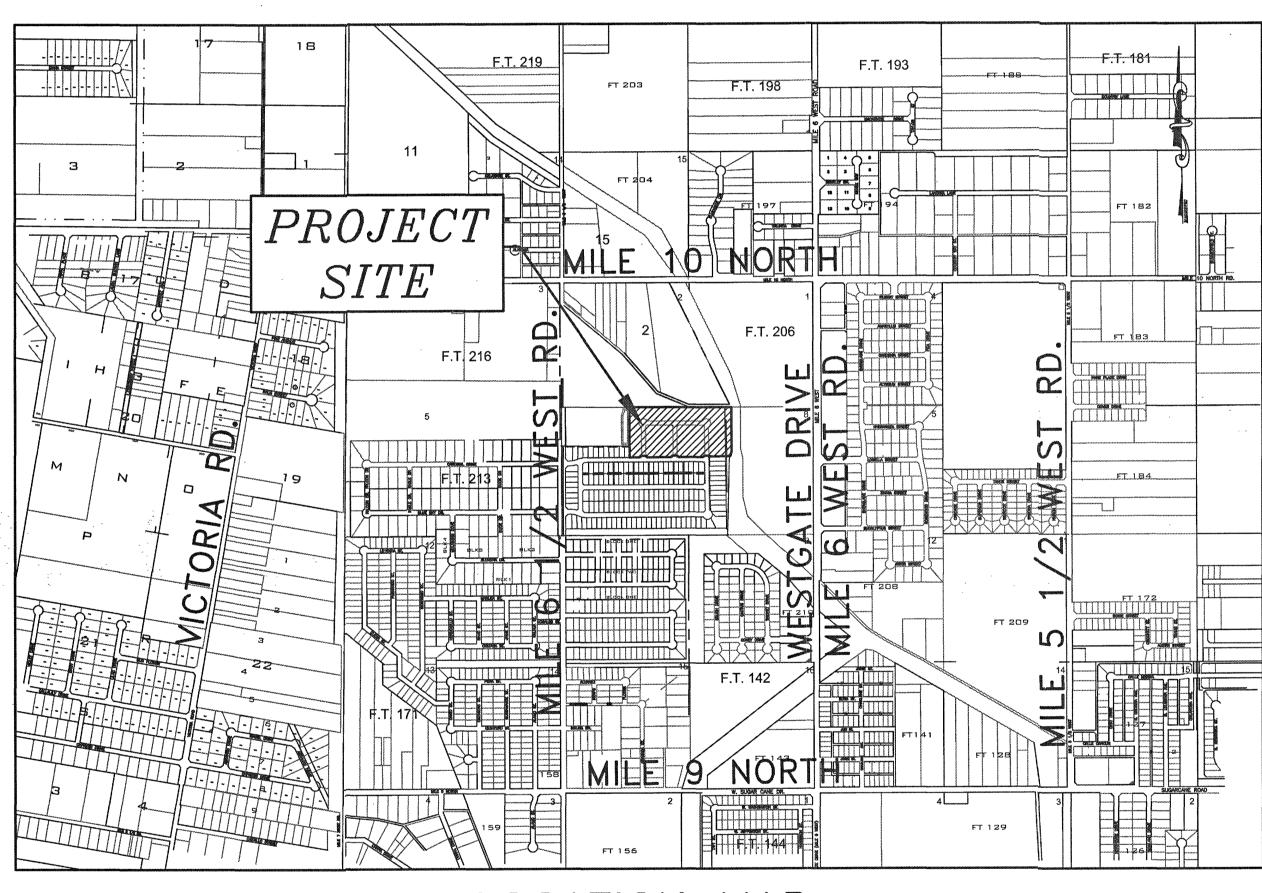
CONSTRUCTION PLANS FOR

MONTE CIELO SUBDIVISION PHASE II

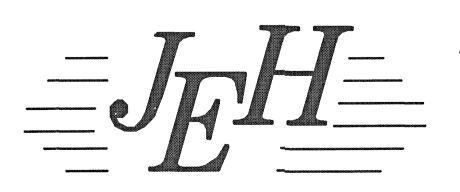
WESLACO, TEXAS



LOCATION

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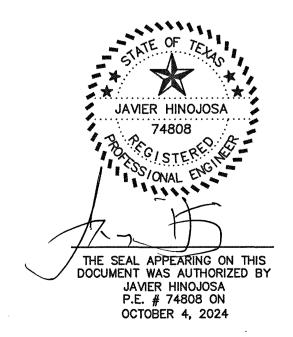
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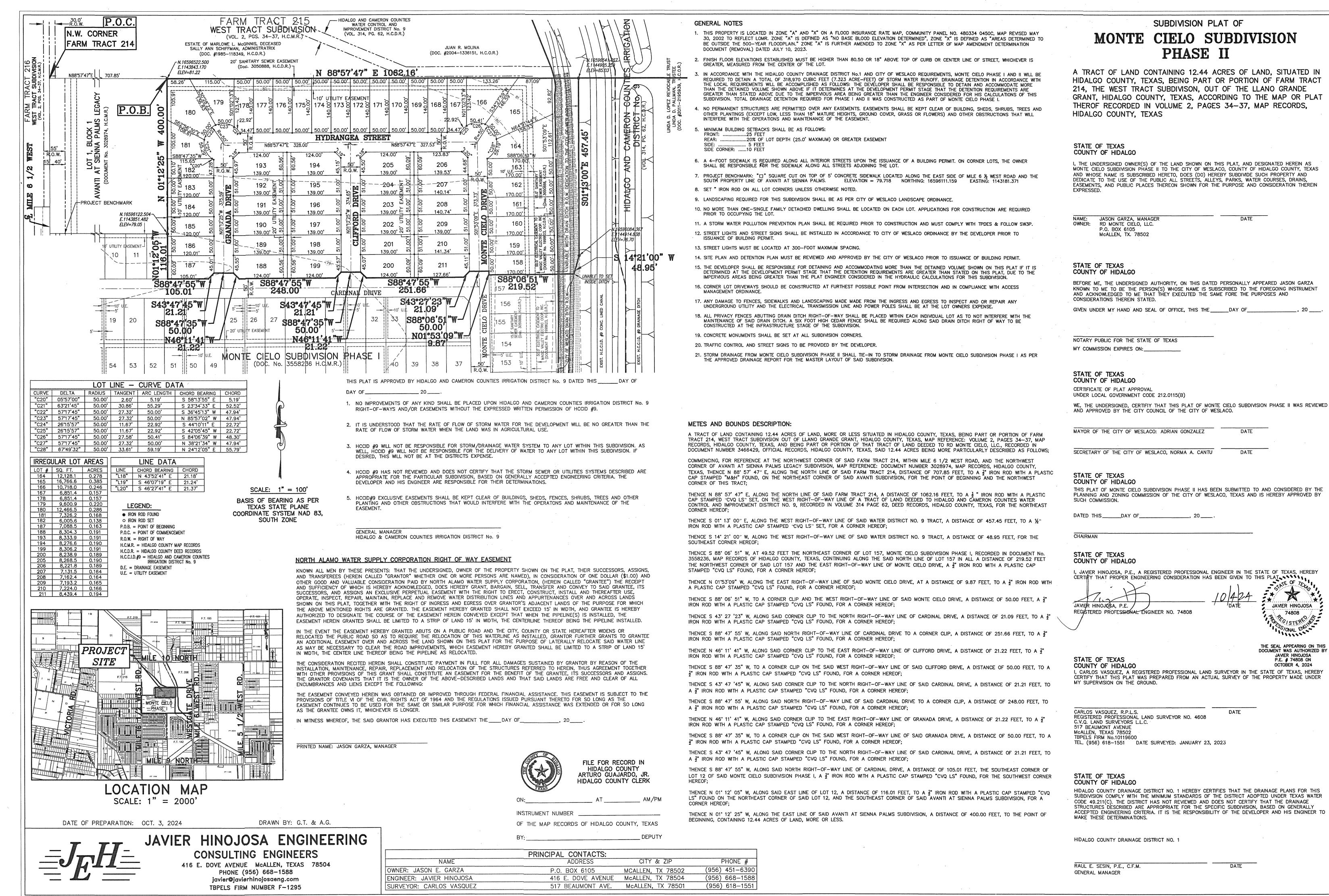
JAVIER HINOJOSA ENGINEERING

CONSULTING ENGINEERS

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OCT. 3, 2024



GENERAL NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UNDERGROUND UTILITIES. WHETHER SHOWN OR NOT SHOWN ON THE DRAWINGS. SUFFICIENTLY IN ADVANCE OF OPERATIONS TO PRECLUDE DAMAGE TO SAME. THE CONTRACTOR SHALL CONTACT AS NECESSARY BUT NOT LIMITED TO:

(877) 373-4858 AT&T (800) 924-9420 SPECTRUM CABLE (855) 707-7328 CITY OF WESLACO (956) 968-3181 TEXAS GAS COMPANY (800) 700-2443 DIG TESS 811 or (800) 344-8377

- 2. CONTRACTOR TO SAW CUT EXISTING ASPHALT PAVEMENT ALONG EDGES OF PROPOSED AGENCY SERVICING THE
- 3. IN THE EVENT OF DAMAGE TO UNDERGROUND FACILITIES, WHETHER SHOWN OR NOT SHOWN IN THE DRAWINGS, THE CONTRACTOR SHALL MAKE THE NECESSARY REPAIRS TO PLACE THE FACILITIES BACK IN SERVICE AT NO INCREASE IN THE CONTRACTOR'S PRICE AND ALL SUCH REPAIRS SHALL CONFORM TO THE REQUIREMENTS OF THE COMPANY OR
- 4. THE CONTRACTOR SHALL EXERCISE EXTRA CARE TO PREVENT DAMAGE TO ALL OTHER STRUCTURES IN THE AREA INCLUDING BUILDINGS, FENCES, ROADS, PIPELINES, UTILITIES, ETC., WHETHER PUBLICLY OR PRIVATELY OWNED.
- 5. UNTIL ACCEPTANCE BY THE ENGINEER OF ANY PART OR ALL OF THE CONSTRUCTION, AS PROVIDED FOR IN THE PLANS AND THESE SPECIFICATIONS, IT SHALL BE UNDER THE CHARGE AND CARE OF THE CONTRACTOR, AND HE SHALL TAKE EVERY NECESSARY PRECAUTION AGAINST INJURY OR DAMAGE TO ANY PART OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD, AT HIS OWN EXPENSE, ALL INJURIES OR DAMAGE TO ANY PORTION OF THE WORK BEFORE ITS COMPLETION AND ACCEPTANCE.
- 6. ALL EXISTING UTILITIES SHOWN WITHIN THE SITE AREA AS PER CITY OF WESLACO THE LOCATIONS OF THE UNDERGROUND LINES ARE APPROXIMATE. THE SPOTTING OF THESE LINES SHALL BE COORDINATED WITH THE DISTRICT'S MAINTENANCE AND OPERATIONS DEPARTMENT FOR FIELD VERIFICATION.
- 7. CONTRACTOR TO COORDINATE ALL WORK WITH THE, CITY OF WESLACO ENGINEERING DEPARTMENT (956-447-3403) PRIOR TO START OF CONSTRUCTION.
- 8. CONTRACTOR SHALL VERIFY EXISTING BENCH MARKS TO INSURE ACCURACY. CONTRACTOR SHALL NOTIFY ENGINEER IF CONFLICT APPEARS WITHIN BENCH MARKS.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THIS PROJECT FROM THE CITY OF WESLACO, TEXAS GAS COMPANY, AT&T, AND HIDALGO AND CAMERON COUNTY IRRIGATION DISTRICT
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AT NO ADDITIONAL COST TO THE OWNER ALL COSTS ASSOCIATED WITH ANY PROTECTION MEASURES THAT WILL BE REQUIRED BY THE CONSTRUCTION DEMOLITION ACTIVITIES TO SAFEGUARD THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC.
- 11. NO OPEN TRENCHES OR EXCAVATION SHALL BE LEFT OPEN OVERNIGHT.
- 12. CONTRACTOR TO PROVIDE PROPER TRAFFIC CONTROL DURING THE CONSTRUCTION APPROVED BY THE CITY OF WESLACO END ENGINEERING TO INSURE THE SAFETY OF THE PUBLIC.
- 13. CONTRACTOR TO PROVIDE ANY AND ALL TEMPORARY GRAPHIC CONSTRUCTION SIGNS, DIRECTIONAL SIGNS AND ANY OTHER SIGNS THAT MAY BE REQUIRED DURING CONSTRUCTION.
- 14. ALL STORM MANHOLES TOPS TO HAVE THE CITY OF WESLACO LOGO.
- 15. ALL DRIVEWAYS AND SIDEWALKS TO BE RECONSTRUCTED WITH EXISTING LIKE MATERIALS TO BE MINIMUM OF THE FOLLOWING:

CALICHE DRIVES:

CULVERTS:

EXPENSE

REVISIONS

ASPHALT DRIVEWAYS: 8" FLEX BASE AND 2" H.M.A.C. (98% COMPACTION) CONCRETE DRIVEWAYS: 6" REINFORCED CONCRETE (4,000 P.S.I.) 8" FLEX BASE (98% COMPACTION)

- 16. ALL EXISTING PAVEMENT THAT IS DAMAGED TO BE REPLACED WITH 8" FLEX AND 2" H.M.A.C. AND ALL EDGES TO BE SAW CUT.
- 17. PROPER SEDIMENT CONTROL DEVISES SHALL BE UTILIZED DURING CONSTRUCTION ON ALL DRAINAGE STRUCTURES. ALL GRATE INLETS SHALL HAVE FILTER FABRIC INLET PROTECTION TO PREVENT SOIL EROSION INTO THE DRAINAGE SYSTEM.
- 18. CONTRACTOR TO PROVIDE ANY AND ALL TEMPORARY GRAPHIC CONSTRUCTION SIGNS DIRECTIONAL SIGNS AND ANY OTHER SIGNS THAT MAY BE REQUIRED DURING CONSTRUCTION.
- 19. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF CITY OF WESLACO, TXDOT AND HIDALGO AND CAMERON COUNTY IRRIGATION DISTRICT No. 9.
- 20. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL DIG TESS 48 HOURS PRIOR TO COMMENCEMENT OF WORK FOR UTILITY SPOTTING @ (1-800-344-8377).
- 21. LOCATIONS OF UNDERGROUND FACILITIES ARE FROM BEST INFORMATION AVAILABLE. NEITHER THE OWNER OR ENGINEER, WARRANT THE ACCURACY OF THE INFORMATION PROVIDED. ANY DEVIATIONS SHALL BE CALLED TO THE ENGINEER'S ATTENTION IMMEDIATELY.
- 22. THE CONTRACTOR SHALL REMOVE ALL FENCES LOCATED WITHIN THE EASEMENTS AND RIGHT OF WAY, INTERFERING WITH CONSTRUCTION OPERATION AND PROVIDE TEMPORARY FENCING DURING CONSTRUCTION. REMOVED FENCES SHALL BE REPLACED WITH A NEW FENCE OR UNDAMAGED ORIGINAL FENCING. REMOVAL AND REPLACEMENT OF EXISTING AND TEMPORARY FENCES SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- 23. THE CONTRACTOR SHALL PROVIDE ACCESS TO EXISTING RESIDENCES AT ALL TIMES.
- 24. ANY DAMAGES TO FENCES, WALKS, OR PRIVATE PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS
- 25. NO OPEN EXCAVATION SHALL BE LEFT OPEN OVERNIGHT. ALL EXCAVATIONS WHICH CANNOT BE BACKFILLED OVERNIGHT SHALL BE COVERED. AS A MINIMUM. WITH STEEL PLATING WHEN IN PAVED AND UNPAVED AREAS SUBJECT TO VEHICULAR LOADING: PLYWOOD, WOOD PLANKING WITH O.S.H.A. ORANGE PLASTIC EXPANDED MESH BARRIER AROUND PERIMETER IN UNPAVED AREAS NOT SUBJECT TO VEHICULAR LOADING, OR AS APPROVED BY THE ENGINEER.
- 26. THE PREPARATION OF THESE PLANS REFLECTS INFORMATION, PROVIDED BY OTHERS, ON THE APPROXIMATE LOCATION AND EXISTENCE OF EXISTING UTILITY AND ADJACENT PHYSICAL FEATURES. HOWEVER, THEY DO NOT IMPLY OR AFFIRM THAT ALL UTILITIES OR PHYSICAL FEATURES ARE SHOWN. GENERALLY, UTILITY SERVICE CONNECTIONS ARE NOT INDICATED ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS OF THE OWNER IMMEDIATELY UPON ENCOUNTERING UNFORESEEN CONFLICTS.

GENERAL NOTES (CONT):

- 28. THE APPROXIMATE LOCATIONS OF KNOWN EXISTING UTILITIES ARE SHOWN, CONTRACTOR SHALL DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATIONS IN THE FIELD PRIOR TO COMMENCING WORK. CONTRACTOR TO BE FULLY RESPONSIBLE FOR DAMAGES WHICH MIGHT OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE EXISTING UTILITIES.
- 29. PUBLIC AND PRIVATE UTILITY LINES AND CUSTOMER SERVICE LINES MAY EXIST THAT ARE NOT SHOWN ON THE CONSTRUCTION DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE, MAINTAIN AND PROTECT THE INTEGRITY OF THESE LINES. HAND EXCAVATION MAY BE REQUIRED. THE CONTRACTOR SHALL RESTORE RELOCATED OR DIVERTED UTILITY TO ITS ORIGINAL CONDITION AND LOCATION WHEN APPLICABLE UPON COMPLETION OF CONSTRUCTION. SAID RESTORATION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- 30. THE CONTRACTOR SHALL ADJUST AND CONNECT TO NEW SYSTEM EXISTING FIELD DRAIN LINES AT PROPOSED LOCATIONS. SAID WORK SHALL BE COORDINATED WITH H.C.C.I.D. No. 9 PRIOR TO COMMENCEMENT OF WORK. SAID LINE ADJUSTMENTS AND CONNECTIONS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- 31. THE CONTRACTOR TO MAINTAIN ALL EQUIPMENT AND TRANSPORTATION OF SAID EQUIPMENT WITHIN THE EXISTING RIGHTS-OF-WAY OF THE CITY, COUNTY, OR STATE.
- 32. DURING EXCAVATION OPERATIONS FOR DRAINAGE AND/OR UTILITIES, THE CONTRACTOR SHALL NOT PILE EXCAVATED MATERIAL OR EXCAVATE WITHIN THE DRIP LINE OF TREES THAT ARE TO BE PRESERVED.
- 33. WHERE NEW WATER LINES ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC 317(DESIGN OF SEWAGE SYSTEMS) OR 30 TAC 290 (WATER HYGIENE).
- 34. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING WATER CONNECTIONS TO ALL HOMES AND BUSINESSES IN WORKING ORDER AT ALL TIMES, EXCEPT FOR BRIEF INTERRUPTIONS IN SERVICE FOR CONNECTIONS TO BE REINSTALLED. IN NO CASE SHALL SERVICES BE ALLOWED TO REMAIN OUT OF SERVICE OVERNIGHT. CONTRACTOR IS RESPONSIBLE FOR DAMAGES TO SAID SERVICES.
- 35. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF PROPOSED FACILITIES AT ALL TIMES DURING CONSTRUCTION.
- 36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING AREA BETWEEN THE BACK OF CURB/EDGE OF PAVEMENT, ROAD SIDE DITCH AND RIGHT-OF-WAY TO HAVE POSITIVE FLOW TO THE PROPOSED DRAINAGE SYSTEM
- 37. THE CONTRACTOR SHALL PROVIDE/MAINTAIN ADEQUATE POSITIVE DRAINAGE AT ALL TIMES DURING THE INSTALLATION OF THE STRUCTURES, DRAINAGE, UTILITY, IRRIGATION AND ROAD IMPROVEMENTS. DEWATERING OF THE TRENCH MAY BE REQUIRED DURING THE INSTALLATION OF THE DRAINAGE, UTILITY AND IRRIGATION FACILITIES/STRUCTURES. SAID DEWATERING SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- 38. THE CONTRACTOR SHALL CLEANUP AND RESTORE THE AREA OF OPERATIONS TO A CONDITION AS GOOD AS OR BETTER THAN THAT WHICH EXISTED PRIOR TO INSTALLATION OF ALL ITEMS TO BE CONSTRUCTED.
- 39. ALL DEBRIS, VEGETATION AND SURPLUS MATERIAL, RESULTING FROM DEMOLITION AND/OR CLEARING OF THE RIGHT-OF-WAY IN PREPARATION OF PROPOSED IMPROVEMENTS SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF AT A SITE ACCEPTABLE THE CITY OF WESLACO, THE CONTRACTOR SHALL PROVIDE A LETTER STATING SO. THIS SHALL BE INCIDENTAL AND NOT A SEPARATE PAY ITEM UNLESS STATED SO. NO EXCESS EXCAVATED MATERIAL SHALL BE DEPOSITED IN LOW AREAS. IF THE CONTRACTOR PLACES EXCESS MATERIAL IN THE AREAS WITHOUT WRITTEN PERMISSION, HE WILL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM SUCH FILL AND CONTRACTOR SHALL REMOVE THE MATERIAL AT OWN COST.
- 40. THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION AND SUBMITTAL OF THE TRENCH EXCAVATION PROTECTION PLAN. CONTRACTOR SHALL SUBMIT CONSTRUCTION DETAILS AND DESIGN CALCULATIONS BEARING THE SEAL OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS BEFORE CONSTRUCTING THE SHORING AND/OR UTILIZING A TRENCH PROTECTION SYSTEM (BOX). THE ENGINEER RESERVES THE RIGHT TO REJECT DESIGNS NOT MEETING THE REQUIREMENTS OF SECTION ITEM 402 AND 403.
- 41. THE CONTRACTOR SHALL BE RESPONSIBLE TO FOLLOW ALL T.C.E.Q. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS AS PER SWP3 SHEETS AND AS STATED IN TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM CONSTRUCTION GENERAL PERMIT (TPDES TXR150000, EFFECTIVE DATE MAY 5, 2019), INCLUDING N.O.I SUBMITTAL AND MS4 NOTIFICATION.
- 42. THE CONTRACTOR SHALL ABANDON AND CAP ANY PORTION OF PIPE LINE (STORM, IRRIGATION, ETC.) FOUND WITHIN THE PROPOSED PIPE TRENCH, AT THE ENGINEERS REQUEST, ONCE APPROVED BY THE ENGINEER, THE PIPE TO BE ABANDONED SHALL BE CAPPED AND SEALED WITH CEMENT AT BOTH ENDS OF THE TRENCH. THIS SHALL BE CONSIDERED SUBSIDIARY UNLESS OTHERWISE STATED.
- 43. ALL ROAD CROSSINGS SHALL BE REPLACED WITH A MINIMUM OF 8" (98% COMPACTED) CALICHE AND 2" HMAC OR LIKE SECTION, WHICHEVER IS GREATER.
- 44. THE ENGINEER WILL PROVIDE CONTROL POINTS (BENCHMARK AND PROPERTY CORNERS) FOR THE WORK TO BE PERFORMED BY THE CONTRACTOR, CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING, INCLUDING BUT NOT LIMITED TO HORIZONTAL & VERTICAL GRADE CUTS FOR CURB & GUTTER, ROADWAY, STORM DRAIN PIPE, ROADSIDE DITCHES, DRIVEWAY CULVERTS AND DITCH WORK.
- 45. THE CONTRACTOR SHALL CONNECT ANY PROPOSED IRRIGATION LINE WITH EXISTING IRRIGATION PIPE IN ACCORDANCE WITH UNITED IRRIGATION DISTRICT SPECIFICATIONS, SUPPORT COLLARS MAY BE USED. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGE TO THE EXIST. LINE CAUSED BY THIS WORK, ELBOWS AND MISC. FITTINGS SHALL ALSO BE USE TO ACHIEVE A 1.0 FT SEPARATION BETWEEN TOP OF PROP. DRAIN LINE AND BOTTOM OF THE IRRIGATION LINE.
- 46. ELBOW FOR RCP OR HPP BEING PROPOSED AT THE END OF LINES SHALL BE PRE-FABRICATED AND SECURED TO THE PIPE WITH A CONCRETE COLLAR (TYPICAL ON ALL PIPE ELBOW INSTALLATIONS.) ELBOW SHALL BE REQUIRED AT ALL LOCATIONS SHOWN ON THE PLANS. THIS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL. PRE-FABRICATED ELBOWS SHALL BE FIELD CONFIRMED BY THE CONTRACTOR.
- 47. THE CONTRACTOR SHALL RELOCATE OR RECONSTRUCT ALL MAIL BOXES TO BE 1' BEHIND BACK OF CURB OR 3' BEHIND EDGE OF PAVEMENT. MAIL BOXES SHALL BE REPLACED TO THE SAME EXISTING CONDITIONS OR BETTER. SAID RELOCATION AND/OR RECONSTRUCTION OF MAIL BOXES SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED IN THE PROPOSAL.
- 48. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL EXISTING WATER VALVES AND MANHOLES TO MATCH PROPOSED FINISH GRADE OF ROADWAY. CONCRETE COLLARS SHALL BE INSTALLED TO MATCH TOPS WITH PAVEMENT GRADE. THIS WORK SHALL BE INCIDENTAL AND NOT A SEPARATE PAY ITEM UNLESS STATED OTHERWISE.

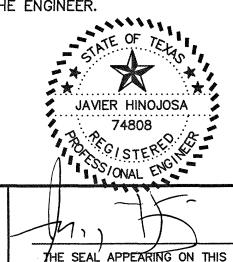
- 49. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT/RELOCATION OF ALL REGULATORY SIGNS REMOVED DUE TO CONSTRUCTION OPERATIONS WITH THE SAME SIGN ON FIXED SUPPORT(S) IMMEDIATELY UPON ITS REMOVAL. APPROVAL BY THE ENGINEER IS NECESSARY BEFORE REMOVING ANY REGULATORY ROADWAY SIGN(S). FLAGGERS ARE REQUIRED TO BE AVAILABLE TO DIRECT TRAFFIC DURING SIGN INTERMEDIATE DOWN TIME. RELOCATION OF ANY DIRECTIONAL SIGN ASSEMBLIES REMOVED DURING CONSTRUCTION OPERATIONS IMMEDIATELY UPON THEIR REMOVAL IS REQUIRED. THESE SIGNS SHALL BE RELOCATED TO A LOCATION IN ACCORDANCE WITH THE LATEST VERSION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". IN NO CASE WILL A SIGN BE REMOVEDD WITHOUT A REPLACEMENT SIGN AND SUPPORT(S) BEING READILY AVAILABLE AND A LOCATION ESTABLISHED. REMOVAL AND RELOCATION OF THESE SIGNS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST REFLECTED IN THE UNIT BID PRICES FOR VARIOUS ITEMS LISTED ON THE PROPOSAL.
- 50. ALL CONSTRUCTION OPERATIONS SHALL BE CONDUCTED TO PROVIDE THE LEAST POSSIBLE INTERFERENCE TO TRAFFIC AS PROVIDED FOR IN THE SPECIFICATIONS, TXDOT STANDARDS, TEXAS M.U.T.C.D. AND/OR AS DIRECTED. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT EDITION OF THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

EROSION CONTROL NOTES

- 1. THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AND ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIRE EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION. CONTRACTOR SHALL PROVIDE ALL REQUIRED EROSION AND SEDIMENTATION CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN.
- 2. AT A MINIMUM THESE CONTROLS SHALL CONSIST OF ROCK BERMS AND/OR SILT FENCES CONSTRUCTED PARALLEL TO AND DOWN GRADIENT FROM THE TRENCHES. THE ROCK BERM OR SILT FENCES SHALL BE INSTALLED IN A MANNER SUCH THAT ANY RAINFALL RUNOFF SHALL BE FILTERED. HAY BALES SHALL NOT BE USED FOR TEMPORARY EROSION AND SEDIMENTATION CONTROLS.
- 3. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
- 4. THE CONTRACTOR SHALL INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY SIGNIFICANT RAINFALL TO INSURE DISTURBANCE TO THE STRUCTURES HAS NOT OCCURRED. SEDIMENT DEPOSITED AFTER A RAINFALL SHALL BE REMOVEDD FROM THE SITE OR PLACED IN AN APPROVED DESIGNATED SOIL DISPOSAL
- 5. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADINGS OF DOWNSTREAM FACILITIES. SUCH INSTALLATIONS SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE OWNER, THEY ARE WARRANTED.
- 6. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE IMPLEMENTED BEFORE CONSTRUCTION COMMENCES, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL BE REMOVEDD WHEN VEGETATION IS ESTABLISHED AND THE CONSTRUCTION AREA IS STABILIZED. ADDITIONAL PROTECTION MAY BE NECESSARY IF EXCESSIVE SOLIDS ARE BEING DISCHARGED FROM THE SITE.
- 7. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVEDD BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER.
- 8. ALL STAGING, MATERIAL STORAGE, STOCKPILE AND REFUSE AREAS SHALL REQUIRE APPLICABLE EROSION AND SEDIMENT CONTROL MEASURES.
- 9. ALL CONSTRUCTION DEBRIS SHALL BE CONTAINED WITHIN APPROPRIATE RECEPTACLES (ROLL-OFF CONTAINERS, DUMPSTERS, TRASH CANS, WIRE-MESH CAGES, Etc.) AND CONFINED WITHIN PERIMETER EROSION AND SEDIMENT
- 10. THE CONTRACTOR MAY REFER TO THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES (2004 EDITION) ITEM 164, "SEEDING FOR EROSION CONTROL" AND ITEM 168, "VEGETATIVE WATERING" FOR VEGETATIVE STABILIZATION SPECIFICATIONS.
- 11. DUST CONTROL SHALL BE IMPLEMENTED AS NECESSARY OR AS DIRECTED BY THE ENGINEER. DUST CONTROL MAY CONSIST OF WATERING OR OTHER METHODS APPROVED BY THE PROJECT ENGINEER.
- 12. ALL DISCHARGES ASSOCIATED WITH DEWATERING OPERATIONS SHALL IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES, MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO SEDIMENTATION BASINS OR FILTER SOCKS.
- 13. CONCRETE WASH-WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM SEWER SYSTEM OR RECEIVING STREAM. ALL WASH ACTIVITIES MUST BE PERFORMED WITHIN THE EXTENTS OF ESTABLISHED EROSION AND SEDIMENT CONTROL MEASURES OR DESIGNATED AREAS APPROVED BY PROJECT ENGINEER.
- 14. SEDIMENT SHALL BE CLEARED FROM ALL STORM SEWER PIPES, CULVERTS AND APPURTENANCES WITHIN THE LIMITS OF CONSTRUCTION PRIOR TO FINAL PROJECT ACCEPTANCE. SEDIMENT SHALL BE PROPERLY DISPOSED.

TRENCH SAFETY

- 1. IN ACCORDANCE WITH HOUSE BILLS 662 AND 665 ENACTED BY THE TEXAS LEGISLATURE (70TH REGULAR LEGISLATIVE SESSION), THE CONTRACTOR SHALL MEET THE REQUIREMENTS FOR TRENCH SAFETY AS OUTLINED IN THE CURRENT VERSION OF THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS, 29 CFR. PART 1926, SUBPART P- EXCAVATIONS.
- 2. PRIOR TO COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL PROVIDE A TRENCH SAFETY PLAN. ALL PLANS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS. THE PLAN SHALL BE SUBMITTED TO THE PROJECT ENGINEER.
- 3. IN THE EVENT CONDITIONS ENCOUNTERED IN THE FIELD REQUIRE TRENCH SAFETY SYSTEMS OUTSIDE OF THE EXTENTS SUGGESTED TRENCH PROTECTION SHOWN ON THE CONSTRUCTION PLANS, ALL EXCAVATION SHALL CEASE AND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A REVISED TRENCH SAFETY PLAN. NO EXCAVATION SHALL RESUME UNTIL THE REVISED TRENCH SAFETY PLAN HAS BEEN APPROVED.
- 4. THE CONTRACTOR SHALL ENSURE APPROVED TRENCH SAFETY PLANS ARE IMPLEMENTED. FAILURE TO ADHERE TO THE TRENCH SAFETY PLAN WILL RESULT IN A STOP WORK ORDER. NONCOMPLIANCE INCIDENTS MAY BE REPORTED TO OSHA.
- 5. TRENCHES OR EXCAVATIONS MAY NOT BE LEFT OPEN OVERNIGHT UNLESS AUTHORIZED IN WRITING BY THE PROJECT ENGINEER. IN CASES WHERE TRENCHES ARE LEFT OPEN, THE CONTRACTOR MUST PROVIDE TRAFFIC RATED, ANCHORED STEEL PLATE COVERS APPROVED BY THE ENGINEER.



JAVIER HINO.IOSA

P.E. # 74808 ON

OCTOBER 4, 2024

ISHEET

OCUMENT WAS AUTHORIZED BY

230301A ROJECT No. OCT. 3, 2024 G.T. & A.G

DRAWN BY

CHK, BY

JAVIER HINOJOSA ENGINEERING

CONSULTING ENGINEERS 416 E. DOVE AVENUE McALLEN, TEXAS 78504 PHONE (956) 668-1588 TBPELS FIRM No. 1295 javier@javierhinojosaeng.com

GENERAL NOTES MONTE CIELO SUBDIVISION PHASE II

WESLACO, TEXAS

SHEETS 230301A

EROSION GENERAL NOTES:

- 1. IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER OF COMPLIANCE WITH FEDERAL REGULATIONS. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TPDES)GENERAL PERMIT NO. TXR15000 TO DISCHARGE WASTE FROM CONSTRUCTION SITES ISSUED AND EFFECTIVE MARCH 5, 2023.
- 2. THE STORM WATER POLLUTION PLAN SHOULD ADDRESS THREE GOALS: A) DIVERSION OF UPSLOPE WATER AROUND DISTURBED AREAS OF THE SITE; B) LIMITS THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE; AND C) REMOVAL OF SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.
- 3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO (EPA).
- 4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EFFECTIVE PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE BY THE OWNER.
- 5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 14 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
- 6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.
- 7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.
- 8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE: DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR; REGULAR COLLECTION OF WASTE; CONVENIENTLY LOCATED WASTE RECEPTACLES; AND DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
- 9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF REQUIREMENTS OF LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
- 10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
- 11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 12. ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHED AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER.
- 13. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.

- 1. STONE SHALL BE 3 TO 5 INCH DIA. CRUSHED ROCK OR ACCEPTABLE CRUSHED CEMENT CONCRETE.
- 2. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, WHEN WASHING IS REQUIRED. IT SHAL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
- 3. THE ENTRANCE SHALL BE PROPERLY GRADED OR INCORPORATE DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
- 4. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVEMENT SURFACES, MUST BE REMOVEDD IMMEDIATELY.

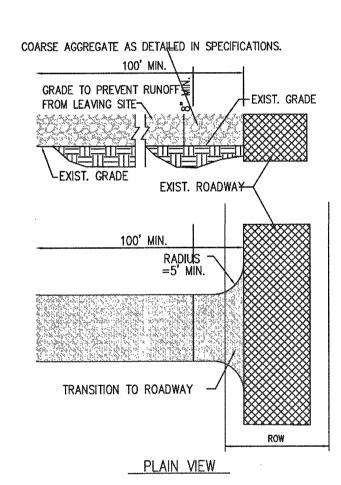
GENERAL NOTES:

- 1. STEEL POSTS WHICH SUPPORT TH SILT FENCE SHALL BE INSTALLED WITH A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A
- 2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE, AS NECESSARY, TO PREVENT FLOW UNDER FENCE.
- 3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAND IN THE GROUND AND BACKFILLED.
- 4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OF TO BACKING SUPPORT, WITH IS IN TURN ATTACHED TO THE STEEL FENCE POST FABRIC SHALL OVERLAP AT ABUTTING ENOS A MINIMUM OF 3 FEET AND SHALL BE JOINED SUCH THAT NO BYPASS OR LEAKAGE OCCURS.
- 5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL, REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 6. SILT FENCE SHALL BE REMOVEDD WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- 7. ACCUMULATED SILT SHALL BE REMOVEDD WHEN IT REACHES A DEPTH OF 6 INCHES THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

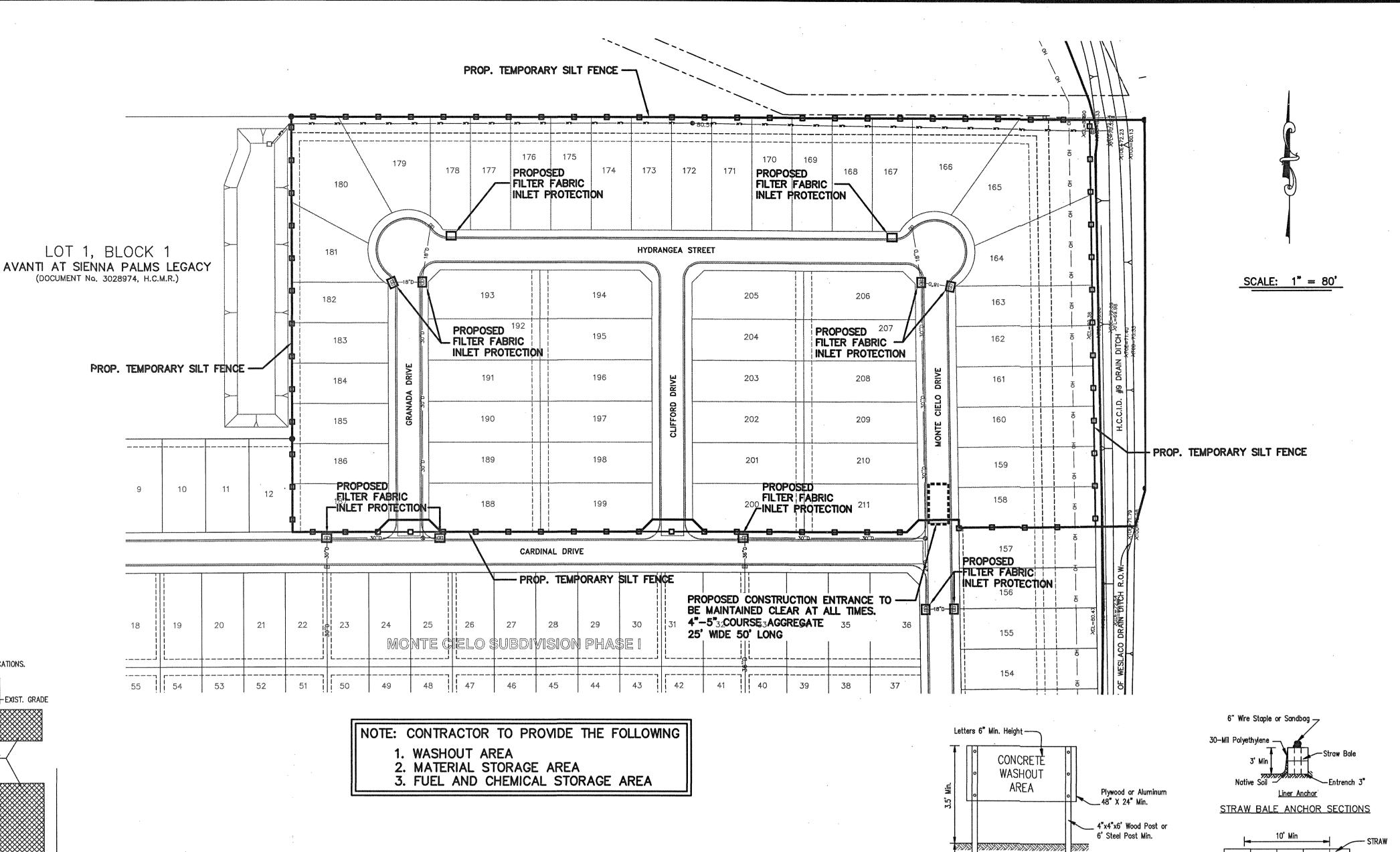
SEDIMENT CONTROL FENCE USAGE GUIDELINES

A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2-YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX. FLOW THROUGH RATE OF 100 GPM/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENEDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN

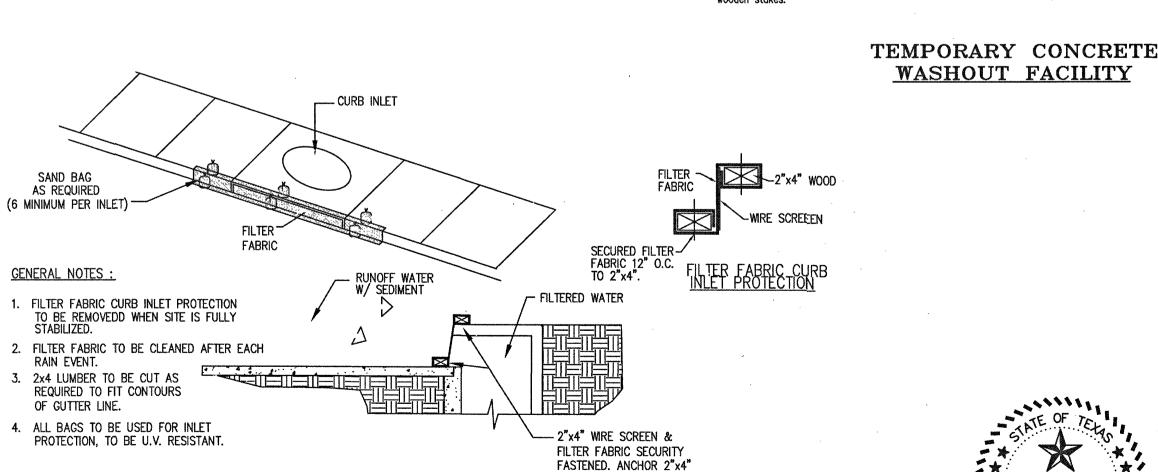


STABILIZED CONSTRUCTION ENTRANCE/EXIT



CONNECT THE ENDS OF FASTEN FABRIC TO TOP STRAND OF WELDED WIRE MESH (W.W.M.)
BY HOG RINGS OR CORD AT A MAX. SPACING OF 15". SUCCESSIVE REINFORCEMENT |-SHEETS OR ROLLS A MIN. OF ! 6 TIMES WITH HOG RINGS. HWOVEN FILTER FABRIC ATTACH THE W.W.M. AND FABRIC ON END POSTS USING 4 EVENLY SPACED STAPLES FOR WOODEN POSTS (OR 4 T-CLIPS OR SEWN VERTICAL POCKETS FOR STEEL POST). PLACE 4" TO 6" OF FABRIC AGAINST THE TRENCH SIDE AND APPROX.. 2" ACROSS TRENCH BOTTOM IN UPSTREAM DIRECTION. MINIMUM TRECH SIZE SHALL BE 6" SQUARE. BACKFILL AND HAND TAMP.

TEMPORARY SEDIMENT CONTROL FENCE



SIGN DETAIL

washout becomes two—thirds full.

1. Maintaining temporary concrete washout facilities shall include

2. Facility shall be cleaned or reconstructed in a new area once

3. Each straw bale is to be staked in place using (2) 2"x2"x4'

removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.

WASHOUT FACILITY

FILTER FABRIC CURB INLET PROTECTION

REVISIONS 230301A DRAWN BY

JAVIER HINOJOSA ENGINEERING

CONSULTING ENGINEERS 416 E. DOVE AVENUE McALLEN, TEXAS 78504 PHONE (956) 668-1588 TBPELS FIRM No. 1295

javier@javierhinojosaeng.com

SUGGESTED EROSION CONTROL PLAN MONTE CIELO SUBDIVISION PHASE II WESLACO, TEXAS

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JAVIER HINOJOSA P.E. # 74808 ON OCTOBER 4, 2024

JAVIER HINOJOSA

74808

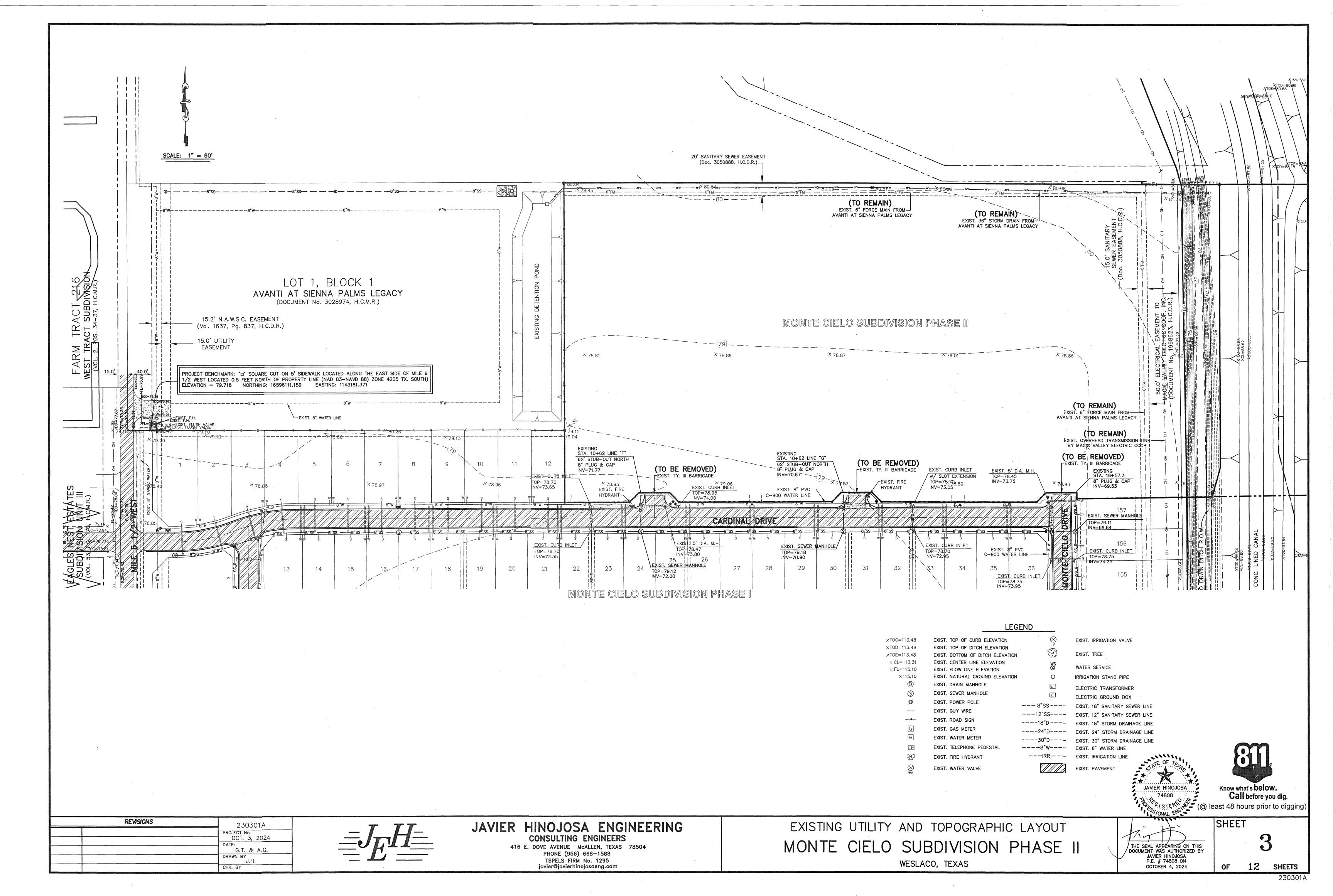
SHEET

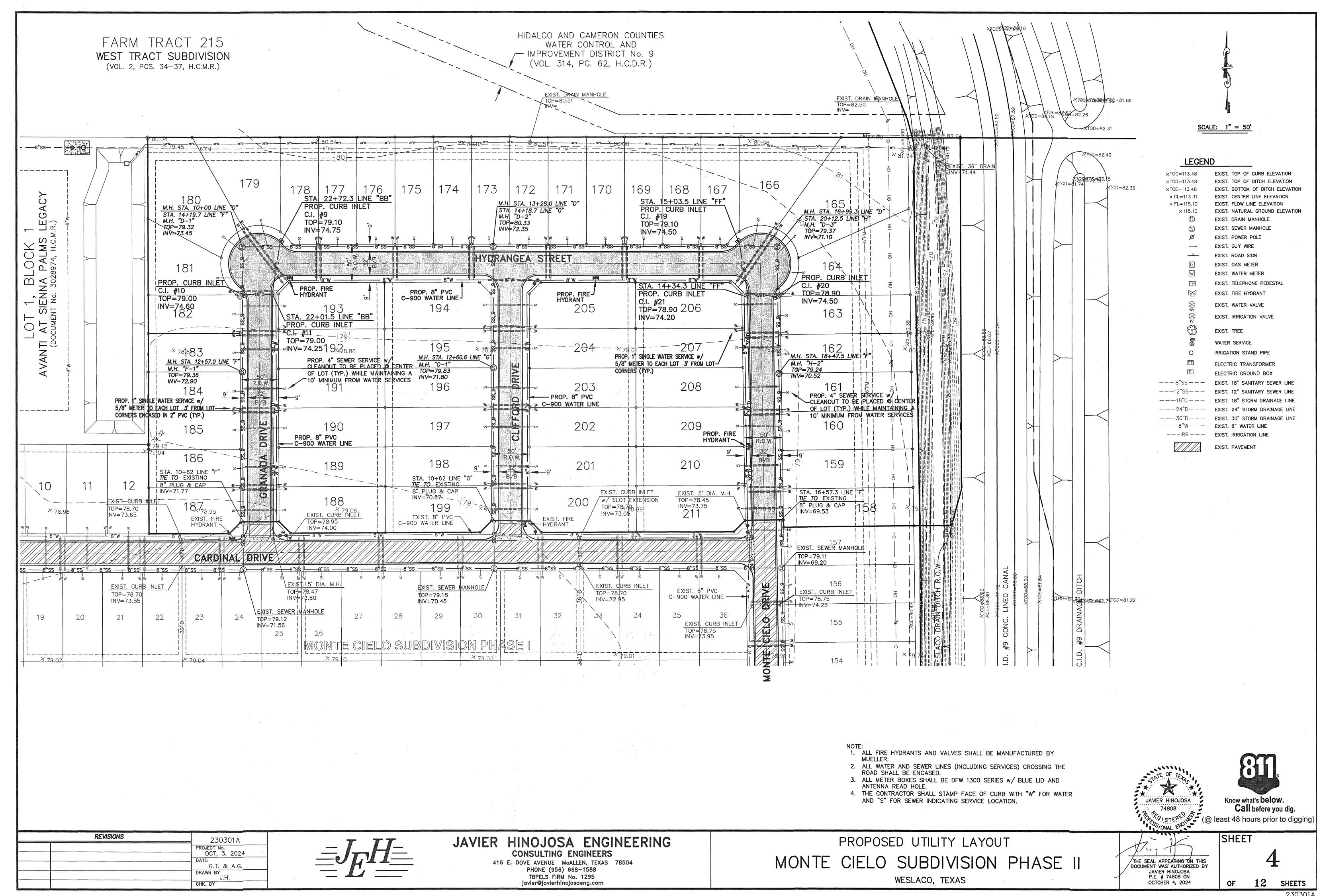
12 SHEETS

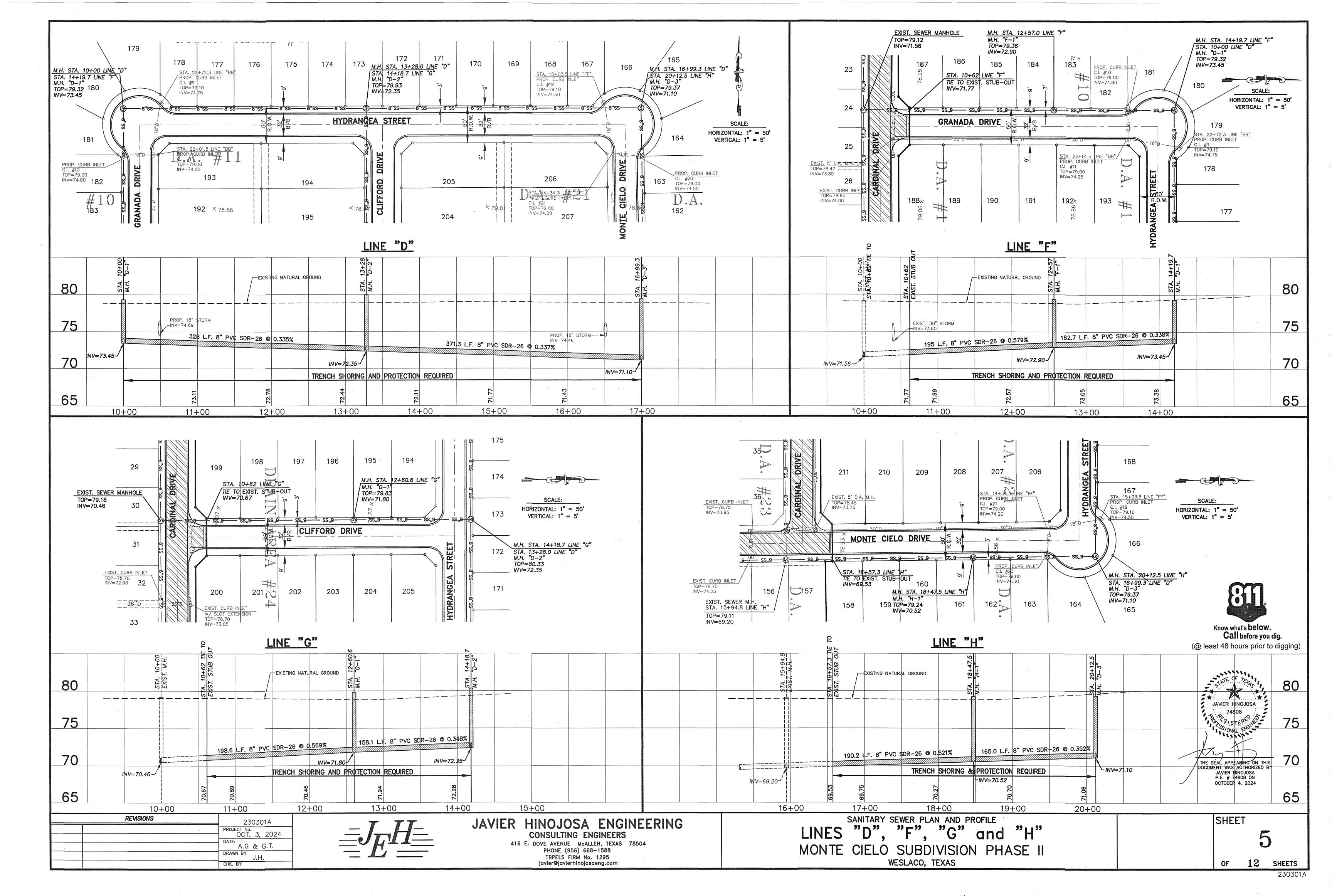
6" WIRE STAPLE OR SANCLAU

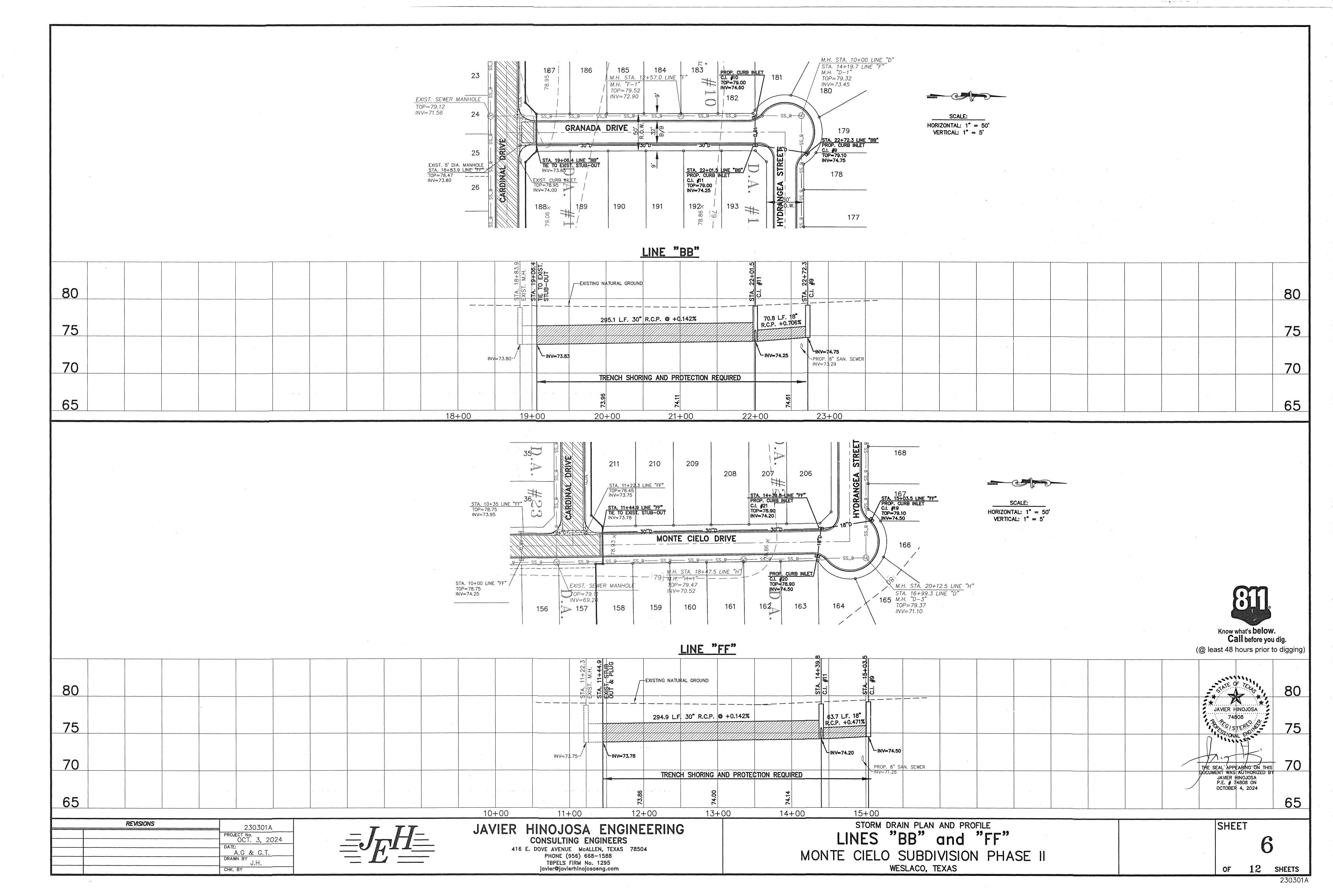
(ANCHOR EVERY 2')

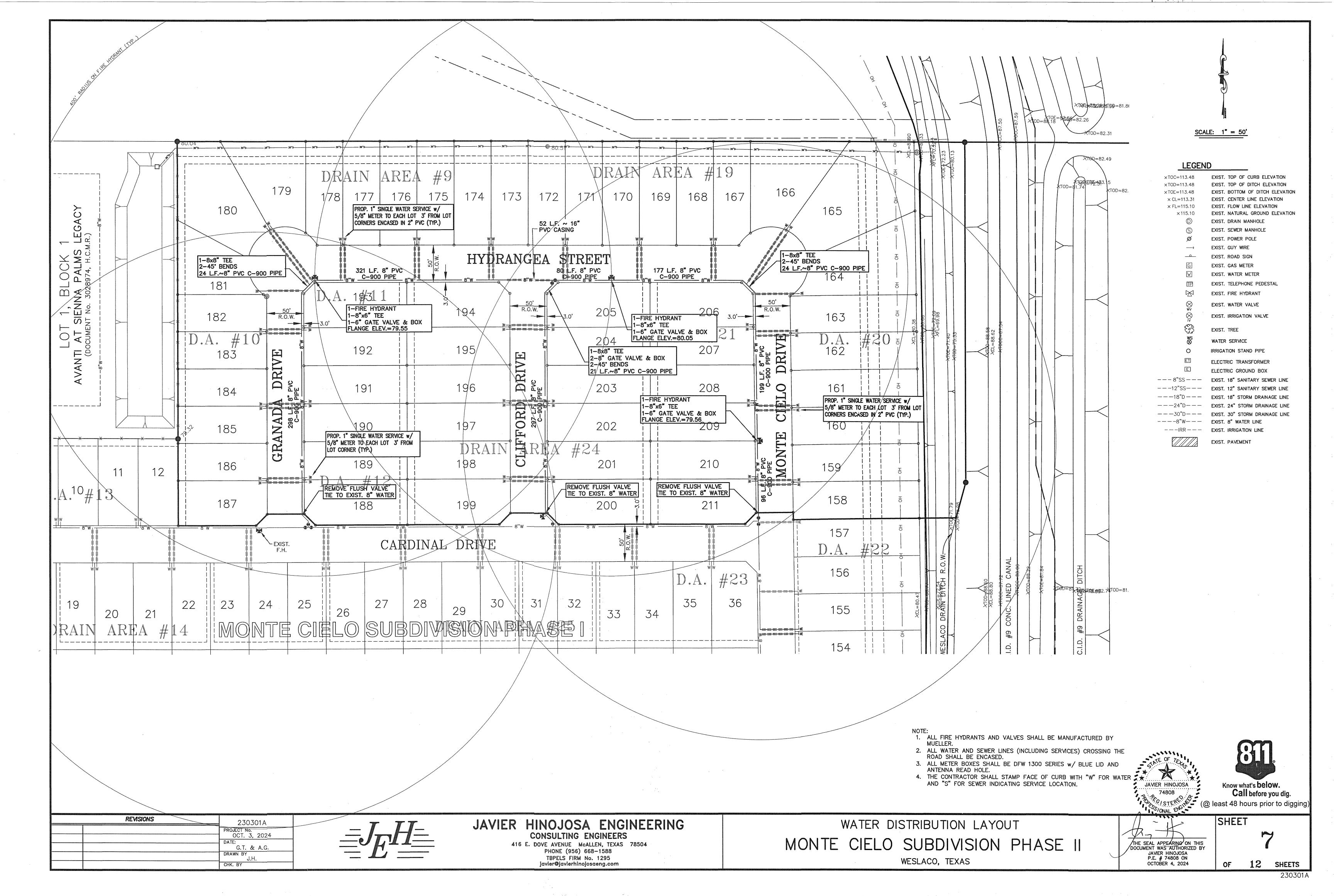
PLAN VIEW

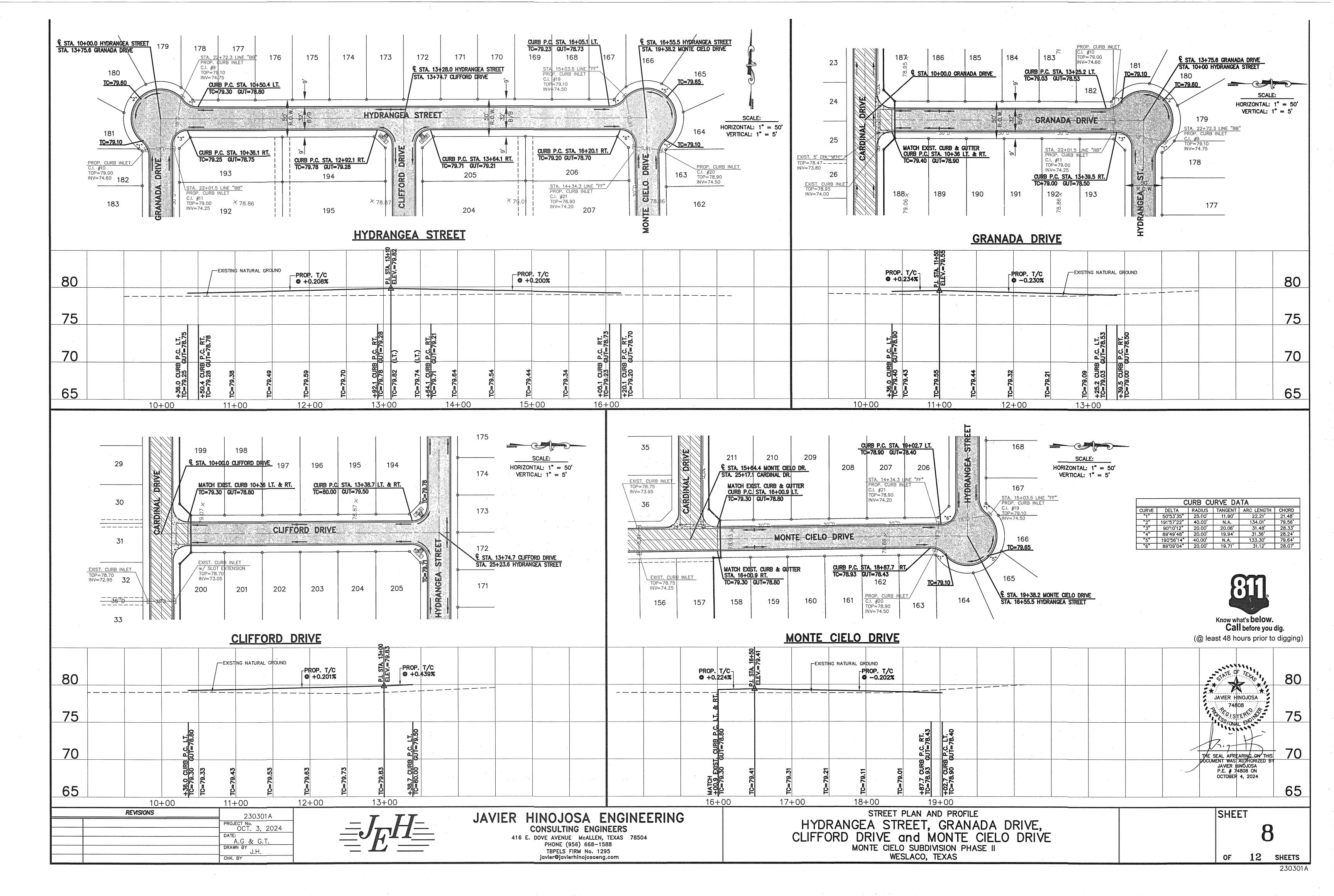


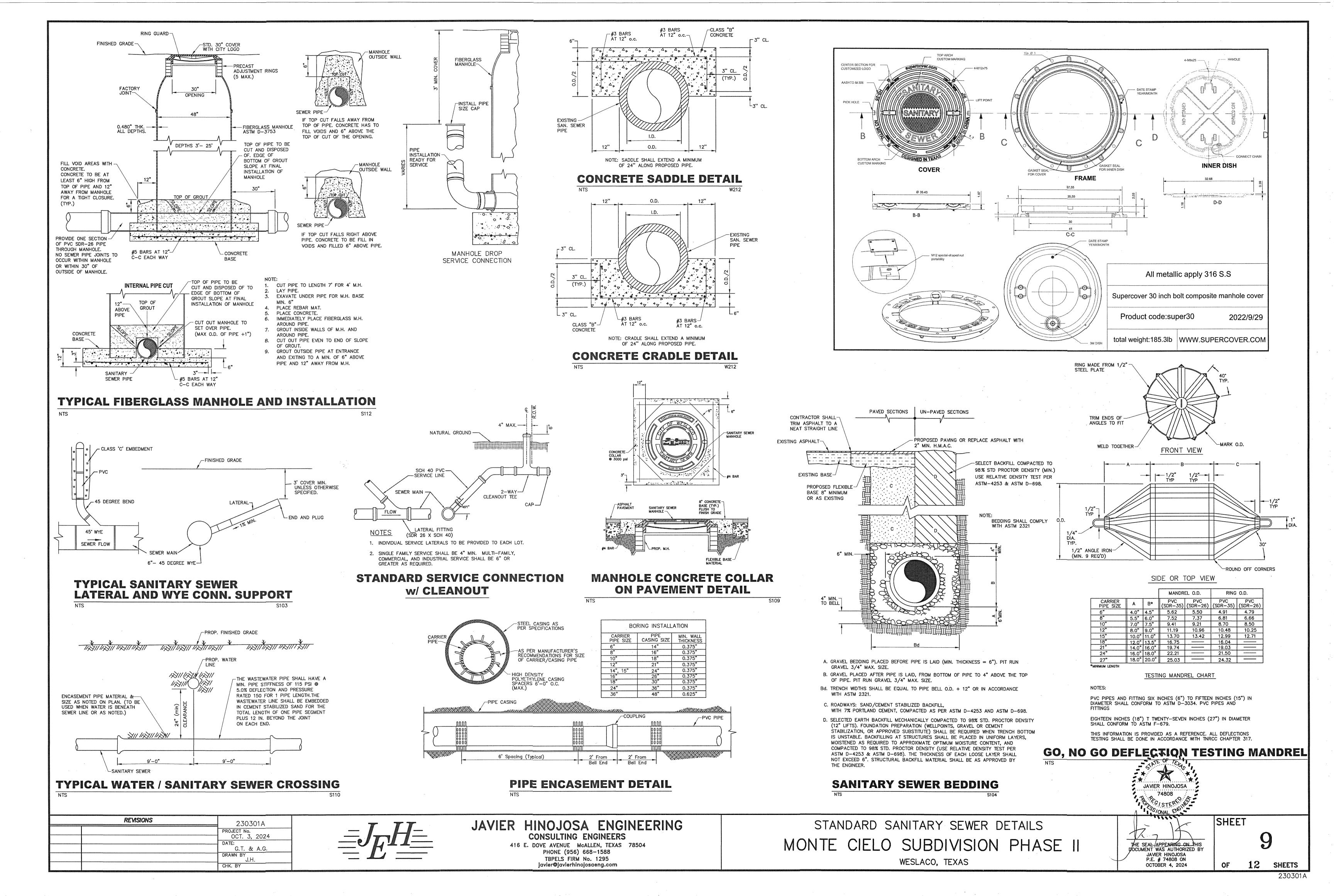


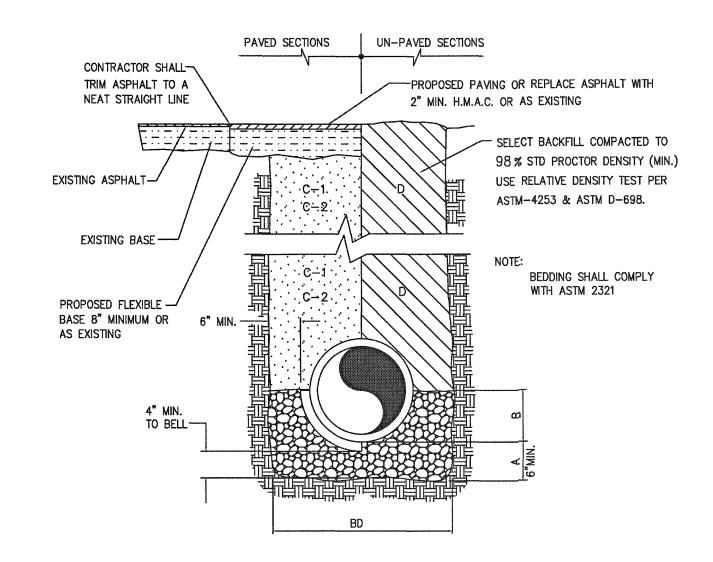








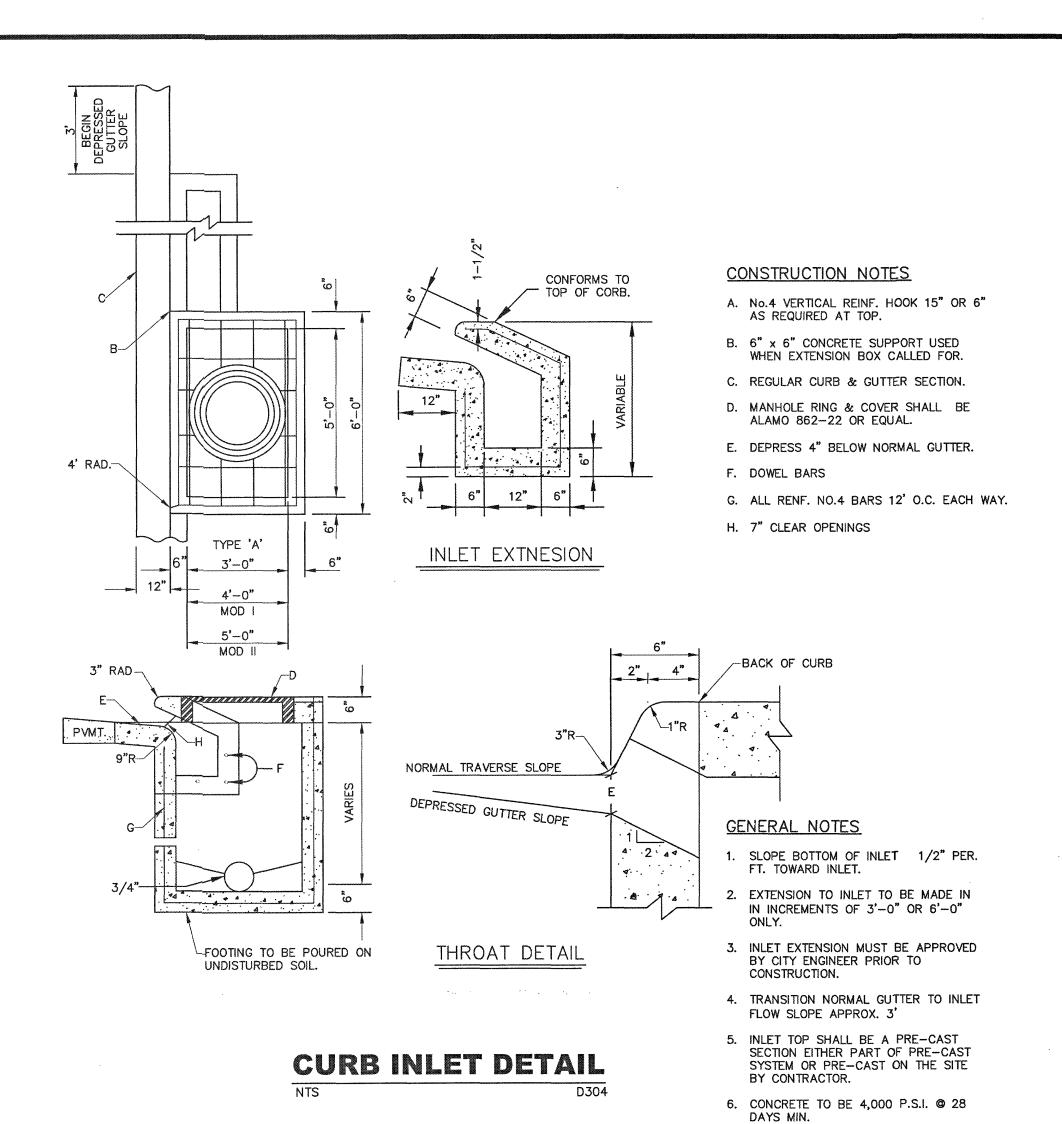


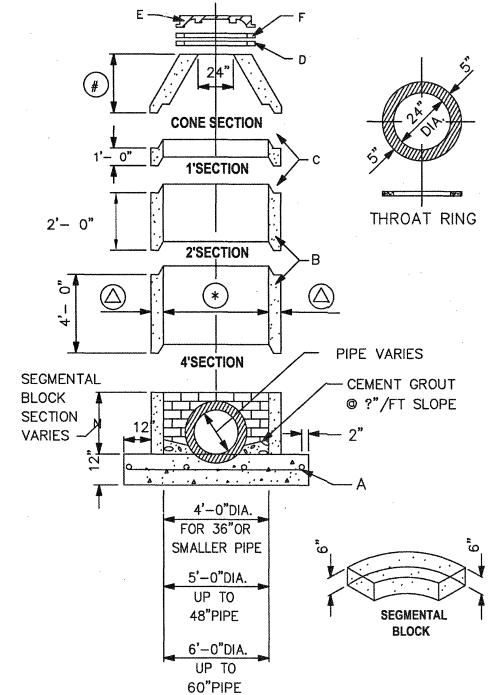


- A. GRAVEL BEDDING PLACED BEFORE PIPE IS LAID (MIN. THICKNESS = 6"). PIT RUN GRAVEL 3/4" MAX. SIZE.
- B. AFTER PIPE IS LAID, PLACE GRAVEL FROM BOTTOM TO SPRING LINE OF PIPE. PIT RUN GRAVEL 3/4" MAX. SIZE.
- Bd. TRENCH WIDTHS SHALL BE EQUAL TO PIPE BELL O.D. + 12" OR IN ACCORDANCE WITH ASTM 2321.
- C-1. CITY STREETS, PARKING AREA, DRIVEWAYS: SELECTED BACKFILL SHALL BE PLACED IN 8" LIFTS MECHANICALLY COMPACTED TO 98% MODIFIED PROCTOR DENSITY,
- C-2. STATE MAINTAINED ROADWAYS: SAND/CEMENT STABILIZED BACKFILL, WITH 7% PORTLAND CEMENT, COMPACTED AS PER ASTM D-4253 AND ASTM D-698.
- D. SELECTED EARTH BACKFILL MECHANICALLY COMPACTED TO 98% STD. PROCTOR DENSITY (12" LIFTS). FOUNDATION PREPARATION (WELLPOINTS, GRAVEL OR CEMENT STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 98% STD. PROCTOR DENSITY (USE RELATIVE DENSITY TEST PER ASTM D-4253 & ASTM D-698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6". STRUCTURAL BACKFILL MATERIAL SHALL BE AS APPROVED BY THE ENGINEER.

STORM SEWER LINE BEDDING DETAIL

NTS





GENERAL NOTES:

1.SEGMENTAL BLOCK MAY BE USED ON
LARGE DIA.PIPES IN LIEU OF BREAKING
OUT LARGE HOLES IN PRE—CAST SECTION.
2.SEGMENTAL BLOCK SECTION & PRE—CAST
SECTION MAY BE ALTERNATED.
3.PRECAST SECTIONS MAY BE PLACED

IN ANY ORDER.

4.FOOTING TO BE POURED ON UNDISTURBED

SOIL.
5.1/2"OF MORTAR TO BE PLACED ON INSIDE AND OUTSIDE OF SEGMENTAL MANHOLES.

CONSTRUCTION NOTES:

A.# 4 BARS AT 12"O.C.EACH WAY.
B.PRE—CAST SECTIONS.

C.MORTAR JOINTS.

D.MIN.OF 3 AND MAX.OF 5 THROAT
RING FOR FUTURE ADJUSTMENTS.

E.HEAVY STREET CAST IRON MANHOLE
RING AND COVER "VULCAN VM-42

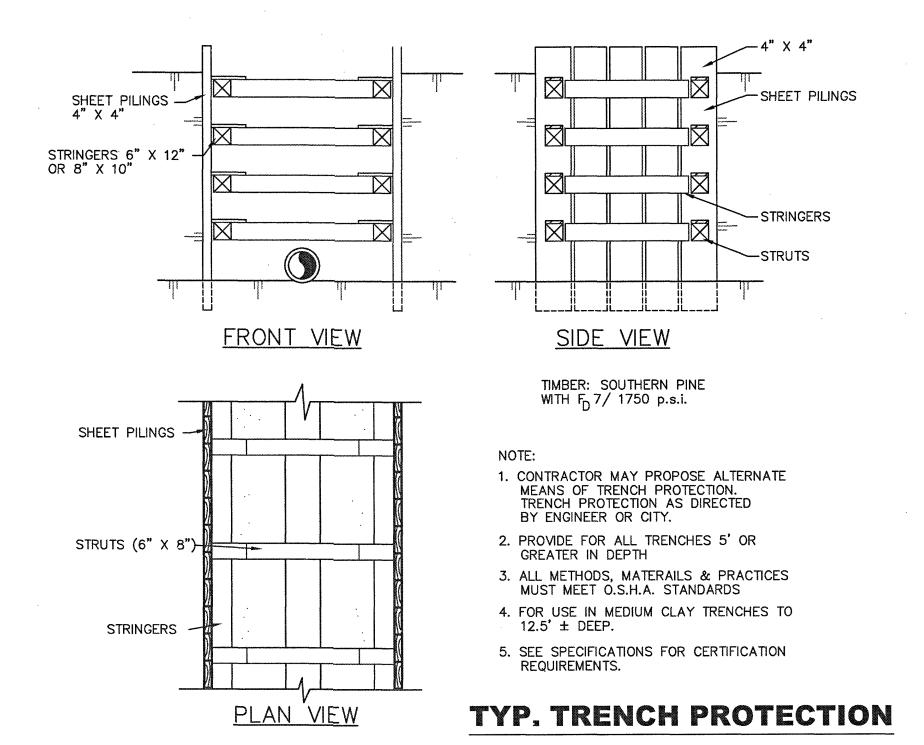
OR EQUAL"RING: 5?" HIGH, CLEAR OPENING 24"COVER: 26"DIA.2"THICK. F.MORTAR JOINT BETWEEN RINGS.

2'- 10" 3'- 4"

DENOTES

| 4'- 0" | 5'- 0" | 6'- 0 |
| DIA. | DIA. | DIA.

TYPICAL STORM SEWER MANHOLE



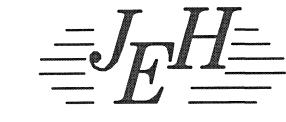
 REVISIONS
 230301A

 PROJECT No.
 OCT. 3, 2024

 DATE:
 G.T. & A.G.

 DRAWN BY
 J.H.

 CHK. BY
 CHK. BY



JAVIER HINOJOSA ENGINEERING

人名英格兰 经基本证券 经营业 医二氏

CONSULTING ENGINEERS

416 E. DOVE AVENUE McALLEN, TEXAS 78504
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TBPELS FIRM No. 1295
javier@javierhinojosaeng.com

STANDARD STORM DRAINAGE DETAILS

MONTE CIELO SUBDIVISION PHASE II

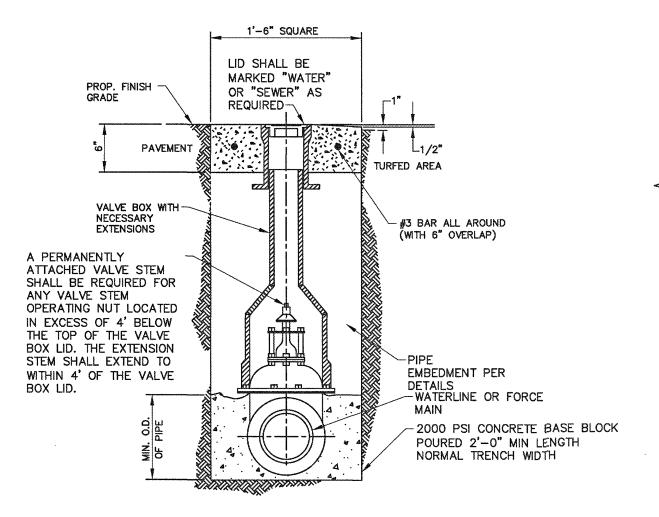
WESLACO, TEXAS

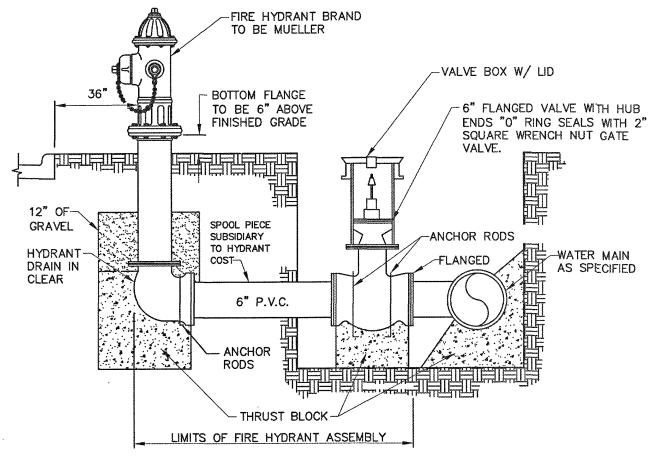
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OCTOBER 4, 2024

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12 SHEETS 230301A



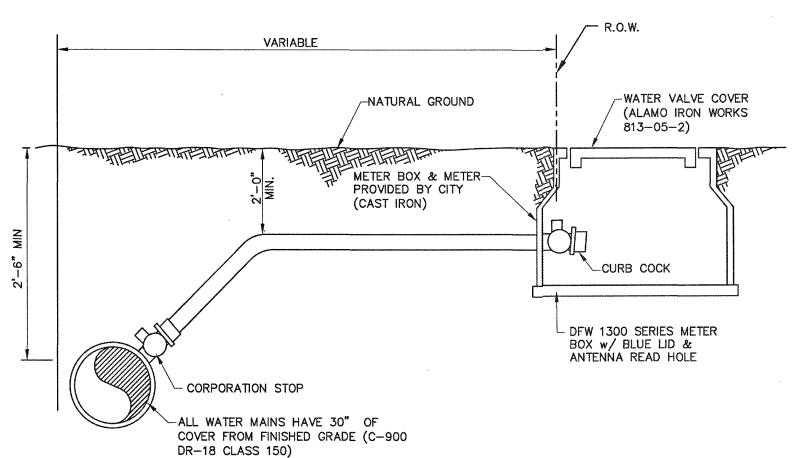


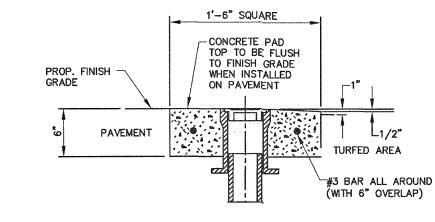
NOTE: SEE FIRE MARSHAL FOR EXACT LOCATION AND HEIGHT OF BOLLARDS.

GATE VALVE AND BOX

FIRE HYDRANT **ASSEMBLY AND BOX DETAIL**

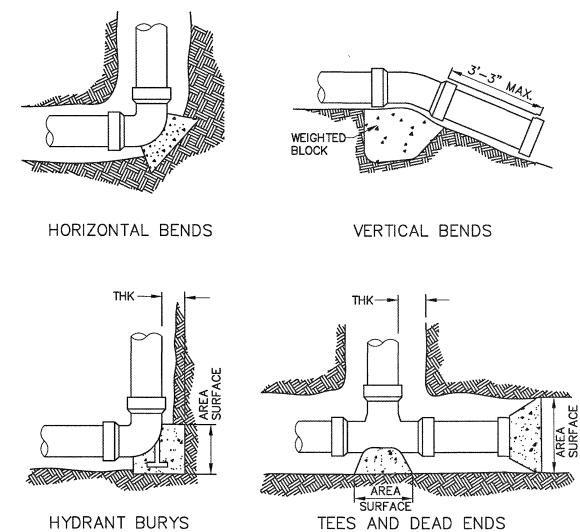
(ALL FIRE HYDRANTS AND VALVES SHALL BE MANUFACTURED BY MUELLER)





GATE VALVE CONCRETE COLLAR

TYPICAL SERVICE CONNECTION



CONSTRUCTION NOTES

A. SIMPLEX COUPLING

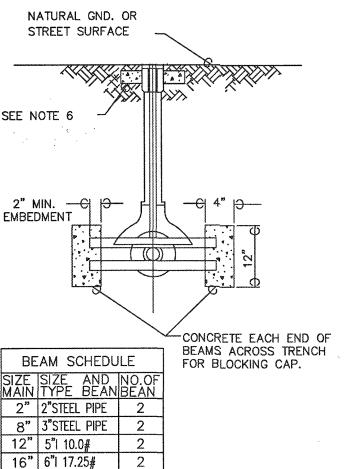
B. ANCHOR ROD

DIAMETER	HORIZONTAL BEND		WEIGHT
OF PIPE INCHES	SURFACE AREA SQ. FEET	THICKNESS INCHES	AT VERTICA BENDS—LI
22-1/2° BE	NDS ·		
6 OR LESS	2	8	1700
8	3	8	3,000
10	3.5	12	4,500
12	4	14	6,600
14	5	18	9,000
16	6	18	11,800
45° BENDS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
6 OR LESS	4	12	3,200
8	5	14	5,800
10	6	18	9,000
12	7	18	13,000
14	8	24	17,000
16	11.5	24	23,200
90° BENDS		<u> </u>	
6 OR LESS	6	12	6,000
8	8	15	10,700
10	10	18	16,700
12	12	18	24,000
14	18	24	32,600
16	21	24	42,700
TEES & DE	AD ENDS		
6 OR LESS	3	12	
8	4	15	
10	6	18	
12	8.5	18	1
14	11.5	24	
16	15	24	

TYPICAL THRUST BLOCK DETAILS

CHK. BY

- NATURAL GND. OR STREET SURFACE NATURAL GND. OR STREET SURFACE SEE NOTE 6



36" | 15" | 50.0# | 2

GENERAL NOTES:

- . 1. ALL DEAD-ENDS ON NEW WATER LINES SHALL BE EQUIPPED WITH A SUITABLE BLOW-OFF FACILITY, OR AS DIRECTED BY THE ENGINEER
- 2. EMBED ALL C.I. FITTINGS IN SAND 3. BEAM SCHEDULE SHALL BE USED FOR END CAPS AND PLUGS, OMMITTING BLOW-OFF FITTINGS. (SEE SHEET 2) 4. BEAMS SHALL EXTEND BEYOND
- 5. ALL CONCRETE TO HAVE A MIN. 28 DAYS COMPRESSIVE STRENGTH OF
- 3,000 P.S.I. 6. MIN. 95% COMPACTION AROUND INSTALLATION

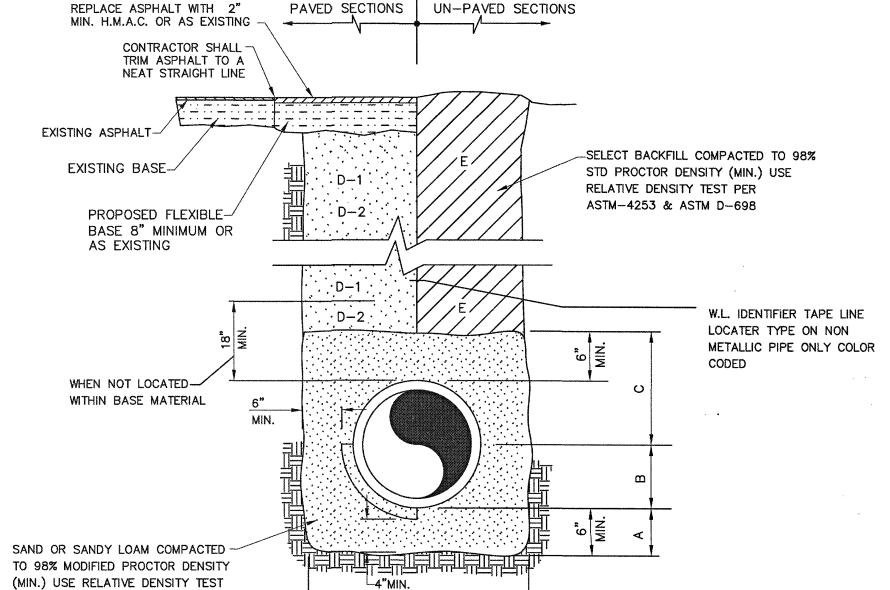
CONSTRUCTION NOTES:

- A. 4" OR LARGER MAIN B. AS REQUIRED x2" TAPPED CAP
- D. 2" C I NIPPLE, THR. (CUT AS
- REQUIRED TO CLEAR VALVE OF BLOCKING BEAMS)
- E. 2" GATE VALVE, THR.
- F. 2"x 2" C I NIPPLE THR G. 2"-90^ C | ELL, THR.
- H. 2" C I PIPE, THR.
- I. STANDARD BOX ASSEMBLY J. 6" VALVE BOX & LID ONLY
- K. 2" COUPLING, THR. (2" MIN. FROM SURFACE) L. CAP NOT TO BE GLUED OR TREATED

GENERAL NOTES:

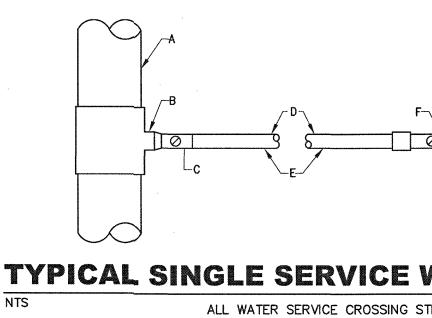
- 1. ALL DEAD-ENDS ON NEW WATER LINES SHALL BE EQUIPPED WITH A SUITABLE BLOW-OFF FACILITY, OR AS DIRECTED BY THE ENGINEER.
- 2. EMBED ALL C.I. FITTINGS IN SAND.
- 3. BEAM SCHEDULE SHALL BE USED FOR END CAPS AND PLUGS, OMITTING BLOW-OFF FITTINGS.
- 4. BEAMS SHALL EXTEND BEYOND TRENCH
- 5. ALL CONCRETE TO HAVE A MIN. OF 28 DAYS CONPRESSIVE STRENGTH 3,000
- 6. MIN. OF 9 SY. COMPACTION AROUND INSTALLATION.

BLOW-OFF INSTALLATION



PROPOSED PAVING OR

PER ASTM-4253 & ASTM D-698



CONSTRUCTION NOTES: A. WATER MAIN (C-900,DR-18 CLASS 150).
B. MAIN LINE SIZE x 1" TAPPING SADDLE
C. 1" CORPORATION STOP
D. PVC OR POLYETHYLENE WATER TUBING,
"TOUGH TUBING" ASTM D 3747. 1" SERVICE LINE. 1" CURB STOP.

* THE WASTEWATER PIPE SHALL HAVE A

MIN. PIPE STIFFNESS OF 115 PSI 0

5.0% DEFLECTION AND PRESSURE

TYPICAL SINGLE SERVICE WATER CONNECTION

ALL WATER SERVICE CROSSING STREET SHALL BE ENCASED

A. SAND OR SANDY LOAM BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE. (MIN. THICKNESS= 6")

B. SAND OR SANDY LOAM BACKFILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. (4" LIFTS, HAND TAMPED) Bd TRENCH WIDTHS SHALL BE PIPE O.D. + 12" OR IN ACCORDANCE WITH ASTM 2321 FOR PVC PIPE.

C. SAND OR SANDY LOAM BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)

D-1. (CITY STREETS, PARKING AREA, SELECT EXCAVATED BACKFILL MATERIAL COMPACTED TO 98% SPD. (8" LIFTS, MECHANICAL COMPACTION)

D-2. (STATE MAINTAINED ROADWAY) COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT COMPACTED AS PER ASTM D-4253 AND ASTM D-698.

E. SELECT EARTH BACKFILL COMPACTED TO 98% SPD. (12" LIFTS, MECHANICAL COMPACTION) FOUNDATION PREPARATION (WELLPOINTS, GRAVEL OR CEMENT STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 98% STD. PROCTOR DENSITY (USE RELATIVE DENSITY TEST PER ASTM D-4253 & ASTM D-698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 6". STRUCTURE BACKFILL MATERIAL SHALL BE SAND, APPROVED SITE SOIL, OR OTHER APPROVED SUBSTITUTE.

WATER LINE BEDDING

2" CORE STOP

CRUSHED ROCK

NOTE:

OR APPROVED EQUAL.

2" TAP SADDLE-

~ 2" MINIMUM (SPECIFY

- NATURAL GROUND

UNDISTURBED

EARTH OR THRUST

2" BRASS 90" ELBOW

POST HYDRANT SHALL BE NON-FREEZING, SELF DRAINING

ROD AND SHALL OPEN TO THE LEFT. ALL WORKING PARTS

SHALL BE BRONZE TO BRONZE DESIGN AND BE SERVICEABLE

FROM ABOVE GRADE WITH NO DIGGING. THE OUTLET SHALL

ALSO BE BRONZE AND BE 2 1/2" NST. FLUSH VALVES SHALL

MANUFACTURED BY KUPFERLE FOUNDRY CO. ST. LOUIS, MO,

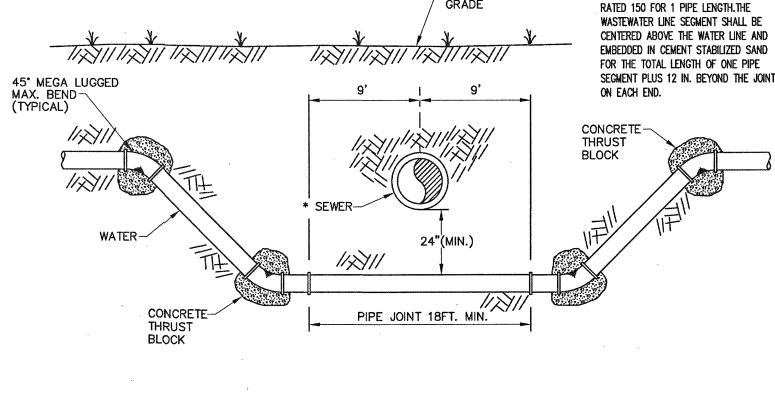
FLUSH VALVE DETAIL

BE LOCKABLE TO PREVENT UNAUTHORIZED USE OS

TYPE WITH A 5' IN. DEPTH OF BURY. FLUSH VALVE WILL BE

FURNISHED WITH A 2' PIP INLET, A NON-TURNING OPERATING

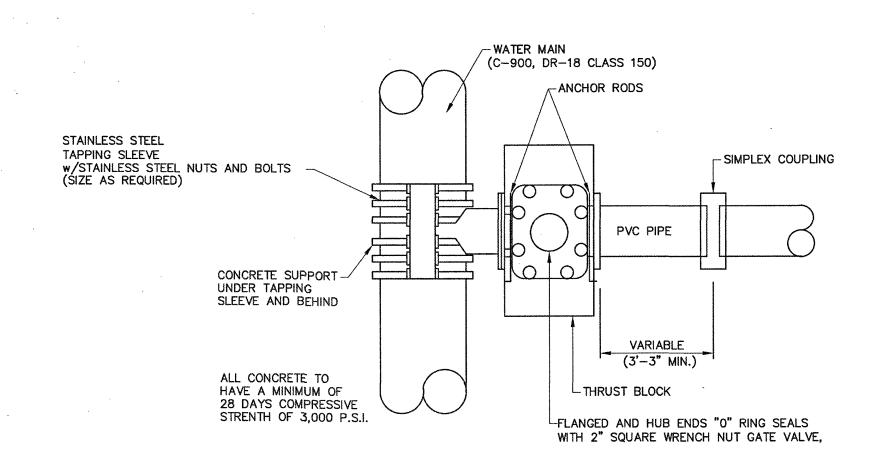
OUTLET SIZE & TYPE)



-PROP. FINISHED

GRADE

TYPICAL WATER DEFLECTION



5 * · · · · · · · · · · · · · · · · · ·
JAVIER HINOJOSA
74808
O COLETER E
PEGISTERE NET
11111
- th

JAVIER HINOJOSA P.E. # 74808 ON

OCTOBER 4, 2024

SHEET

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY

TAPPING SLEEVES & VALVE INSTALLATION

REVISIONS 230301A PROJECT No. OCT. 3, 2024 G.T. & A.G. DRAWN BY

2. THE LOCATION OF THRUST NTS

DEPENDS
UPON THE
DIRECTION OF
THRUST AND

BLOCKS

GENERAL NOTES

SEE THRUST
 BLOCK SIZE

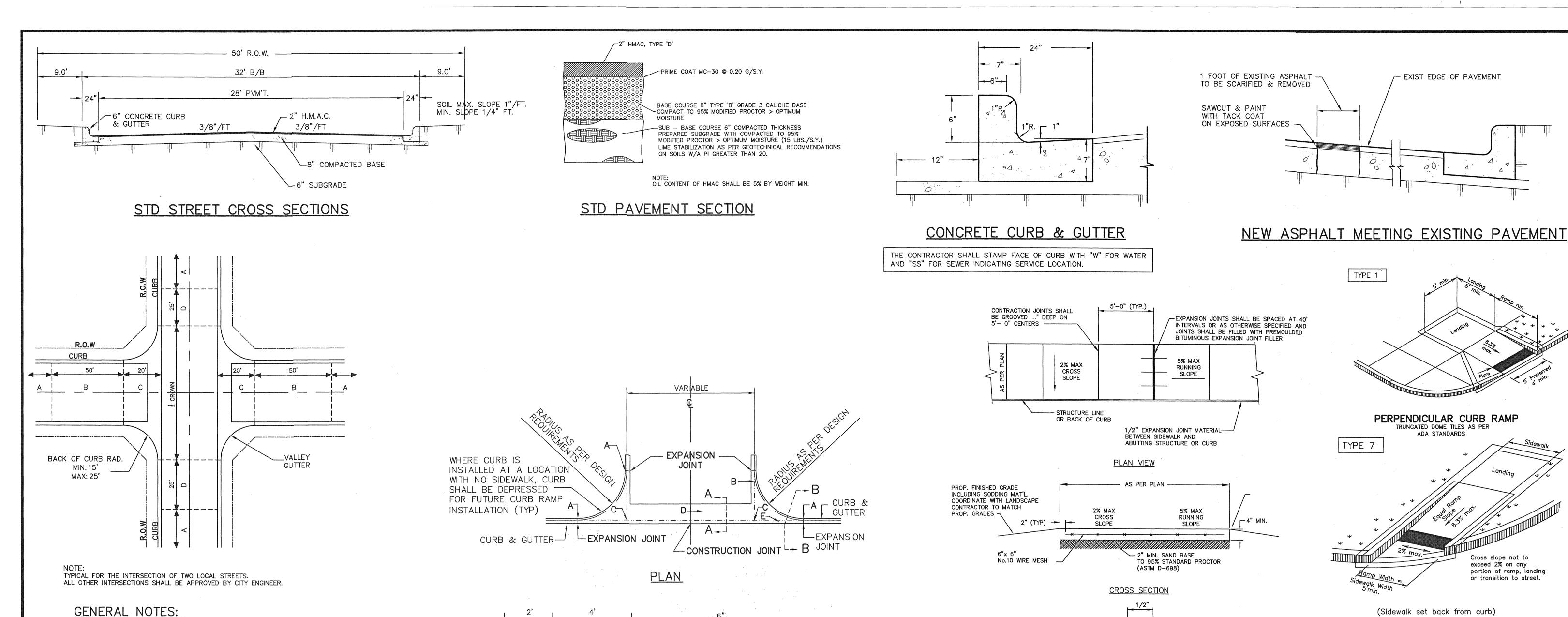
THICKNESS AND SURFACE

JAVIER HINOJOSA ENGINEERING

CONSULTING ENGINEERS 416 E. DOVE AVENUE McALLEN, TEXAS 78504 PHONE (956) 668-1588 TBPELS FIRM No. 1295 javier@javierhinojosaeng.com

STANDARD WATER DETAILS MONTE CIELO SUBDIVISION PHASE II

WESLACO, TEXAS



-PARABOLIC

F OR G VARIABLE

SECTION A-A CONCRETE VALLEY GUTTER

SECTION B-B

CONSTRUCTION NOTES:

PERPENDICULAR TO VALLEY GUTTER.

IS PARALLEL TO VALLEY GUTTER.

TO VALLEY GUTTER.

- A. NORMAL CROWN FOR RESIDENTIAL STREET.
- B. TRANSITION SECTION FROM FULL CROWN TO NO CROWN SECTION.

1. REDUCE NORMAL CROWN TO NO CROWN SECTION WHEN APPROACHING

2. REDUCE NORMAL CROWN TO HALF CROWN SECTION WHEN STREET

NORMAL CROWN & THE LEG OF THE "T" WILL REDUCE NORMAL CROWN TO NO CROWN SECTION WHEN APPROACHING PERPENDICULAR

DRAINAGE FLOWS ACROSS THROUGH STREET OF INTERSECTION.

6. VALLEY GUTTER SHALL BE 6 FEET WIDE. PER STANDARD DETAIL.

3. FOR "T" INTERSECTION THE THROUGH STREET WILL RETAIN

4. CONSTRUCTION PLANS WILL DETAIL "T" INTERSECTION WHEN

5. CONSTRUCTION PLANS WILL SPECIFY RADII CURB RETURNS.

- C. NO CROWN SECTION.
- D. TRANSITION SECTION FROM FULL CROWN TO HALF CROWN SECTION.

GENERAL NOTES:

- 1. DESIGN ELEVATIONS TO BE GIVEN AT EACH END OF THE CURB RETURN (TOP OF CURB ELEVATION) AND AT INTERSECTIONS OF PROJECTED FLOWLINES (FLOWLINE ELEVATION).
- 2. ON UPSTREAM AND DOWNSTREAM ENDS OF THE INTERSECTION, VALLEY GUTTER CONSTRUCTION SHALL EXTEND TO THE END OF
- 3. THE VALLEY GUTTER TO BE REINFORCED WITH 6"X 6" X NO. 6 GA. WIRE MESH. OR NO. 3 @ 12" O.C.E.W. OR NO. 4 @ 16" O.C.E.W.

4. INVERT OF VALLEY GUTTER TO EXTEND FROM FLOWLINE OF UPSTREAM CURB RETURN TO FLOWLINE OF DOWNSTREAM

CURB RETURN. 5. FOR NEW CONSTRUCTION, VALLEY GUTTER SHALL BE CONSTRUCTED PRIOR TO ADJACENT

- 6. PRIOR TO CONSTRUCTION OF NEW VALLEY GUTTER ON EXISTING ACCEPTED STREETS, PAVEMENT SHALL BE REMOVEDD AS SHOWN ON PLANS.
- 7. VALLEY GUTTER SHALL BE PLACED USING 3000 P.S.I CONCRETE.
- 8. FOR HANDICAP RAMP, SEE DETAIL.
- 9. EXISTING CURB OR PAVEMENT SHALL BE SAWCUT WHERE NECESSARY TO CONNECT TO PROPOSED VALLEY GUTTER.

- A. END OF CURB RETURN, SEE NOTE 1.
- D. DIRECTION OF FLOW
- E. FLOWLINE

- I. THE 1 1/2" INVERT DEPTH MAY BE WITH APPROVAL FROM THE CITY ENGINEER.

CONSTRUCTION NOTES:

- B. PROJECTED FLOW LINE OF 1 1/2" INVERT SEE NOTE 2.
- C. INTRSECTION OF FLOWLINES, SEE

- F. 6" X 6" NO. 6 GA. WIRE MESH
- G. NO. 3 BARS AT 12" O.C.E.W.
- H. NO. 4 BARS AT 18" O.C.E.W.
- REDUCED TO IMPROVE DRIVEABILITY

CONSTRUCTION NOTES:

A. POWER POLE OR OTHER OBSTRUCTION.

B. LEAVE 6" CLEARANCE AROUND TREE TRUNKS.

T= SIDEWALK **THICKNESS**

- C. TOP OF CURB.

D. FIRE HYDRANT

MAILBOX

SIDEWALK EXPANSION JOINT

CONCRETE SIDEWALK DETAILS

E. BACK OF CURB.

PROVIDE 1/2" PREFORMED EXPANSION JOINT

MATERIAL WHERE SIDEWALK ABUTS POWER

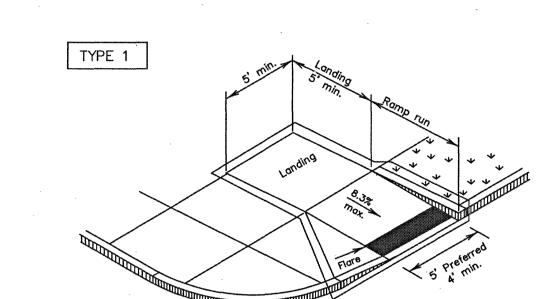
POLES, FIRE HYDRANTS, MAILBOXES OR

OTHER IMMOVABLE OBJECTS.

--- 3-24" No.4 BARS

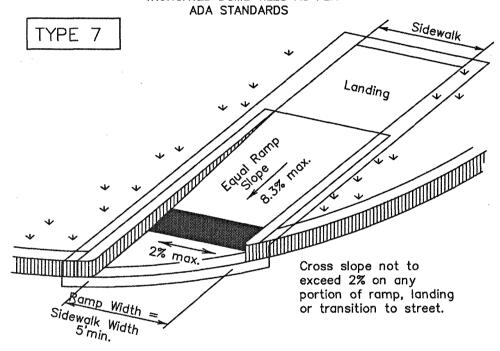
SMOOTH DOWEL SPACED EVENLY

TYPICAL SIDEWALK DETAILS OBSTRUCTIONS

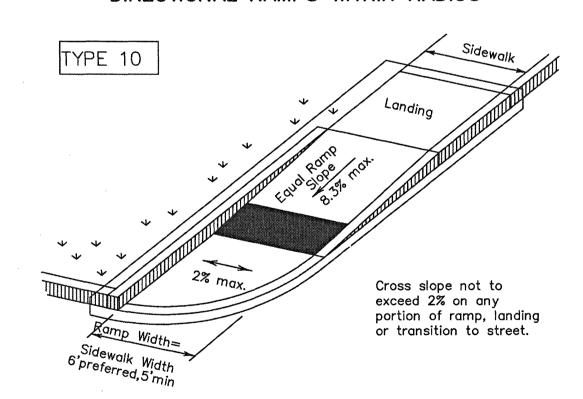


- EXIST EDGE OF PAVEMENT

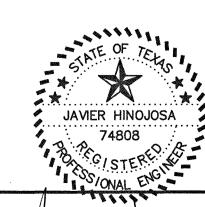
PERPENDICULAR CURB RAMP TRUNCATED DOME TILES AS PER



(Sidewalk set back from curb) DIRECTIONAL RAMPS WITHIN RADIUS



(Sidewalk adjacent to curb) DIRECTIONAL RAMPS WITHIN RADIUS TRUNCATED DOME TILES AS PER ADA STANDARDS



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY

JAVIER HINOJOSA

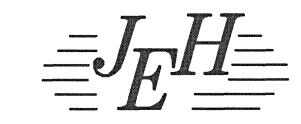
OCTOBER 4, 2024

P.E. # 74808 ON

SHEET

SHEETS

REVISIONS 230301A PROJECT No. OCT. 3, 2024 G.T. & A.G. DRAWN BY CHK. BY



PAVEMENT.

JAVIER HINOJOSA ENGINEERING

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STANDARD PAVING DETAILS MONTE CIELO SUBDIVISION PHASE II WESLACO, TEXAS