# of **9**

# CHUCK CORICA GOLF COURSE PARKING LOT IMPROVEMENTS CITY OF ALAMEDA, ALAMEDA COUNTY, CALIFORNIA

#### **GENERAL NOTES:**

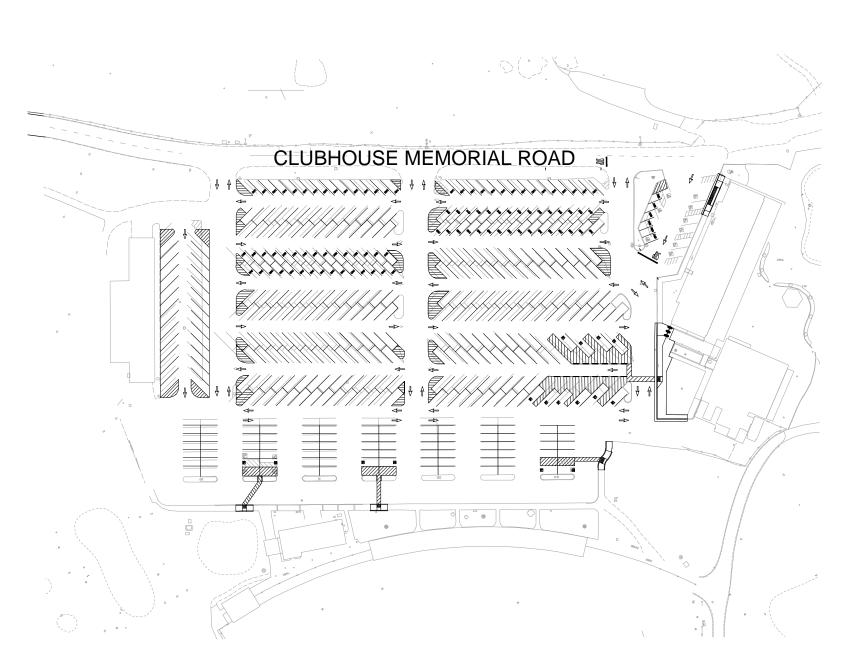
- 1. SETS OF THESE PLANS, TOGETHER WITH ANY NECESSARY REVISIONS THERETO, WILL BE KEPT ON FILE, IN THE OFFICE OF THE PROJECT CONSTRUCTION
- 2. ALL PUBLIC WORK SHALL BE PERFORMED AND COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER. THE CITY, AND ITS REGULARLY APPOINTED AGENTS, SHALL, AT ALL TIMES DURING THE PROGRESS OF WORK, HAVE FREE ACCESS THERETO AND SHALL BE ALLOWED TO EXAMINE SOME AND/OR
- EROSION AND DUST CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE PROJECT STORM WATER POLLUTION  $\,$  PREVENTION PLAN  $\,$ (SWPPP) AND MONITORING PROGRAM USING BEST MANAGEMENT PRACTICE GUIDELINES, MONITORING PROGRAM USING BEST MANAGEMENT PRACTICE
- 6. ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTRACTOR SHALL CONTACT USA(UNDERGROUND SERVICE ALERT) AT 811 FORTY-EIGHT (48) HOURS PRIOR TO BEGINNING WORK TO VERIFY EXISTING UNDERGROUND UTILITIÉS. USA TO BE CALLED PRIOR TO START OF EACH NEW PHASE OF WORK BY EACH CONTRACTOR AND EACH SUBCONTRACTOR PRIOR
- CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE CORRECTNESS OF THE EXISTING TOPOGRAPHY PREPARED BY BKF ENGINEERS AND OTHER SITE
- CONDITIONS PRIOR TO CONSTRUCTION. 8. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALAMEDA PUBLIC WORKS DEPARTMENT ON THE SCHEDULING OF DUST CONTROL METHODS AND
- SYSTEM AND COMPENSATE THE CITY'S COSTS FOR THE WATER USED. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL NOTIFY BKF ENGINEERS IN WRITING AND TELEPHONE AT (925)940-2200 BEFORE PROCEEDING WITH THE WORK IN
- 18. CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS OF 7 A.M. TO 7 P.M. MONDAY THRU FRIDAY.
- 19. IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS, ALL ENGINE-DRIVEN CONSTRUCTION VEHICLES, EQUIPMENT AND PNEUMATIC TOOLS SHALL BE REQUIRED TO USE EFFECTIVE INTAKE AND EXHAUST MUFFLERS; EQUIPMENT SHALL BE PROPERLY ADJUSTED AND MAINTAINED; ALL CONSTRUCTION EQUIPMENT SHALL BE EQUIPPED WITH MUFFLERS IN ACCORDANCE WITH OSHA STANDARDS CONSISTENT WITH MITIGATION MEASURE NOI-GDP-1 AND NOI-SDP-1 IDENTIFIED IN THE MITIGATION MONITORING
- PROGRAM. SEE CITY OF ALAMEDA MUNICIPAL CODE SECTION 4-10. 20. THE CONTRACTOR SHALL NOTIFY THE ENGINEER-OF-RECORD IN WRITING, AT LEAST 48 HOURS PRIOR TO COMMENCING WORK OF ALL DIFFERENCES BETWEEN THE FIELD CONDITIONS AND THE DESIGN INDICATED ON THE PLANS. COMMENCEMENT OF THE RELATED WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER-OF-RECORD AND THE CITY BEFORE ALTERED
- 21. CONTRACTOR SHALL HAVE A SUPERINTENDENT OR COMPETENT PERSON ON SITE AT ALL TIMES DURING CONSTRUCTION.
- 22. ALL WORK SHALL CONFORM TO THE APPLICABLE CITY/DISTRICT CODES. SUPERINTENDENT OF CONSTRUCTION SHALL BE DILIGENTLY PERFORMED BY A PERSON OR PERSONS AUTHORIZED TO DO SO AT ALL TIMES DURING WORKING HOURS. THE STORING OF GOODS, EQUIPMENT AND/OR MATERIALS ON THE PUBLIC SIDEWALK AND/OR A PUBLIC STREET SHALL NOT BE ALLOWED
- UNLESS A SPECIAL PERMIT IS ISSUED BY THE ENGINEERING DIVISION. 23. THE CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY THE CITY OF ALAMEDA OR WITH OTHER AGENCIES AS REQUIRED FOR HAULING ON LOCAL STREETS AND SHALL ADHERE TO THE PAVEMENT RESTORATION
- POLICIES AS DESCRIBED IN THE CONTRACT DOCUMENTS. 24. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION, REPLACEMENT, OR REPAIR OF IRRIGATION SYSTEM DAMAGED DURING DEMOLITION OR
- 25. CONTRACTOR SHALL COMPLY TO ALL OSHA SAFETY REGULATIONS
- PERTAINING TO THE TYPE OF CONSTRUCTION PERFORMED ON THIS PROJECT. 26. CONTRACTOR IS SOLELY RESPONSIBLE TO REPAIR OR REPLACE ADJACENT LANDSCAPE AND LANDSCAPING FEATURES TO THEIR ORIGINAL CONDITION
- IF DAMAGED OR DESTROYED AS A RESULT OF THIS PROJECT. 27. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SPOILS GENERATED THROUGH THE CONTRACT ACTIVITIES FROM THE JOB SITE, UNLESS
- OTHERWISE SHOWN TO REMAIN ON-SITE. 28. CONTRACTOR SHALL BEWARE OF POSSIBLE HAZARDOUS MATERIALS SUCH AS BUT NOT LIMITED TO MARSH CRUST, CREOSOTE RAILROAD TIES AND TRANSITE PIPE AND ADHERE TO SAFE WORK PRACTICES AS DETAILED IN THE
- 29. MANHOLE FRAMES, INLETS, AND OTHER STRUCTURES IN PAVED AREAS SHALL BE ADJUSTED AFTER FINAL PAVING, CURB PLACEMENT, OR SIDEWALK COMPLETION. ALL SURFACE ITEMS IN NON PAVING AREA TO BE SET TO FINAL GRADE AFTER LANDSCAPING FINAL GRADING.

THE CITY ENGINEER.

30. ANY CONFLICTS THAT ARISE IN THE RIGHT-OF-WAY SHALL BE RESOLVED BY



**VICINITY MAP** 



### SITE PLAN

SCALE 1"=100'

#### GENERAL NOTES (CONTINUED):

- TRENCHING SPECIFICATIONS FOR BAY MUD SITES ARE USUALLY RESTRICTIVE
- ABOUT EXCAVATION METHODS AND SHORING REQUIREMENTS. THE FOLLOWING OBSERVATIONS AND GUIDELINES ARE PRESENTED AS A SUPPLEMENT TO THE DRAWINGS: A. THE FILL SHOULD BE SEGREGATED WHEN PERFORMING EXCAVATIONS.

MOST CONTRACTORS ACCOMPLISH THIS BY PLACING THE FILL ON ONE

- SIDE OF THE TRENCH AND EXCAVATED BAY MUD ON THE OTHER. B. BAY MUD REQUIRES SIGNIFICANT DRYING AND PROCESSING TIME TO BE REUSED AS COMPACTED FILL. BAY MUD MUST BE SPREAD IN THIN LAYERS AND DISKED OR TURNED TO FACILITATE DRYING SUCH THAT THE MATERIAL MAY BE PROPERLY COMPACTED. BAY MUD SHALL NOT BE USED AS STRUCTURAL BACKFILL. HOWEVER, BAY MUD MAY BE USED AS BACKFILL IN LANDSCAPE AREAS PROVIDED IT IS APPROVED BY THE
- PROJECT LANDSCAPE ARCHITECT. C. TRENCHES THAT EXTEND INTO THE BAY MUD SHOULD BE BACKFILLED AS ARCHITECT. SOON AS POSSIBLE AFTER PLACEMENT OF UTILITIES TO PREVENT BASE HEAVE OR TRENCH SLOUGHING. SIGNIFICANT LATERAL MOVEMENTS OF EXCAVATION WALLS CAN OCCUR IF THE TRENCHES ARE LEFT OPEN FOR EXTENDED PERIODS
- D. GLORY HOLE EXCAVATIONS AND V-TRENCHING SHALL NOT BE PERFORMED. THEY RESULT IN LARGE QUANTITIES OF HEAVY BACKFILL THAT CAN CAUSE LONG-TERM DIFFERENTIAL SETTLEMENTS.

#### GENERAL NOTES (CONTINUED):

- UNDERGROUND UTILITIES CAN BE SUBJECT TO DAMAGE FROM HEAVY EQUIPMENT. FOR GRAVITY FLOW UTILITIES SUCH AS SEWER AND STORM DRAIN, THE PIPES USUALLY BECOME SHALLOWER TOWARD THE REAR OF THE SITES, FURTHER FROM THE MAIN CONNECTIONS ON ROADWAYS. WHERE PIPES HAVE RELATIVELY THIN SOIL COVER, THEY CAN BE DAMAGED FROM HEAVY EARTHWORK EQUIPMENT UNDER CERTAIN CONDITIONS. WHEN BACKFILL HAS BEEN PROPERLY PLACED AND COMPACTED OVER SHALLOW PIPES, THE RISK OF DAMAGE FROM NORMAL EQUIPMENT WHEEL LOADS IS USUALLY SMALL. IF THE FILL IS ALLOWED TO BECOME SATURATED FROM PONDED WATER, HOWEVER, SUCH AS RAINFALL OR WASH OUT FROM CONCRETE TRUCKS, SIGNIFICANT RUTTING CAN OCCUR. THE FOLLOWING
- OBSERVATIONS AND GUIDELINES SHALL BE USED: A. SHALLOW PIPES SHOULD BE ADEQUATELY BACKFILLED TO THE SUBGRADE LEVEL IN ROADWAY AREAS AND SHOULD NOT BE LEFT LOW.

CLEARLY MARKED AND AVOIDED TO PREVENT DAMAGE.

- B. HEAVY EQUIPMENT SUCH AS LOADED TRUCKS, FORKLIFTS, OR CONCRETE TRUCKS SHOULD NOT BE ALLOWED TO DRIVE THROUGH AREAS WHERE THE SUBGRADE SOILS HAVE BECOME WET. DAMAGE TO PIPES BY FORKLIFTS AND CONCRETE TRUCKS MAY NOT BE DISCOVERED UNTIL MONTHS LATER. C. WHERE HEAVY EQUIPMENT CANNOT BE AVOIDED, LATERALS SHOULD BE
- A. THE UPPER 12 NCHES OF SOIL SUBGRADE BENEATH ASPHALT AND CONCRETE PAVEMENT SHOULD BE MOISTURE CONDITIONED TO ABOVE OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION IN AREAS OF CLAYEY FILL WITH A PI GREATER THAN 20, AND SHOULD BE FIRM AND NONYIELDING. IMPORTED FILL, SANDY FILL, OR CLAY WITH A PI LESS THAN 20 SHOULD BE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION IN THE UPPER SIX
- B. AGGREGATE BASE BENEATH ASPHALT AND CONCRETE PAVEMENT THAT WILL RECEIVE VEHICULAR TRAFFIC (INCLUDING GUTTERS) SHOULD BE
- COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. C. SUBGRADE SOIL AND AGGREGATE BASE BENEATH SIDEWALKS SHOULD BE COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION.



SHEET INDEX CITY OF ALAMEDA

SHEET INDEX

NAVD 88 = CITY OF ALAMEDA + 6.11 FT

<del></del>	
DWG NO.	DESCRIPTION
C1.0	TITLE SHEET
C2.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C3.0	HORIZONTAL CONTROL AND STRIPING PLAN
C4.0	GRADING AND DRAINAGE PLAN
C5.0	GRADING DETAILS
C5.1	CONSTRUCTION DETAILS
C5.2	CONSTRUCTION DETAILS
C6.0	EROSION CONTROL PLAN
C6.1	EROSION CONTROL PLAN

#### **ABBREVIATIONS**

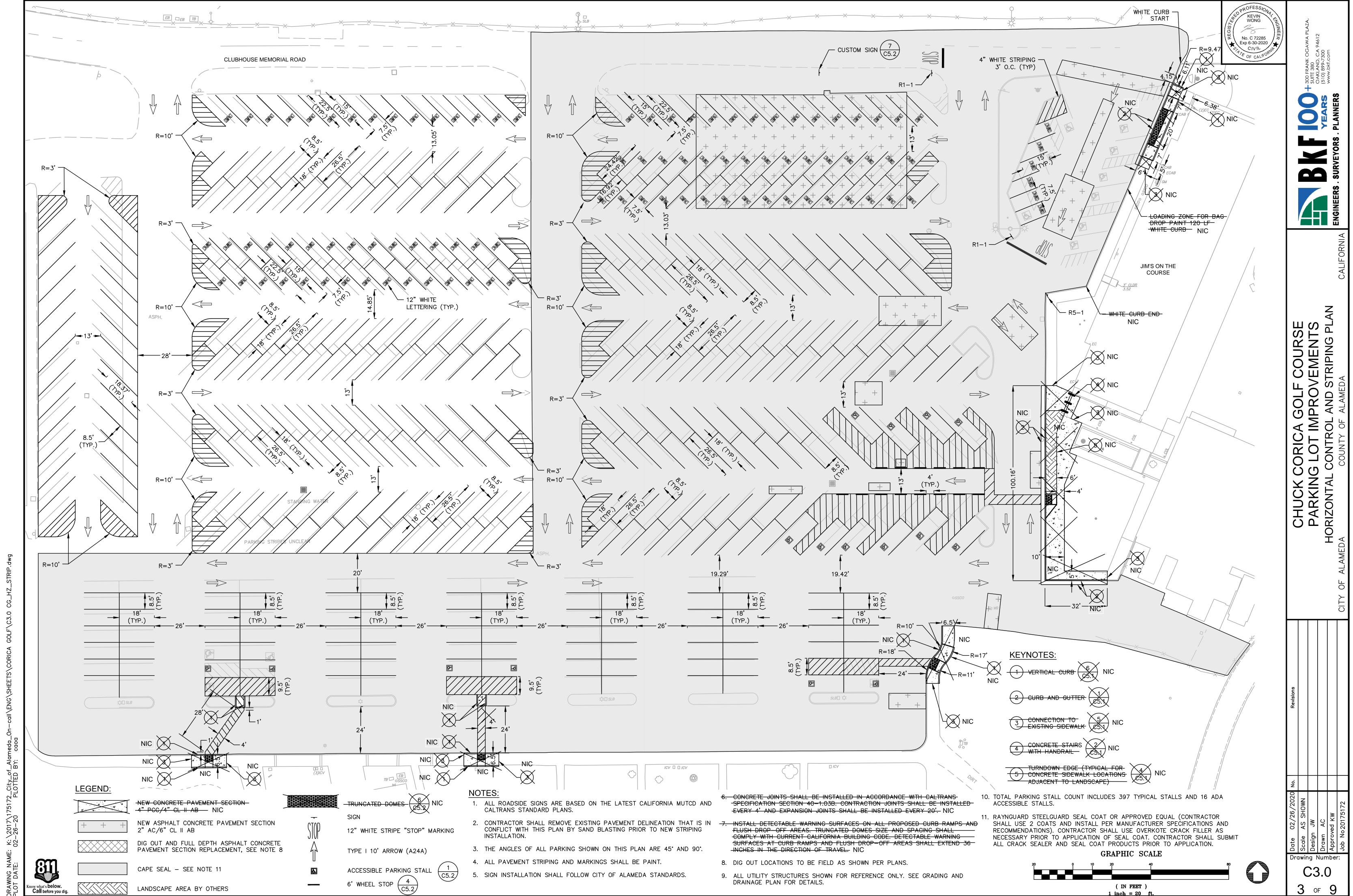
/ CDCINE VI	1110110
AB AC	ASPHALT BASE ASPHALT CEMENT
BS	BOTTOM OF SLOPE/STEF
BW	BACK OF WALK
DI	DROP INLET
EX	EXISTING
FG	FINISH GRADE
FL	FLOW LINE
FS	FINISH SURFACE
GR	GRATE
INV	INVERT
LF	LINEAR FEET

MATCH ON CENTER PORTLAND CEMENT CONCRETE NIC

TOP OF CURB TOP OF PAVEMENT TOP OF SLOPE/STEP TYPICAL NOT IN CONTRACT

PLEASE NOTE **CONCRETE CURB RAMPS AND SIDEWALK IMPROVEMENTS ARE NOT PART OF THIS** CONTRACT.

**GENERAL NOTES (CONTINUED)** 



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LEGEND:

1. EXISTING CONDITIONS OBTAINED FROM AN AERIAL SURVEY PERFORMED ON 12/29/2018 BY ROBERT J. LUNG AND ASSOCIATES AND A TOPOGRAPHIC SURVEY PERFORMED BY BKF ENGINEERS ON 01/19/2019.

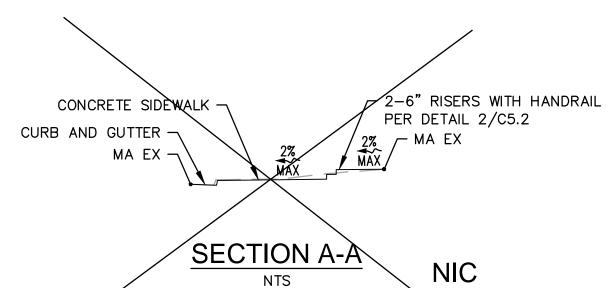
GRADING LIMITS

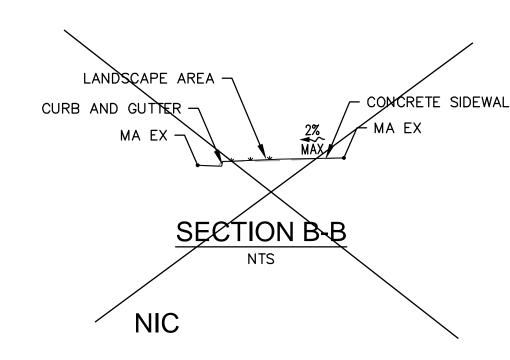
GRADE BREAK

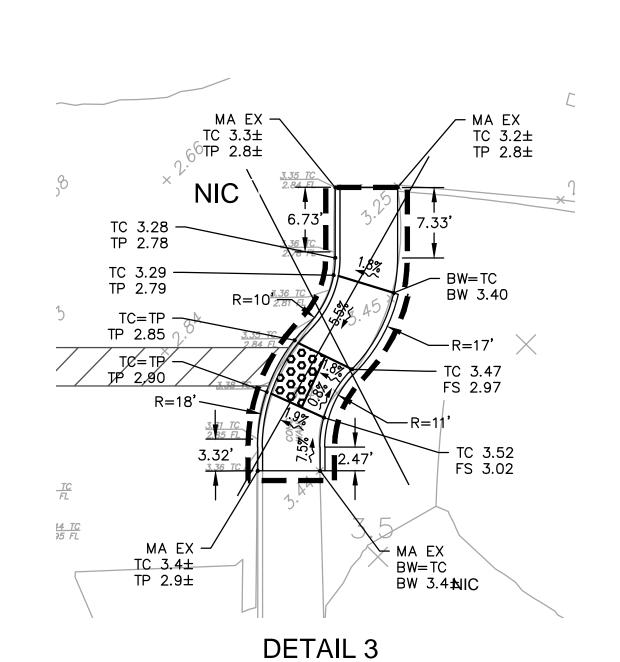
2. CONTRACTOR SHALL VERIFY AND MATCH EXISTING GRADES ADJACENT TO LIMIT OF WORK.

LANDSCAPE AND IRRIGATION BY OTHERS

- 3. ALL SIDEWALK/WALKWAY CROSS-SLOPE AND LONGITUDINAL SLOPE SHALL NOT EXCEED 2% AND 4.99%, RESPECTIVELY, UNLESS OTHERWISE NOTED.
- 4. THE LOCATIONS, MATERIALS, TYPES, SIZES AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM MULTIPLE SOURCES AND WILL NEED TO BE FIELD VERIFIED.
- 5. CONTRACTOR SHALL ADJUST ALL EXISTING RIMS TO FINISHED GRADE.







DETAIL 1

MA EX\-

BW 2.0±\

TC 1.9±33

FL 1.5±

BS 2.05

MA EX1.5

†C 2.0±

FL 1.5±,

TC=FS -FS 2.641.60

TC 255 FL 1.65

TC+FS ·

FS 2.52<sub>2.12</sub>

TC=FS

TC 2.40 ¬ FL 1.90

TC=FL

TC=FL

TC 2.49 -FL 1.99

TC 2.72 — FL 2.22

TC 2.76 - FL 2.26

TC 2.84 -FL 2.34

1.94,55

1.90

FS 2.44 TC=FS -FS 2.41

FS 3.1<del>±</del>

16.35

F\$ 2.35

∽ BW 2.6₹

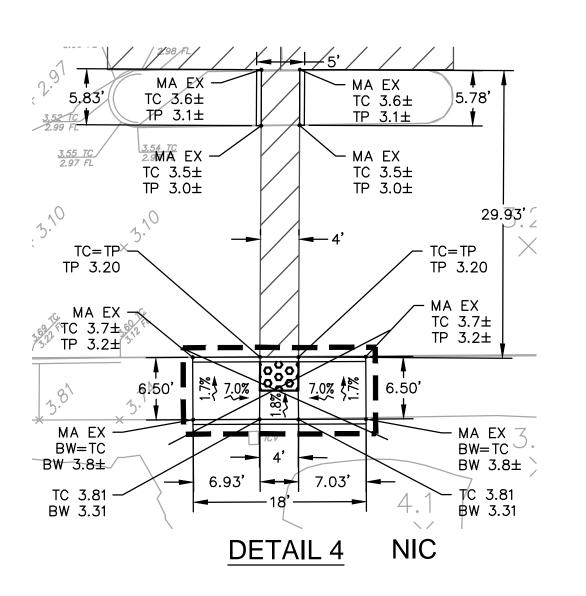
∠MA EX BW 2.8±

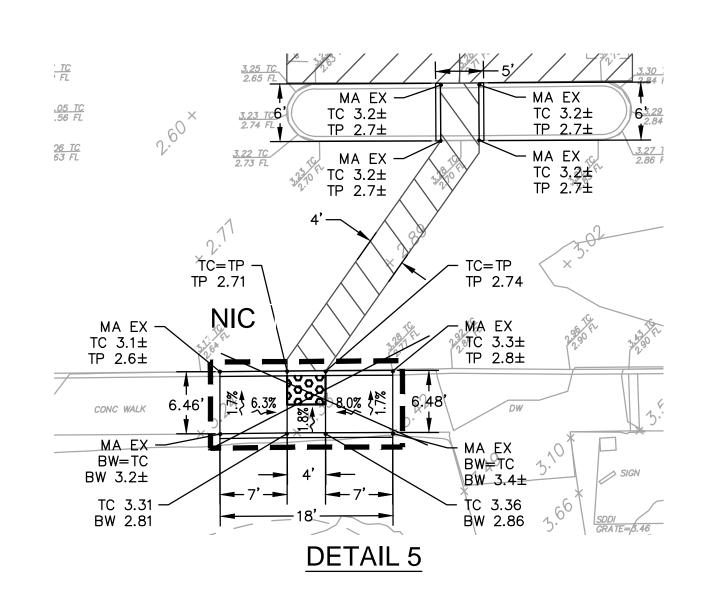
- BW 2.45 14" IR 3.37

NIC

TC 2.9± FL 2.5±

2-6 RISERS



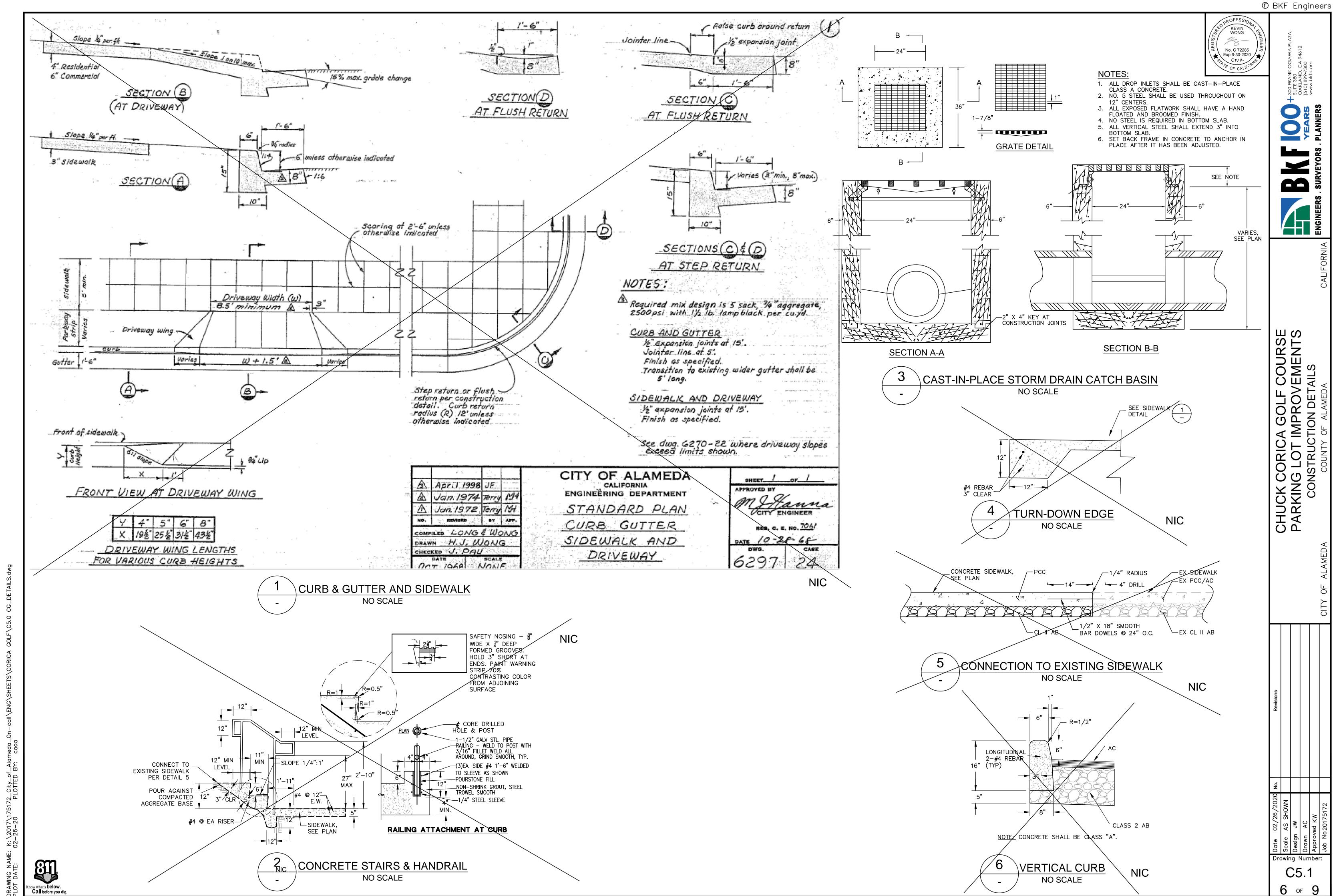


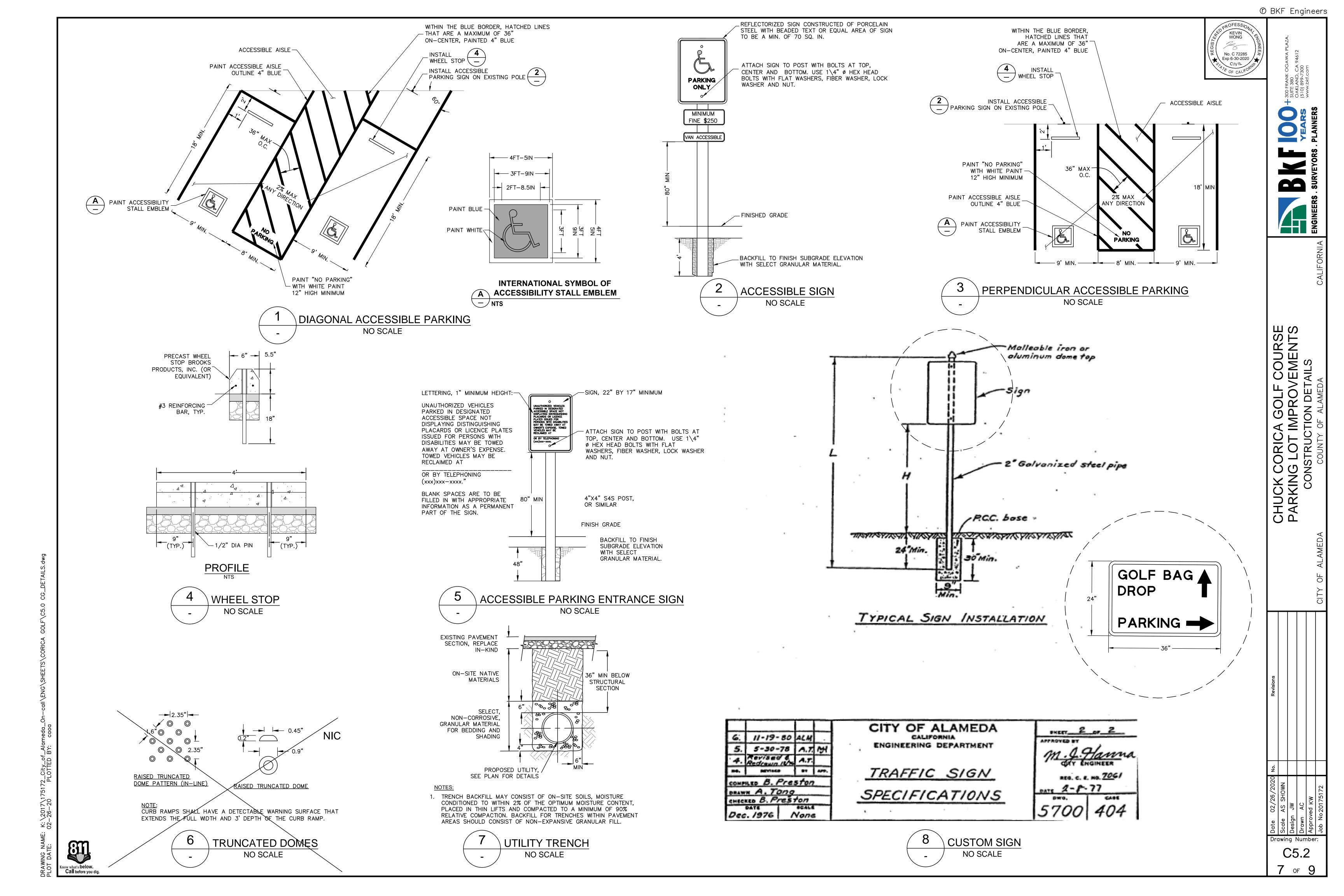
( IN FEET ) 1 inch = 10 ft.

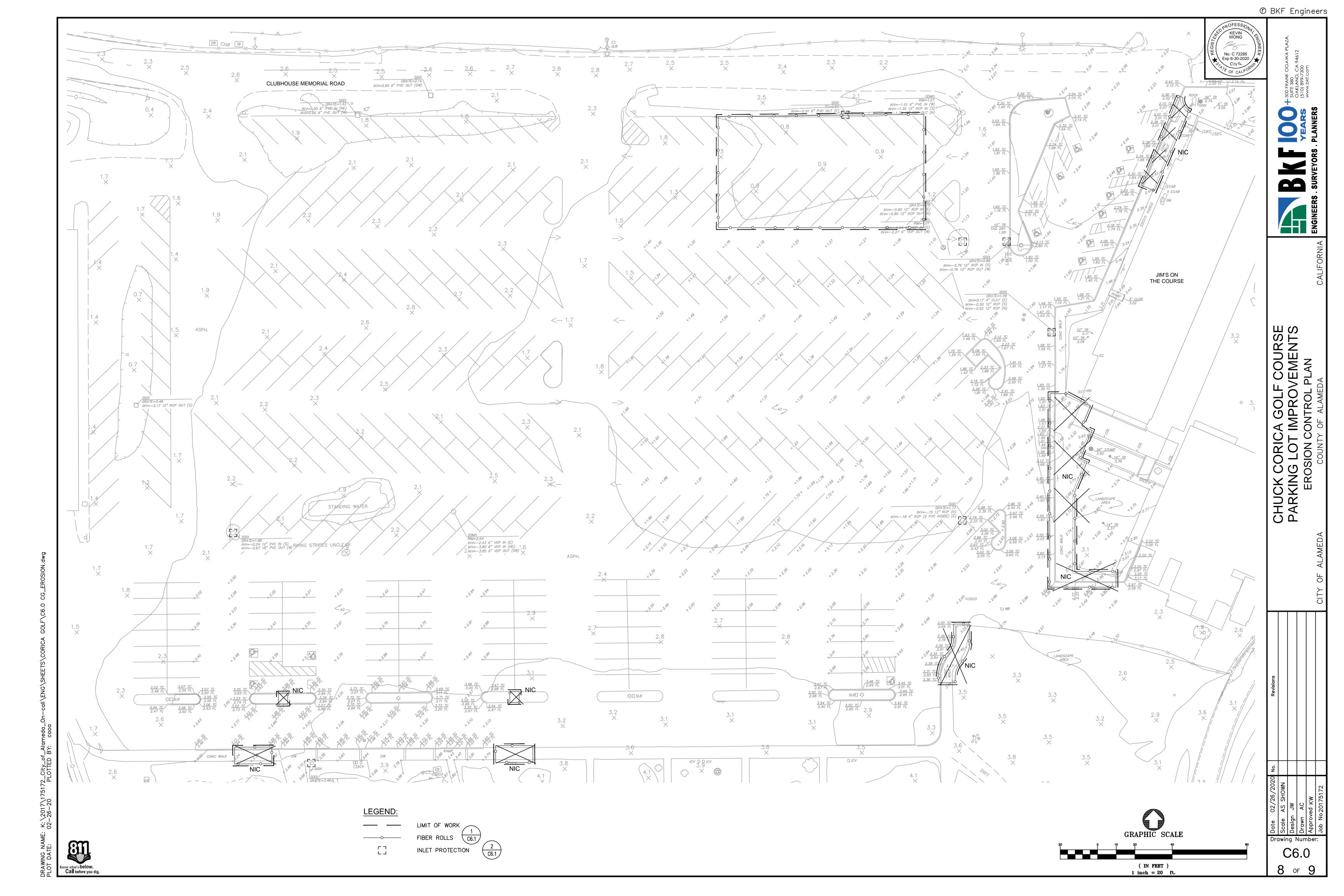


× LANDSCAPE IN-KIND 2 TC 2.60 -MA EX.07 FL 2.1±/ ONCRETE SIDEWALK MA EX BW=TC BW 2.45 MA EXCAB BW 2.4± DETAIL 2

Orawing Number. C5.0 5 of 9







#### NOTES:

- 1. ALL CONSTRUCTION DEBRIS SHALL BE GATHERED ON A REGULAR BASIS AND PLACED IN A DUMPSTER OR OTHER CONTAINER AND SHALL BE EMPTIED OR REMOVED ON A WEEKLY BASIS. WHEN APPROPRIATE, TARPS ON THE GROUND SHALL BE USED TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORMWATER POLLUTION. AFTER BREAKING OLD PAVEMENT, ALL PIECES SHALL BE REMOVED TO AVOID CONTACT WITH RAINFALL OR RUNOFF.
- 2. ON-SITE PILES SHALL BE REMOVED REGULARLY FROM THE SITE, WITH ONLY TEMPORARY STORAGE ALLOWED. ALL TEMPORARY SOIL OR OTHER STOCKPILES ON SITE SHALL BE SECURELY COVERED WITH A TARP, PLASTIC SHEETING OR SIMILAR MATERIAL.
- 3. ALL DIRT/MUD, GRAVEL, RUBBISH, REFUSE AND GREEN WASTE FROM THE SIDEWALK, STREET PAVEMENT, AND STORM DRAIN SYSTEM ADJOINING THE PROJECT SITE SHALL BE REMOVED DAILY AND PRIÓR TO RAIN. LEAKS, DRIPS AND SPILLS MUST BE CLEANED UP IMMEDIATELY. DURING WET WEATHER, DRIVING VEHICLES OFF PAVED AREAS AND OTHER OUTDOOR WORK AREAS SHALL BE
- 4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AND MAINTAINED TO MINIMIZE THE TRACKING OF DIRT, MUD, DUST AND DEBRIS ONTO THE PUBLIC RIGHT-OF-WAY. 5. SIDEWALK AND PUBLIC STREET PAVEMENT ADJOINING THE PROJECT SITE SHALL BE BROOM-SWEPT DAILY AND PRIOR TO RAIN. CAKED-ON MUD OR DIRT SHALL BE SCARED FROM THESE AREAS
- 6. FILTER MATERIALS (SUCH AS BLOCK AND GRAVEL BAGS, SANDBAGS, FILTER FABRIC) SHALL BE INSTALLED AT THE STORM DRAIN INLETS SURROUNDING THE PROJECT SITE. INLET PROTECTIONS SHALL BE INSTALLED PRIOR TO: THE START OF THE RAINY SEASON, SITE DE-WATERING ACTIVITIES, SAW-CUTTING ACTIVITIES OR ANY OTHER ACTIVITY THAT MAY RESULT IN THE DISCHARGE OF MATERIAL TO THE STORM DRAIN. FILTER MATERIALS SHALL BE MAINTAINED AND/OR REPLACED AS NECESSARY TO MINIMIZE SHORT-CUTTING AND TO REMOVE SEDIMENT DEPOSITS OR BUILDUP. ACCUMULATED SEDIMENT/DEBRIS SHALL BE DISPOSED OF PROPERLY.
- SAW-CUTTING SLURRY SHALL BE VACUUMED AND REMOVED FROM SITE. SAW-CUT SLURRY SHALL NOT ENTER THE STORM WATER CONVEYANCE SYSTEM.

BEFORE SWEEPING. AT THE COMPLETION OF WORK THE STREET SHALL BE WASHED AND THE WASH WATER COLLECTED AND DISPOSED OFF SITE.

- 8. CONTRACTOR TO CREATE A CONTAINED AND COVERED AREA ON THE SITE FOR THE STORAGE OF CEMENT BAGS, PAINTS, FLAMMABLES, OILS, FERTILIZERS, PESTICIDES, OR ANY OTHER MATERIALS USED ON THE PROJECT SITE THAT HAVE THE POTENTIAL FOR BEING DISCHARGED TO THE STORM DRAIN SYSTEM BY WIND, EXPOSURE TO RAINFALL OR IN THE EVENT OF A MATERIAL SPILL. 9. CONTRACTOR SHALL NEVER CLEAN MACHINERY, TOOLS, BRUSHES, ETC. OR RINSE CONTAINERS INTO A STREET, GUTTER, STORM DRAIN OR STREAM.
- 10. CONTRACTOR SHALL ENSURE THAT CONCRETE/GUNITE SUPPLY TRUCKS OR CONCRETE/PLASTER FINISHING OPERATIONS DO NOT DISCHARGE WASH WATER INTO STREET GUTTERS OR DRAINS. CONCRETE TRUCKS SHALL HAVE A SELF-CONTAINED WASH-OUT SYSTEM OR DISCHARGE TO A DEDICATED, SECURE SITE WASH-OUT IN ORDER TO AVOID THE POSSIBILITY OF DEBRIS ON CITY STREETS OR DISCHARGE OF WASH WATER TO THE STORM WATER CONVEYANCE SYSTEM.
- 11. CONTRACTOR SHALL MINIMIZE REMOVAL OF NATURAL VEGETATION OR GROUND COVER FROM THE SITE IN ORDER TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION PROBLEMS. CONTRACTOR SHALL RE-PLANT THE AREA, AND STABILIZE ALL CUT AND FILL SLOPES AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED. AT A MINIMUM, 4,000 POUNDS/ACRE OF STRAW WITH TACKIFIER SHOULD BE PLACED ON ALL EXPOSED SOILS INCLUDING THOSE WITHIN ACTIVE WORK AREAS AND FLAT LOTS.
- 12. CONTRACTOR SHALL PROVIDE EROSION "PREVENTION" AND PERIMETER PROTECTION MEASURES (SOIL STABILIZATION) SUCH AS FIBER ROLLS, SILT FENCE, AND/OR SEDIMENT TRAPS OR BASINS. ENSURE CONTROL MEASURES ARE ADEQUATELY MAINTAINED AND IN OPERABLE CONDITION. SEDIMENT CONTROLS, INCLUDING INLET PROTECTION, ARE NECESSARY BUT SHOULD BE A SECONDARY DEFENSE BEHIND GOOD EROSION CONTROL AND SITE PERIMETER MEASURES.
- 13. SITE DE-WATERING OPERATIONS SHALL BE DESIGNED TO PREVENT THE DISCHARGE OF ANY SEDIMENT, DEBRIS OR OTHER POLLUTANTS TO THE MUNICIPAL STORM WATER CONVEYANCE SYSTEM. 14. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED THROUGHOUT THE SEASON, REPLACEMENT SUPPLIES SHOULD BE KEPT ON SITE, SITE INSPECTIONS SHALL BE CONDUCTED BEFORE AND AFTER EACH STORM EVENT, AND EVERY 24 HOURS FOR EXTENDED STORM EVENTS, TO IDENTIFY AREAS THAT CONTRIBUTE TO EROSION AND SEDIMENT PROBLEMS OR ANY OTHER POLLUTANT DISCHARGES. DOCUMENT ALL INSPECTION FINDINGS AND ACTIONS TAKEN. DRAINAGE ACROSS INTERIOR PROPERTY LINES WILL NOT BE PERMITTED EXCEPT IN SPECIAL CIRCUMSTANCES APPROVED BY THE CITY OF ALAMEDA ENGINEER AFTER ESTABLISHMENT OF APPROVED EASEMENTS. CONSTRUCTION GRADING AND EROSION CONTROL SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT SEDIMENTATION OR OTHER DAMAGE TO OFF-SITE PROPERTY. SEE 30-84.12 OF THE ALAMEDA, CALIFORNIA - CODE OF ORDINANCES FOR
- 15. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED INTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
- 16. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
- 17. LOCATION OF CONSTRUCTION FENCING SHOWN ON THIS PLAN IS APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE SITE AND INSTALLING NEW CONSTRUCTION FENCING AS
- 18. CONTRACTOR SHALL APPLY WATER TO PREVENT DUST OR MINIMIZE DUST NUISANCE.
- 19. REFERENCE: "CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE (BMP) HANDBOOK".

#### **Storm Drain Pollution** from Construction Activities

Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay. As a contractor, site supervisor, owner, or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

## WHAT CAN YOU DO?

### **Advance Planning to Prevent Pollution**

- □ Schedule excavation, grading, and paving activities for dry weather periods.
- Control the amount of runoff crossing your construction site. Use berms or drainage ditches to divert water flow around the site.
- □ Identify potential pollution sources from materials and wastes that will be used, stored or disposed of on the job.
- ☐ Inform your employees and subcontractors about the clean storm water requirements and their responsibilities in pollution prevention.
- ☐ Design site to protect storm water quality; allow areas for chemical and equipment storage away from drains or channels.

#### **Best Management Practices**

The following practices can reduce pollution significantly. Compliance with environmental regulations can be as simple as minimizing contact with rainwater (covering the source), limiting the area of the source, protecting materials and waste from runoff, and maintaining a "clean" site using good housekeeping practices or Best Management Practices.

- ☐ Use one area of the site for auto parking, vehicle refueling, and routine equipment maintenance. This designated area should be well away from streams or storm drain inlets, and bermed and rocked if necessary. Make major repairs off
- Keep materials out of the rain runoff prevent contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from paved surfaces that drain to storm drains, creeks, or channels.
- ☐ Keep work areas and the public right-of-way clean. Remove trash, litter, and debris on a daily basis.
- ☐ Clean up leaks, drips and other spills immediately so they do not pollute the soil or leave residue on paved surfaces that can be washed away when it rains.
- ☐ Maintain all vehicles and equipment in good working order. Inspect frequently for leaks and repair promptly.

#### ■ Never wash down "dirty" pavement or surfaces where materials have been spilled; use dry cleanup methods whenever possible (absorbent materials, cat litter, and/or rags).

- ☐ Place dumpsters under roofs or cover with tarps or plastic sheeting. Never clean out a dumpster by washing it down.
- ☐ Make sure portable toilets are in good working order. Check frequently for leaks.
- ☐ Implement erosion and sediment control practices outlined in the SFRWQCB's "Erosion and Sediment Control Field Manual."

#### Materials and Waste Handling

☐ Practice source reduction by ordering only the amount you need to finish the job.

☐ Dispose of all wastes

- properly. Many construction materials and wastes, including solvents, waterbased paints, vehicle fluids. broken asphalt and concrete, wood. and cleared vegetation can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardou waste. Never bury waste materials.
- ☐ Never clean or rinse tools or equipment into a street, gutter or storm drain.
- Use recyclable materials whenever possible.

This brochure is one of a series of pamphlets describing storm drain protection measures for specific types of construction industry activities. Other pamphlets include:

Painting and Application of Solvents and Adhesives

Fresh Concrete and Mortar Application

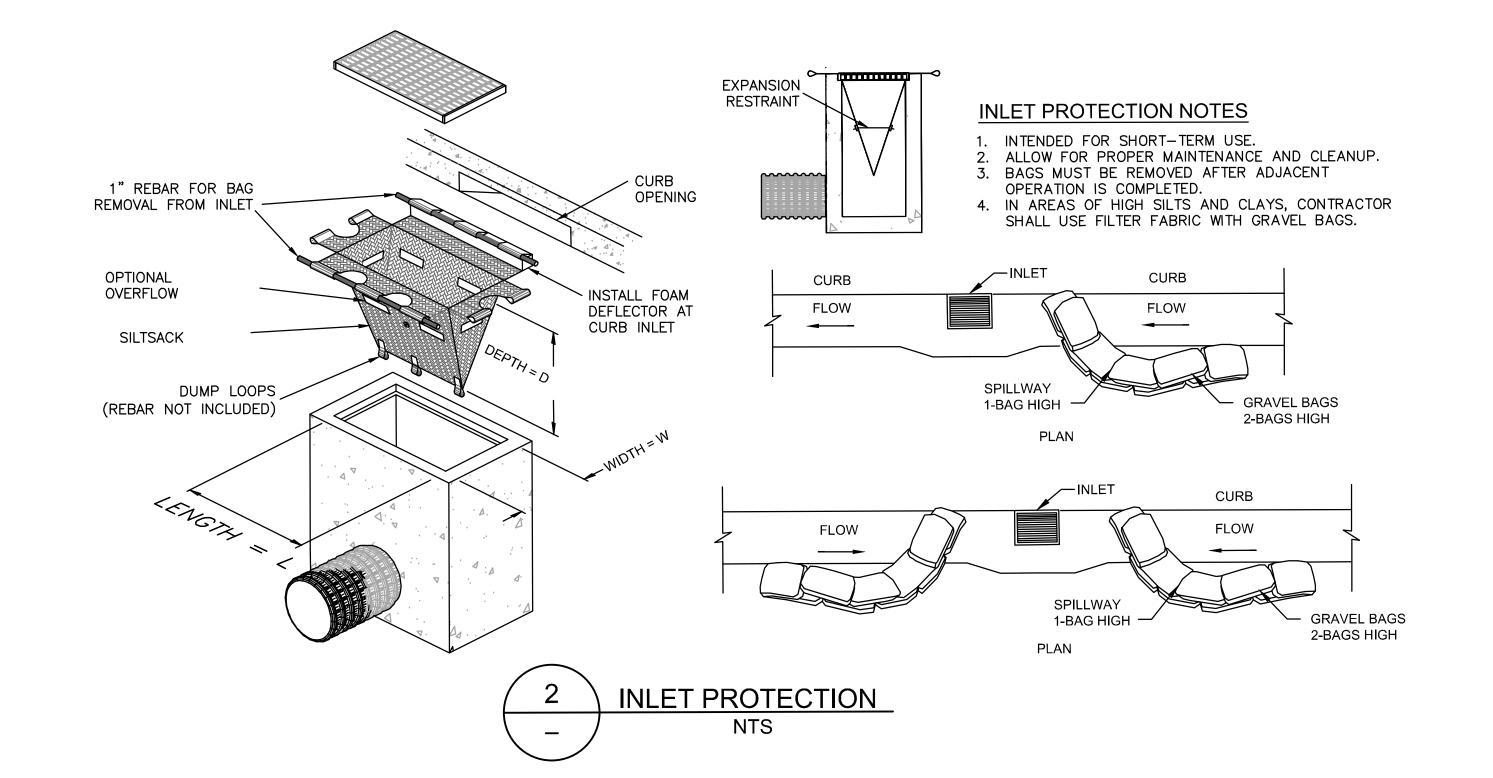
Roadwork and Paving Heavy Equipment Operation and Maintenance



# CONSTRUCTION FENCE TIE INTO CONSTRUCTION FENCE EXISTING HARDSCAPE ENTRENCHMENT DETAIL IN HARDSCAPE AREA

- 1. FIBER ROLLS ARE TUBES MADE FROM POROUS BIODEGRADABLE FIBER STUFFED IN A PHOTO-DEGRADABLE
- TRENCH, 2"--4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND







OPEN WEAVE NETTING. THEY ARE APPROXIMATELY 8" DIAMETER.

2. FIBER ROLL INSTALLATION REQUIRES THAT THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A ROLL. ROLLS SHOULD BE ABUTTED SECURELY TO PROVIDE A TIGHT JOINT, NOT OVERLAPPED.

3. IF FIBER ROLL IS PLACED ON PAVEMENT OR CONCRETE, SECURE IN PLACE WITH GRAVEL BAGS.



of **9**