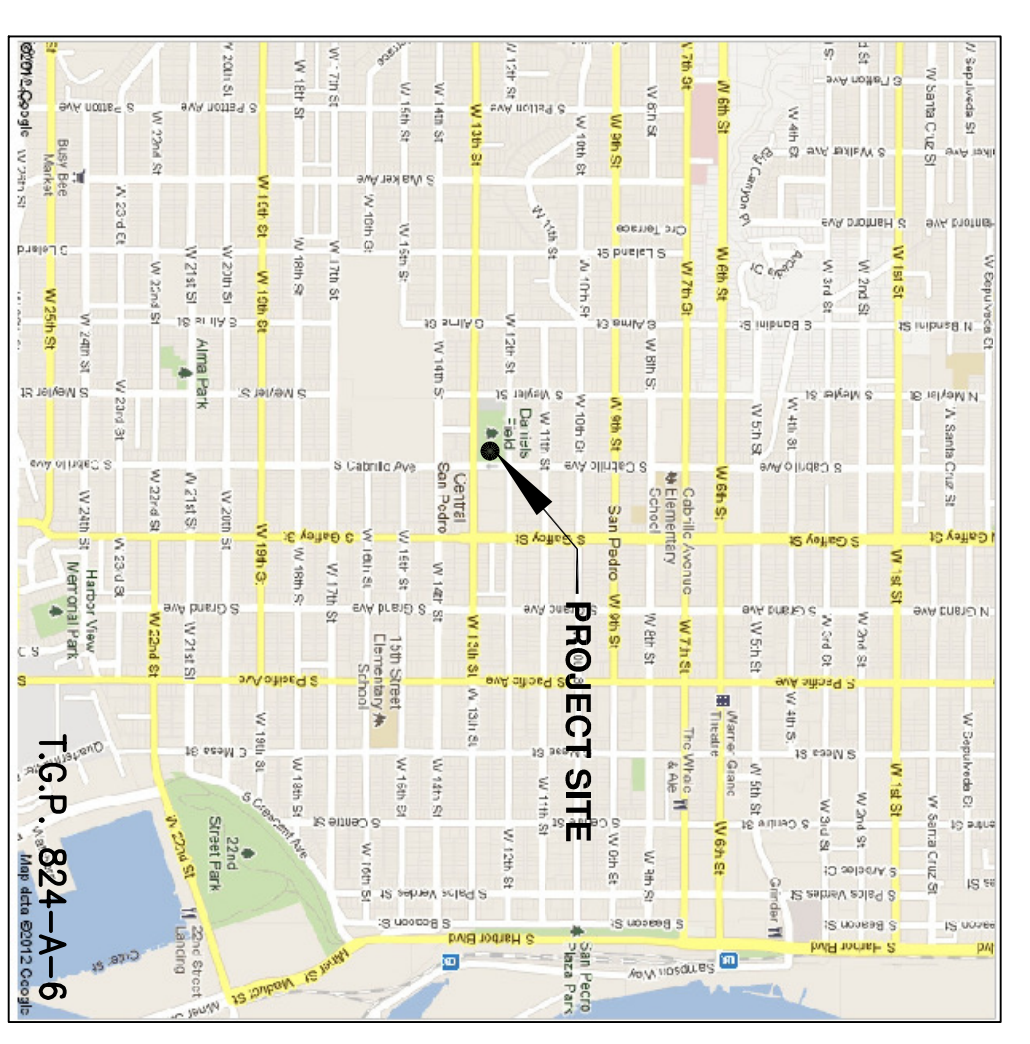


GRADING AND DRAINAGE PLAN FOR DANIELS FIELD MULTI-PURPOSE RECREATIONAL AREA 845 W. 12TH STREET SAN PEDRO, CALIFORNIA



VICINITY MAP
T.G.P. 824-A-6

OWNER/DEVELOPER: CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS BOYS AND GIRLS CLUB OF SAN PEDRO
1200 S. CABRILLO AVENUE
SAN PEDRO, CA 90731
OFFICE (310) 833-0807 FAX (310) 833-4253

ENGINEER: CETECH ENGINEERING
2270W. PERSIMMON STREET, STE. B.
TORRANCE, CA 90501
(310) 533-1550 FAX (310) 533-1290

GEOTECHNICAL CONSULTANT: T.L.N. ENGINEERING COMPANY
17834 BAILEY DRIVE
TORRANCE, CA 90504
TEL (310) 371-7045 FAX (310) 371-5856

PROJECT ARCHITECT: RODIN ASSOCIATES
2900 S. WESTERN AVENUE, SUITE 408
CHICO PUECO VERDES, CA 90731
CELL (310) 833-9150 FAX (310) 832-0333

LEGAL DESCRIPTION: LOT A, TRACT NO. 7921, M.B. 113-40

SPECIAL NOTES TO CONTRACTOR

- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A SEPARATE PERMIT FROM THE CITY OF LOS ANGELES BUREAU OF ENGINEERS.
- PRIOR TO THE START OF CONSTRUCTION, ALL SURVEY MONUMENTS IN THE PROJECT AREA SHALL BE LOCATED AND TIED OUT BY THE UNDERSIGNED ENGINEER OF RECORD. ALL CENTRELINE MONUMENTS OR TIES LOST OR DESTROYED BY THE CONTRACTOR SHALL BE REPLACED BY THE ENGINEER OF RECORD, ENTIRELY AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY ENGINEER. NEW SHEETS INDICATING METHOD OF ESTABLISHMENT OF MONUMENTS SHALL BE SUBMITTED TO THE METRICS DIVISION OF THE METRIC BUREAU OF ENGINEERING PRIOR TO THE FINAL ACCEPTANCE OF ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- PRIOR TO THE SUBMITTAL OF ANY BIDS OR PROPOSALS AND THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR IS REQUIRED TO MAKE AN INSPECTION OF THE PROJECT SITE TO VERIFY THE EXISTING SITE CONDITIONS. THE SITE MAY CONTAIN ASPHALT PAVED AREAS, CONCRETE PAVED AREAS AND/OR SLABS, CURBS, GUTTERS, STEPS, SOD, GRAVE LINES AND OVERHEAD OR UNDERGROUND UTILITY LINES. IN SUBMITTING A PROPOSAL, OR BID FOR GRADING OF THE SITE, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THE RELOCATION OR REMOVAL AND DISPOSAL OF ANY OF THE ABOVE ITEMS OR ANY OTHER ITEMS THAT ARE REQUIRED TO BE REMOVED FOR THE CONSTRUCTION INDICATED ON THESE PLANS OR ARE REQUIRED FOR THE CONSTRUCTION OF THE PROJECT.
- UTILITIES - THE CONTRACTOR AND SUBCONTRACTORS ARE REQUIRED TO CONTACT ALL UTILITIES, GOVERNMENTAL AGENCIES, AND PRIVATE COMPANIES THAT MAY HAVE UNDERGROUND LINES OR SUBSTRUCTURES TO ASCERTAIN THEIR LOCATION. THE CONTRACTOR AND SUBCONTRACTORS ARE REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR AND SUBCONTRACTORS SHALL NOTIFY UNDERGROUND SERVICE ALERT AT 1-800-222-2800 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
- SAFETY - ALL CONTRACTOR AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS OF THE U.S. DEPARTMENT OF LABOR, THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS, AND THE CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS. THE ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS' AND SUBCONTRACTORS' COMPLIANCE WITH THE ABOVE MENTIONED SAFETY STANDARDS. SHOULD THE CONTRACTOR OR SUBCONTRACTORS ENCOUNTER AN UNSAFE CONDITION DURING CONSTRUCTION WHILE COMPLIANCE WITH THESE PLANS, THE CONTRACTOR OR SUBCONTRACTOR SHALL TERMINATE THEIR WORK, PROTECT THE SITE, AND IMMEDIATELY CONTACT THE ENGINEER. CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE PROTECTION OF ALL PERSONS AND PROPERTY, AND THAT THE REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- UNAUTHORIZED CHANGES AND USES - THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
- ARCHITECT'S PLAN - THE CIVIL ENGINEER'S SITE PLAN WILL CONTROL DIMENSIONAL INFORMATION. SHOULD A CONFLICT OCCUR BETWEEN THESE AND THE ARCHITECT'S PLANS OR SPECIFICATIONS, THE ENGINEER AND ARCHITECT SHALL BE IMMEDIATELY NOTIFIED IN WRITING.
- GOVERNMENT/ AGENCY REQUIREMENTS - NOTHING CONTAINED ON THIS PLAN SHALL BE DEEMED TO AUTHORIZE THE VIOLATION OF ANY APPLICABLE PROVISION OF ANY FEDERAL, STATE, OR AGENCY LAWS, ORDINANCES, CODES, REGULATIONS, STANDARDS OR RULES AND REGULATIONS. SHOULD A CONFLICT OCCUR BETWEEN THESE PLANS AND REQUIREMENTS OF THE GOVERNING AGENCY, THE CONTRACTOR OR SUBCONTRACTOR AND THE OWNER SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.
- PROTECTION OF PROPERTY - THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE PROTECTION OF PERSONAL AND REAL PROPERTY AT THE JOB SITE AND ADJACENT PROPERTIES.
- GEOTECHNICAL REQUIREMENTS - THIS PLAN IS BASED ON THE TECHNICAL REPORT PREPARED BY THE CONSULTANT INDICATED HEREON. NO OTHER GEOTECHNICAL INFORMATION HAS BEEN PROVIDED TO THE ENGINEER. ALL SUBSEQUENT REPORTS, ADDENDUMS, MEMORANDUMS, RECOMMENDATIONS, FIELD DETERMINATIONS SHALL BE COMPILED WITH SUBJECT TO THE APPROVAL OF THE GOVERNING AGENCY. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED BY THE OWNER, CONTRACTOR, OR GEOTECHNICAL ENGINEER OF ANY GEOTECHNICAL INFORMATION OR DECISIONS OCCURRING SUBSEQUENT TO OR IN ADDITION TO THE ABOVE REFERENCED GEOTECHNICAL REPORT.
- CONFLICTS - ANY CONFLICTS BETWEEN THIS PLAN AND OTHER PLANS OR EXISTING SITE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE OWNER AND CONTRACTOR OR SUBCONTRACTOR. OPPORTUNITY FOR THE ENGINEER TO EVALUATE THE MATTER SHALL RELIEVE THE ENGINEER FROM ANY ACTUAL OR POTENTIAL DAMAGE OR LOSS WHICH MAY RESULT FROM SAID CONFLICT.

PRIVATE ENGINEERS' NOTICE TO CONTRACTORS

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE ENGINEER.

GENERAL NOTES

- SPECIFICATIONS SHALL HAVE PRECEDENCE OVER DRAWINGS.
- THE STAMPED SET OF PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
- NO WORK WHATSOEVER SHALL BE STARTED IN OR ABOUT A GRADING PROJECT WITHOUT FIRST NOTIFYING THE GRADING INSPECTOR.
- NO GRADING WORK, INCLUDING IMPORT AND EXPORT, SHALL BE DONE BETWEEN THE HOURS OF 6:00 P.M. AND 7:00 A.M. ON ANY DAY AND NO WORK SHALL BE DONE ON SUNDAY AT ANY TIME.
- OWNER SHALL KEEP THE CONSTRUCTION AREA SURFACE TO CONTROL DUST CAUSED BY GRADING AND CONSTRUCTION. OWNER SHALL, AT ALL TIMES, PROVIDE RESPONSIBLE CONTROL OF DUST CAUSED BY WIND.
- IF A GRADING JOB EXTENDS OVER A PERIOD OF TIME EXCEEDING SIX MONTHS, THE DEPARTMENT MAY REQUIRE PLANNING OF THESE PORTIONS OF THE JOB WHERE ALL OTHER GRADING REQUIREMENTS HAVE BEEN MET IN ORDER TO PREVENT DUST AND EROSION.
- HIGHWAY EQUIPMENT SHALL BE KEPT IN GOOD OPERATING CONDITION AND MAINTAINED AS REQUIRED BY LAW.
- CONTRACTOR SHALL CONTROL NOISE RESULTING FROM REPAIR OR HEAVY EQUIPMENT AFTER NORMAL WORKING HOURS BY LOCATING SUCH ACTIVITIES AS FAR AS PRACTICABLE FROM ADJACENT INHABITED AREAS AND SO THAT SUCH ACTIVITIES DO NOT CONSTITUTE A PUBLIC NUISANCE OR DISTURB THE PACE.
- THE TRAFFIC BUREAU OF THE LOS ANGELES POLICE DEPARTMENT SHALL BE NOTIFIED PRIOR TO THE START OF HAULING. (310-468-5100)
- NOT APPLICABLE.
- NOT APPLICABLE.
- THE FILL MATERIAL IN EACH TRUCKLOAD SHALL BE KEPT LOW ENOUGH TO PREVENT SPILLAGE AND SHALL BE SUFFICIENTLY WET DOWN TO PREVENT DUST.
- NO PERSON SHALL, WHEN EXCAVATING, COMPACTING, HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE, DEBRIS, OR OTHER SUBSTANCE, CAUSE A LOW OR PERMIT TO BE DEPOSITED, OR FALL FROM THE BODY, TRES, OR WHEELS OF ANY VEHICLE SO USED UPON ANY PUBLIC STREET OR ALLEY WITHOUT IMMEDIATELY AND PERMANENTLY REMOVING THE SAME THEREFROM.
- PERMISSION SHALL BE SECURED FROM THE DEPARTMENT OF PUBLIC WORKS IF THE TRUCKS ARE LOADED IN THE STREET.
- THE LOCATION OF DUMPING EXCESS SOIL SHALL BE APPROVED BY THE GRADING INSPECTOR PRIOR TO STARTING EXCAVATION.
- BRUSHING AND SCRAPING OF SLOPES SHALL PROCEED ONLY AS FAR AS PERIODICALLY CLEARED BY THE GRADING INSPECTOR.
- SLOPES SHALL BE BRUSHED PRIOR TO PLACING FILL.
- LOOSE MATERIAL SHALL NOT EXCEED 3" IN DEPTH ON A FILLED SLOPE.
- ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE.
- ALL LOOSE FILL SHALL BE REMOVED AND COMPACTED.
- BUILDINGS SHALL BE LOCATED CLEAR OF THE TOE OF ALL SLOPES WHICH EXCEED A SLOPE OF TWO HORIZONTAL TO ONE VERTICAL ACCORDING TO THE FOLLOWING:
A. A MINIMUM OF THREE FEET, PROVIDED THE SLOPE DOES NOT EXCEED SIX FEET IN VERTICAL HEIGHT.
B. ONE-HALF THE VERTICAL HEIGHT WITH A MAXIMUM OF 15 FEET FOR SLOPES EXCEEDING SIX FEET.
- EXCEPTION: ATTACHED OR DETACHED OPEN GARPORTS OR DETACHED GARAGES MAY BE CONSTRUCTED A MINIMUM OF THREE FEET CLEAR OF THE TOE OF COMPOUNDING CUT OR FILL SLOPES. IN THE CASE OF ATTACHED ENCLOSED GARAGES, ALL PORTIONS OF THE BUILDING SHALL COMPLY WITH SUBSECTION (B) ABOVE.
- ALL GRADING SLOPES SHALL BE PLANTED AND SPRINKLERED. (7012.11).
- STANDARD 12 INCH HIGH BERM IS REQUIRED AT TOP OF ALL GRADED SLOPES. (7013.3).
- NO FILL TO BE PLACED UNTIL THE CITY GRADING INSPECTOR HAS INSPECTED AND APPROVED THE BOTTOM EXCAVATION.
- MAX-MADE FILL SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90 % MAX. DRY DENSITY WITHIN 40 FEET BELOW FINISH GRADE AND 93% OF MAX. DRY DENSITY DEEPER THAN 40 FEET BELOW FINISH GRADE, UNLESS A LOWER RELATIVE DENSITY ENGINEER (NOT LESS THAN 90% OF MAX. DRY DENSITY) IS JUSTIFIED BY THE SOILS ENGINEER.
- TEMPORARY EROSION CONTROL TO BE INSTALLED BETWEEN OCTOBER 1 AND APRIL 15. OBTAIN GRADING INSPECTORS AND DEPARTMENT OF PUBLIC WORKS APPROVAL OF PROPOSED PROCEDURES (1-200 CH (7007.1)).

GRADING QUANTITIES

ESTIMATED EARTHWORK VOLUME (FOR PERMIT PURPOSES ONLY)
INCLUDING RECOMPACTION OF EXISTING LOOSE FILL:

FILL IN LOTS: 320 C.Y. MAXIMUM DEPTH OF FILL: 4 FEET

CUT IN LOTS: 1,115 C.Y. MAXIMUM DEPTH OF CUT: 7 FEET

OVEREXCAVATION/RECOMPACTION: 1,190 C.Y.

EXPORT FROM SITE: 557 C.Y. (ALLOWING FOR SHRINKAGE OF RECOMPACTED MATERIAL)

NOTIFICATIONS

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THE DRAWING LOCATED AT THIS WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNERS OF SAID UTILITIES AND STRUCTURES TO OBTAIN PERMISSION FOR THE LOCATION, FOR VENTILATION AND LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

OWNER SHALL KEEP THE CONSTRUCTION AREA SURFACE WET DOWN TO PREVENT SPILLAGE CAUSED BY GRADING AND CONSTRUCTION. OWNER SHALL, AT ALL TIMES, PROVIDE RESPONSIBLE CONTROL OF DUST CAUSED BY WIND.

THE EXPORT OR IMPORT MATERIAL IN EACH TRUCK LOAD SHALL BE KEPT LOW ENOUGH TO PREVENT SPILLAGE AND SHALL BE SUFFICIENTLY WET DOWN TO PREVENT DUST.

A STAGNANT AREA SHALL BE DESIGNATED WHERE EACH TRUCK IS PREPARED FOR ROAD TRAVEL, AND ALL LOOSE MATERIAL REMOVED. ANY SUBSTANCE TO DRIP OR FALL FROM THE BODY, TRES, OR WHEELS OF ANY VEHICLE UPON THE PUBLIC RIGHT OF WAY SHALL BE REMOVED IMMEDIATELY AND PERMANENTLY. EROSION CONTROL MEASURES SHALL BE IN PLACE FROM NOVEMBER 15 THROUGH APRIL 15.

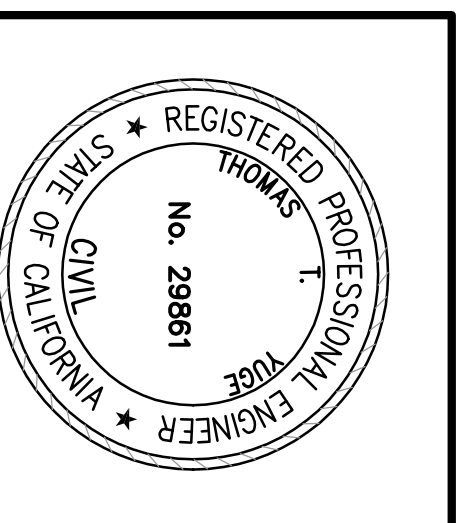
DURING CONSTRUCTION, ALL SHEET FLOW FROM THE PROJECT SITE SHALL BE PREVENTED FROM FLOWING DIRECTLY TO THE PUBLIC RIGHT OF WAY. PROVIDE 1 COURSE HIGH ROW OF SANDBAGS OR 12" HIGH BY 3" WIDE EARTHEN BERM (COVERED WITH 10 MIL PLASTIC SHEETING, SECURED BY SANDBAGS AT 10' O.C., EACH SIDE OF BERM) ALONG PERIMETER OF PROJECT SITE BOUNDARY AND DESLTING BASIN AS DIRECTED BY FIELD ENGINEER OR GRADING INSPECTOR.

THIS PLAN HAS BEEN REVIEWED AND CONFORMS TO
RECOMMENDATIONS OF SOILS ENGINEERING/GEOLOGIC
REPORTS DATED 10/23/11 AND 12/12/11

SIGNATURE	DATE
-----------	------

NO.	DATE	REVISED	BY
08-27-12		BID SET	TY

PREPARED BY: **Cetech Engineering**
GRADING AND DRAINAGE PLAN
TITLE SHEET
845 W. 12TH STREET
SAN PEDRO, CALIFORNIA



THOMAS T. VOGT, P.E.
REGISTERED PROFESSIONAL ENGINEER
No. 29861
STATE OF CALIFORNIA

2262 West Central Street, Suite B, Torrance, California, 90501
PH: 310.533.1590 FAX: 310.533.1590 Email: tcvogt@cetechengineering.com

DATE: 08-27-12	DATE: 09-28-12	DATE: _____
SCALE: AS SHOWN	SCALE: _____	SCALE: _____
DRAWING NO. C-1		

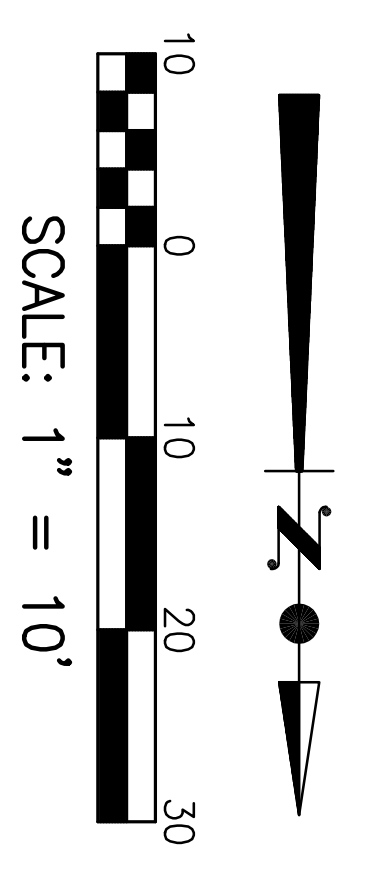
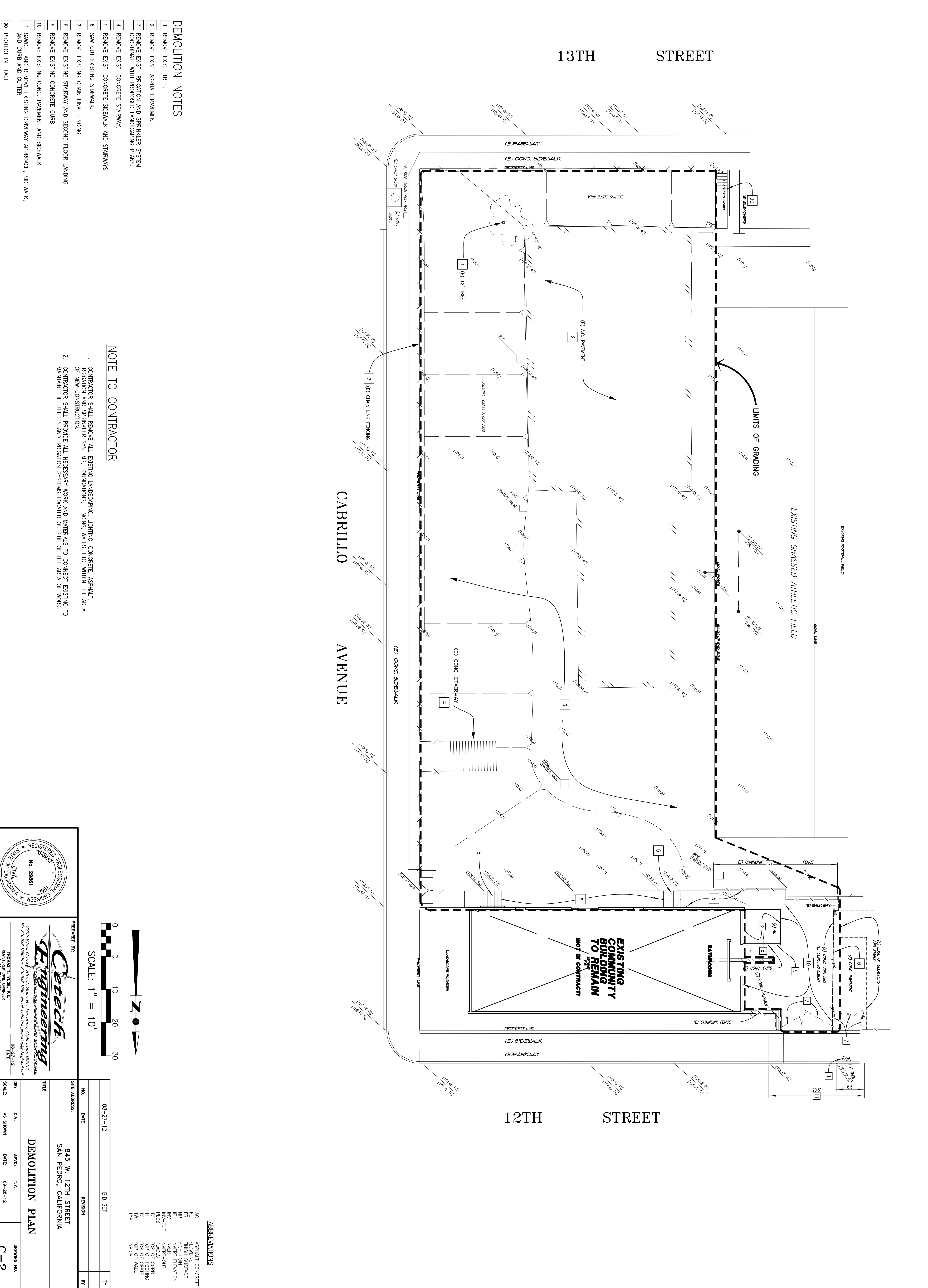


- DEMOLITION NOTES**
- 1 REMOVE EXIST. TREE.
 - 2 REMOVE EXIST. ASPHALT PAVEMENT.
 - 3 REMOVE EXIST. IRRIGATION AND SPRINKLER SYSTEM COORDINATE WITH PROPOSED LANDSCAPING PLANS.
 - 4 REMOVE EXIST. CONCRETE STAIRWAY.
 - 5 REMOVE EXIST. CONCRETE SIDEWALK AND STAIRWAYS.
 - 6 SAW CUT EXISTING SIDEWALK.
 - 7 REMOVE EXISTING CHAIN LINK FENCING.
 - 8 REMOVE EXISTING STAIRWAY AND SECOND FLOOR LANDING.
 - 9 REMOVE EXISTING CONCRETE CURB.
 - 10 REMOVE EXISTING CONC. PAVEMENT AND SIDEWALK.
 - 11 SAWCUT AND REMOVE EXISTING DRIVEWAY APPROACH, SIDEWALK AND CURB AND GUTTER.
 - 90 PROTECT IN PLACE.

NOTE TO CONTRACTOR

1. CONTRACTOR SHALL REMOVE ALL EXISTING LANDSCAPING, LIGHTING, CONCRETE, ASPHALT, IRRIGATION AND SPRINKLER SYSTEMS, FOUNDATIONS, FENCING, WALLS, ETC. WITHIN THE AREA OF NEW CONSTRUCTION.
2. CONTRACTOR SHALL PROVIDE ALL NECESSARY WORK AND MATERIALS TO CONNECT EXISTING TO MAINTAIN THE UTILITIES AND IRRIGATION SYSTEMS LOCATED OUTSIDE OF THE AREA OF WORK.

- ABBREVIATIONS**
- AC ASPHALT CONCRETE
 - ECW EXISTING CONCRETE WALL
 - FS FINISH SURFACE
 - HP HIGH POINT
 - INV INVERT ELEVATION
 - INV-OUT INVERT-OUT
 - RICS RIGID CONCRETE
 - PLACES PLACES
 - CHUB CURB
 - TF TOP OF FINISH
 - TO TOP OF GRADE
 - THW THROAT



REGISTERED PROFESSIONAL ENGINEER
 THOMAS T. VOGE, P.E.
 No. 29861
 CIVIL
 STATE OF CALIFORNIA

Cetch Engineering
 REGISTERED PROFESSIONAL ENGINEERS AND ARCHITECTS
 2252 West Central Street, Suite B, Torrance, California, 90501
 Ph: 310.533.6500 Fax: 310.533.6500 Email: cetchengineering@sbcglobal.net
 REG. NO. 29861

THOMAS T. VOGE, P.E.
 PREPARED BY: 08-27-12
 DATE

NO.	DATE	REVISION	BY
08-27-12		BID SET	TY

SITE ADDRESS:
 845 W. 12TH STREET
 SAN PEDRO, CALIFORNIA

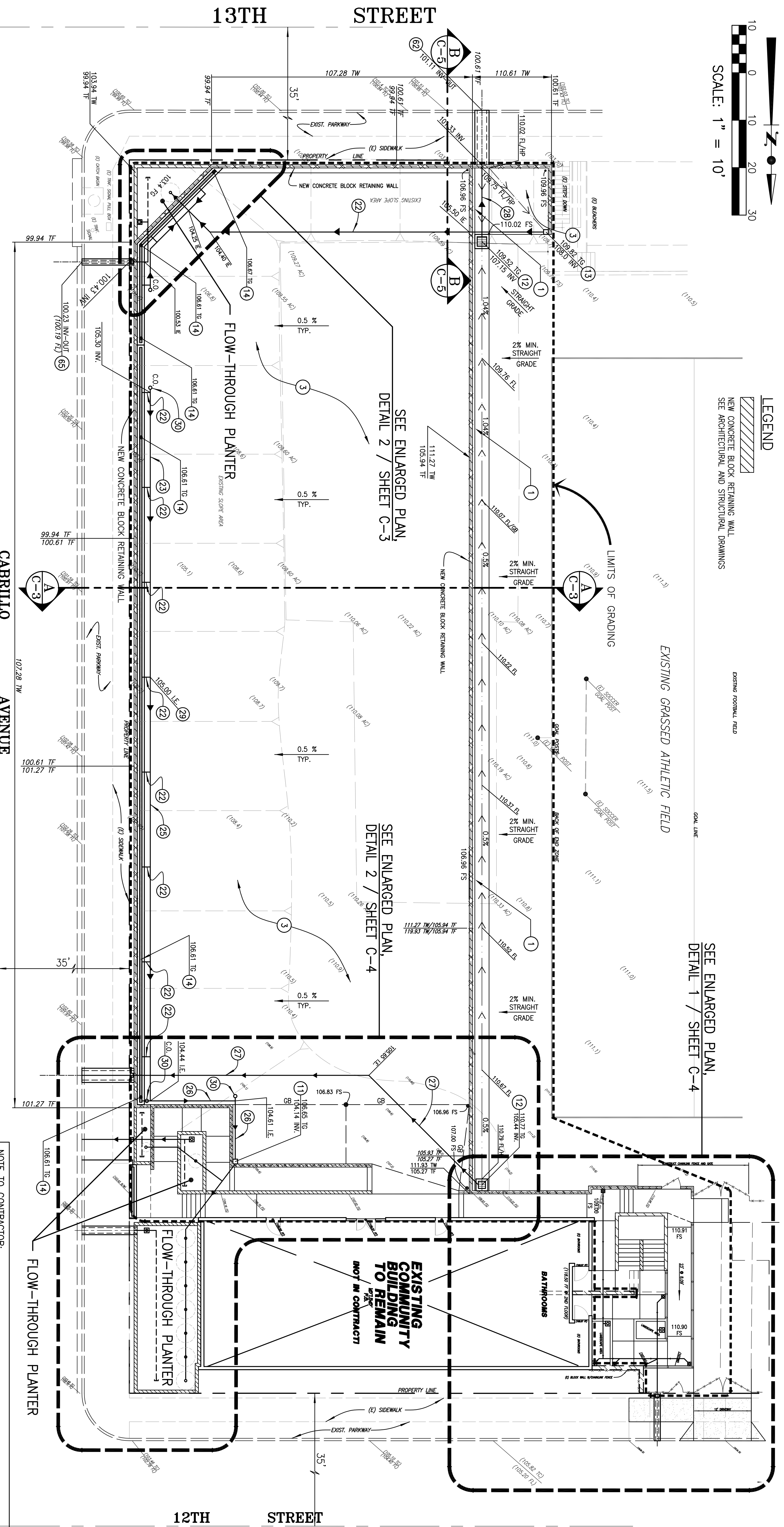
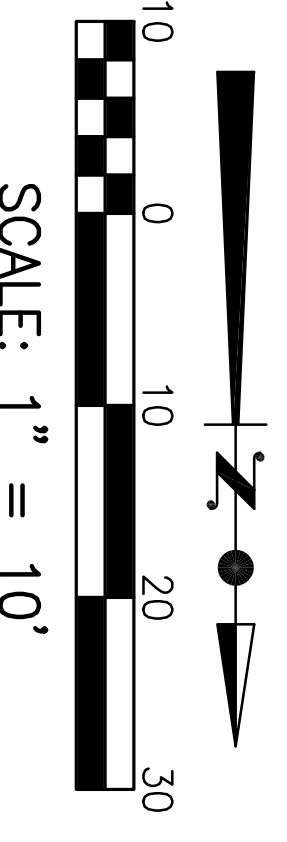
TITLE:
 DEMOLITION PLAN

DR: C.V. APVD: T.V. DATE: 09-28-12 DRAWING NO. C-2

SCALE: AS SHOWN

CETCH ENGINEERING, THOMAS T. VOGE, P.E., EXPRESSLY RESERVE THEIR COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF CETCH ENGINEERING, THOMAS T. VOGE, P.E. SHOULD UNAUTHORIZED RE-USE BY A THIRD PARTY OCCUR, CETCH ENGINEERING, THOMAS T. VOGE, P.E. SHALL BE HELD HARMLESS.

BID SET - 08-27-12



LEGEND

- NEW CONCRETE BLOCK RETAINING WALL SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS
- EXISTING FOOTING FOUND
- EXISTING GRASSSED ATHLETIC FIELD
- GOLF LINE

SEE ENLARGED PLAN, DETAIL 1 / SHEET C-4

SEE ENLARGED PLAN, DETAIL 2 / SHEET C-3

SEE ENLARGED PLAN, DETAIL 2 / SHEET C-4

SEE WATERSHED EXHIBIT FOR TRIBUTARY DRAINAGE AREAS

PROPOSED SITE PLAN
NOT TO SCALE

SECTION C-1

SECTION C-3

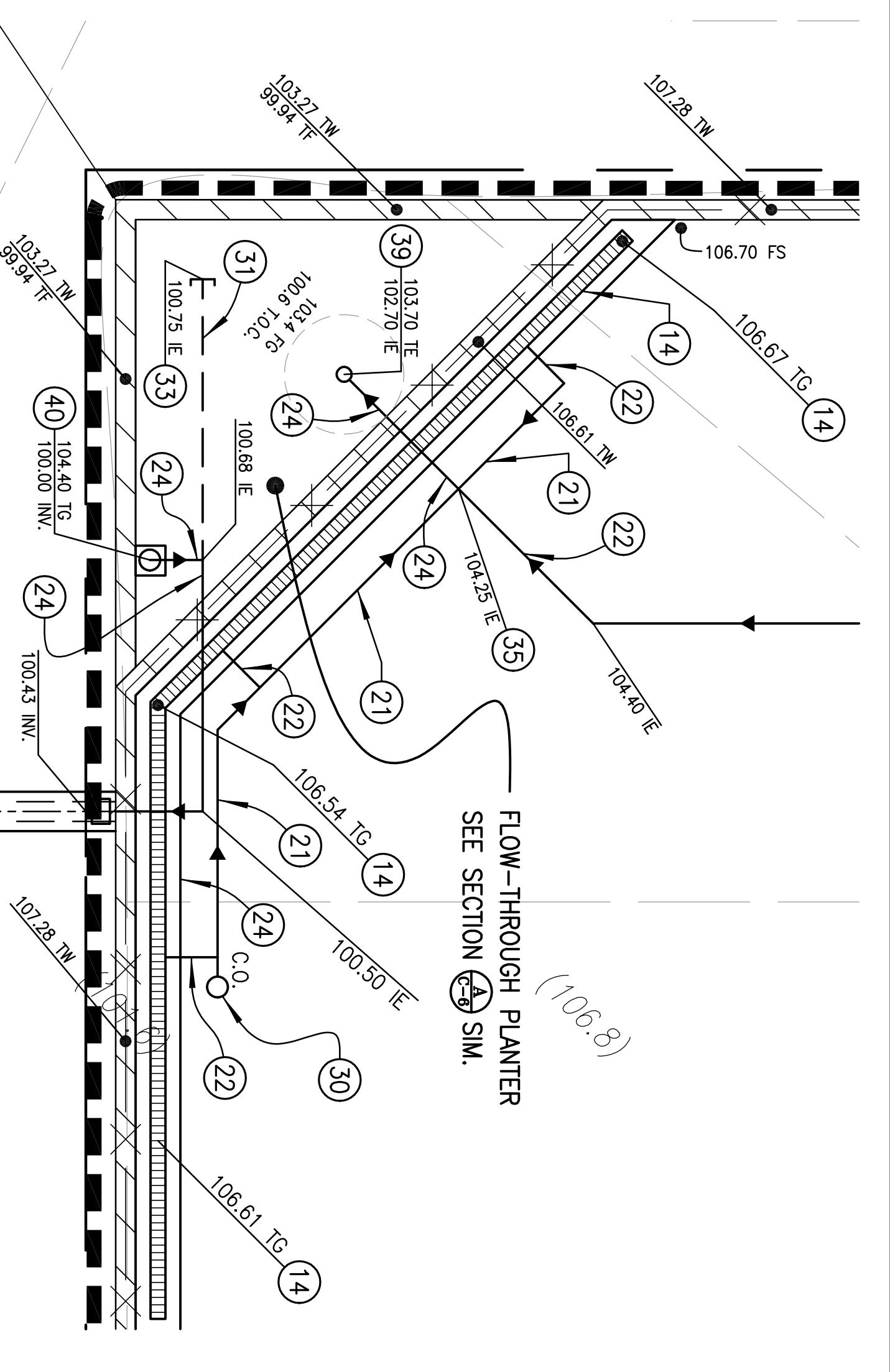
SECTION A

SECTION C-3

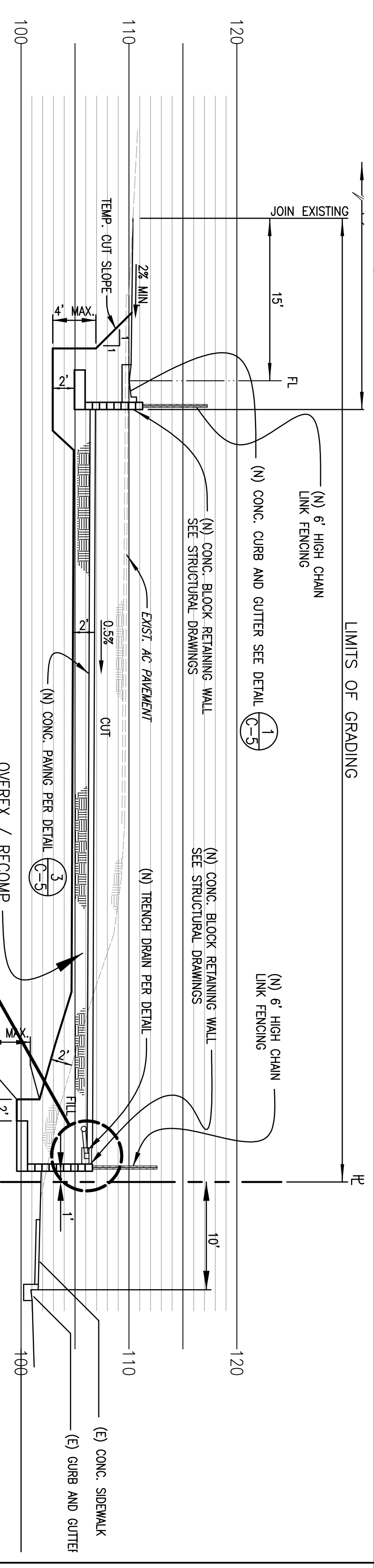
- NOTE TO CONTRACTOR:**
1. ALL STORM DRAIN PIPING TO BE INSTALLED PER DETAIL 6/C-5
 2. CONTRACTOR TO COORDINATE ALL STAIRS AND ADA ACCESS AND RAMPS WITH ARCHITECTURAL PLANS
 3. ALL DRAINS TO HAVE C.I. GRATES

ALL EXISTING, DISTURBED OR MANUFACTURED SLOPE AREAS SHALL BE PLANTED WITH CITY OF L.A. APPROVED VEGETATION TO PREVENT EROSION

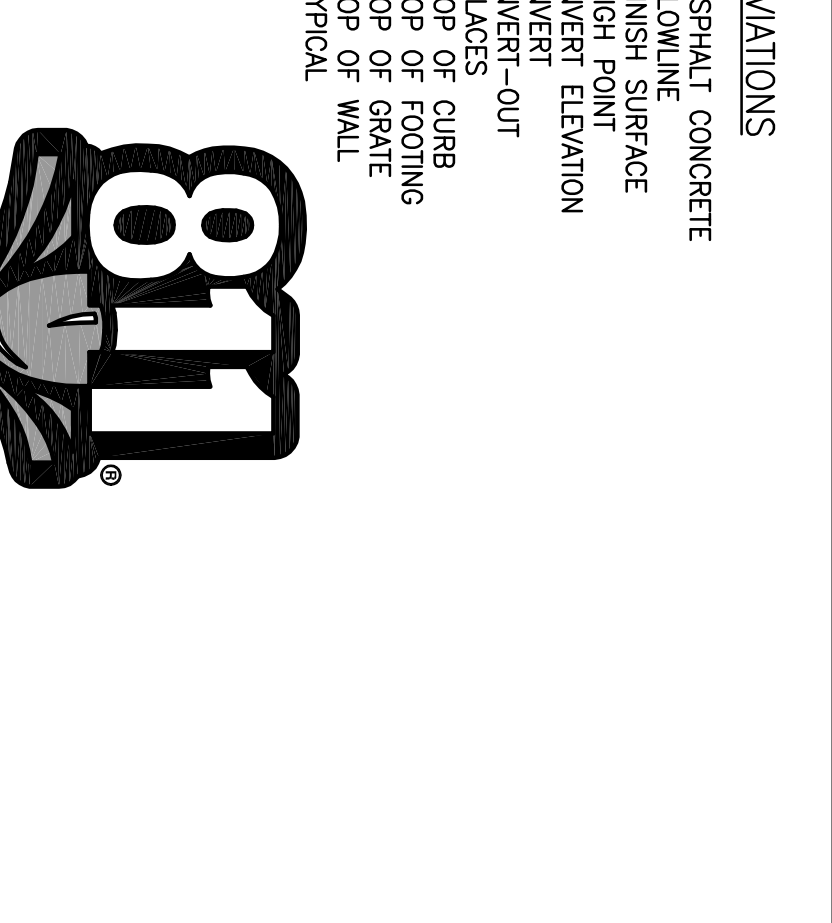
- CONSTRUCTION NOTES**
1. CONSTRUCT 6" CONCRETE CURB WITH GUTTER PER DETAIL 3/C-5
 2. NOT USED
 3. CONSTRUCT 6" CONCRETE PAVED AREA PER DETAIL 4/C-3
 4. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 5/C-5, MEDIUM BROOM FINISH IN DIRECTION OF CROSS SLOPE
 5. CONSTRUCT 6" CONCRETE CURB ONLY PER DETAIL 1/C-5
 6. CONSTRUCT 18" CATCH BASIN (BROOKS NO. 2424 WITH ADA COMPLIANT TRAFFIC RATED GRATE)
 7. CONSTRUCT 18" CATCH BASIN (BROOKS NO. 1818 WITH ADA COMPLIANT TRAFFIC RATED GRATE)
 8. CONSTRUCT 12" CATCH BASIN (BROOKS NO. 1212) WITH ADA COMPLIANT TRAFFIC RATED GRATE
 9. CONSTRUCT TRENCH DRAIN (ONS PRO SERIES, 5" DEEP CHANNEL DRAIN) PER DETAIL 4/C-5
 10. INSTALL FLOW-GUARD TRENCH DRAIN MEDIA FILTER, MODEL NO. FF-1003-1, BY PER 10, L.F. @ 0.15 CFS. SEE DETAIL 5/C-6
 11. CONSTRUCT 4" SDR 35 STORM DRAIN @ 1% MIN. GRADIENT
 12. CONSTRUCT 4" SDR 35 STORM DRAIN @ 0.5% GRADIENT OR AS NOTED
 13. CONSTRUCT 6" SDR 35 STORM DRAIN @ 0.5% GRADIENT OR AS NOTED
 14. CONSTRUCT 6" SDR 35 STORM DRAIN @ 1% MIN. GRADIENT OR AS NOTED
 15. CONSTRUCT 8" SDR 35 STORM DRAIN @ 0.8% MIN. GRADIENT
 16. CONSTRUCT 12" SDR 35 STORM DRAIN @ 1% MIN. GRADIENT
 17. CONSTRUCT 18" SDR 35 STORM DRAIN @ 1% MIN. GRADIENT
 18. CONSTRUCTION 8" X 6" SDR 35 EXPANSIBLE REDUCER
 19. CONSTRUCT LINE SIZE CLEANOUT PER DETAIL 7/C-6
 20. CONSTRUCT 4" SDR 35 PERFORATED DRAIN PIPE PER DETAIL A/C-6, S.W.
 21. CONSTRUCT 6" SDR 35 PERFORATED DRAIN PIPE PER DETAIL A/C-6
 22. CONSTRUCT 4" SDR 35 CAP
 23. CONSTRUCT 4" SDR 35 CAP
 24. CONSTRUCT 5" SQUARE INLET (6" SDR 35 REDUCER)
 25. CONSTRUCT 5" SQUARE INLET (6" SDR 35 REDUCER)
 26. CONSTRUCT 5" SQUARE INLET (6" SDR 35 REDUCER)
 27. CONSTRUCT 4" PVC POP-UP EMITTER (ONS NO. 420) PER DETAIL 8/C-6
 28. CONSTRUCT 6" PVC POP-UP EMITTER (ONS NO. 620) PER DETAIL 8/C-6
 29. CONSTRUCT 9" AIRVALV GATE INLET (ONS NO. 981 WITH NO. 932 HUB ADAPTER) AND 4" RESER PER DETAIL 1/C-6
 30. CONSTRUCT 12" AIRVALV GATE INLET (ONS NO. 1280 WITH NO. 1221 ADAPTER) AND 6" RESER PER DETAIL 1/C-6, S.W.
 31. CONSTRUCT DISABLED ACCESS RAMP PER ARCHITECTURAL DRAWINGS
 32. CONSTRUCT SIDEWALK PER ARCHITECTURAL DRAWINGS
 33. CONSTRUCT PARKWAY DRAIN PER A.P.M.A. STANDARD PLAN 151-1.1, 5" @ 2% TYPE 2 INLET
 34. CONSTRUCT PARKWAY DRAIN PER A.P.M.A. STANDARD PLAN 151-1.1, 5" @ 2% TYPE 2 INLET
 35. CONSTRUCT CURB DRAIN PER A.P.M.A. STANDARD PLAN 150-3, 14" TYPE 1 INLET
 36. CONSTRUCT 4" X 14" RECTANGULAR PIPE WITH CURB-0-LET THRU THE CURB DRAIN (NO. TD 419)
 37. CONSTRUCT 3" X 8" RECTANGULAR PIPE WITH CURB-0-LET THRU THE CURB DRAIN (NO. TD 38) WITH TYPE II INLET PER A.P.M.A. STANDARD PLAN 151-3, WHERE SHOWN
- NOTE:** ALL DRAINAGE PIPING WITH FITTINGS AS REQUIRED PER A COMPLETE SYSTEM
**REQUIRES SEPARATE ENDOCKUMENT PERMIT FROM BUREAU OF ENGINEERING



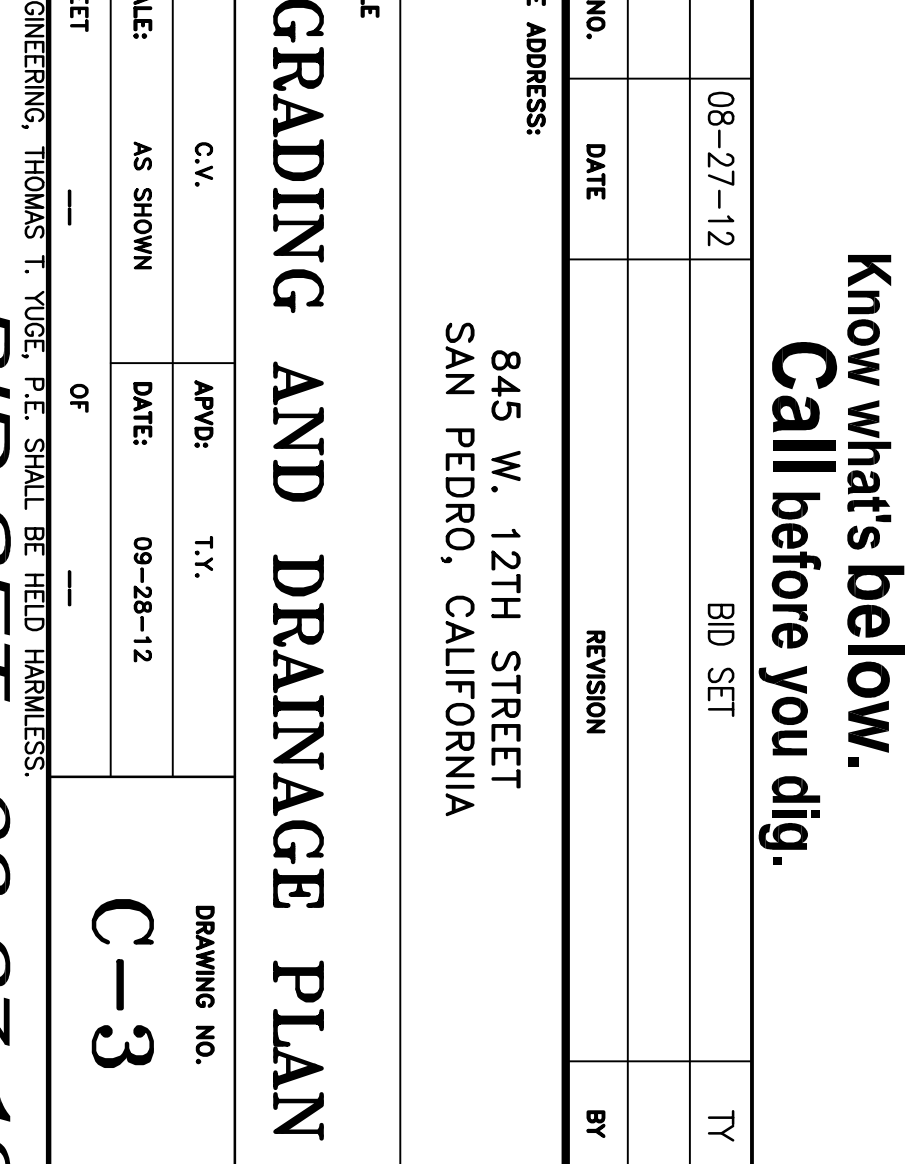
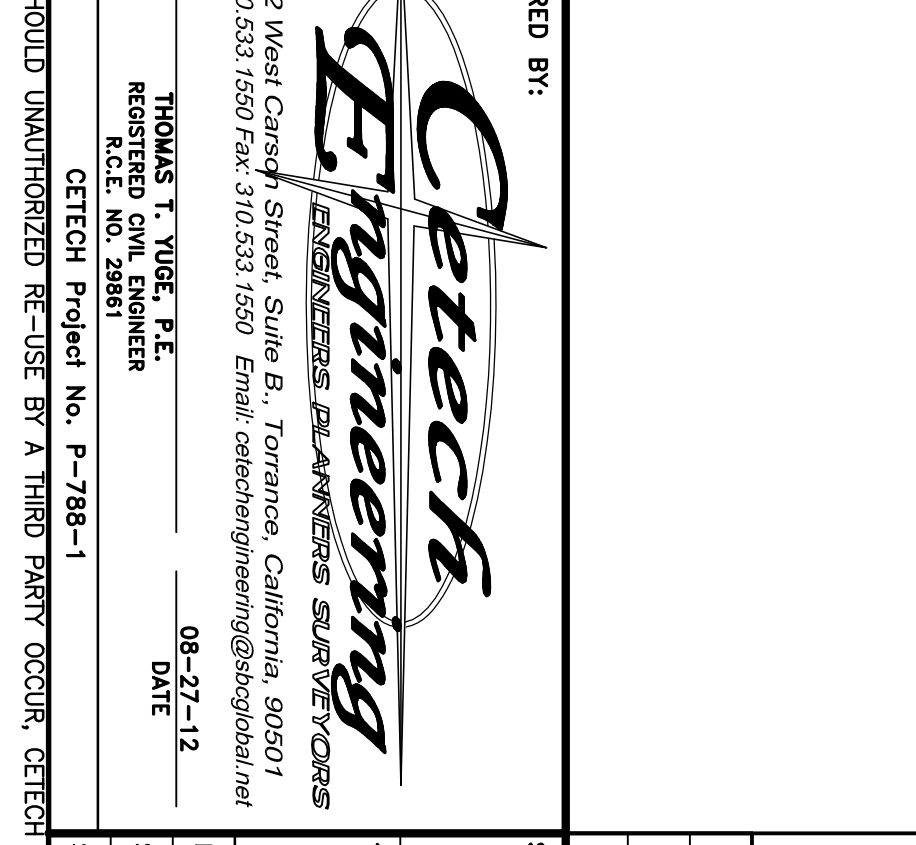
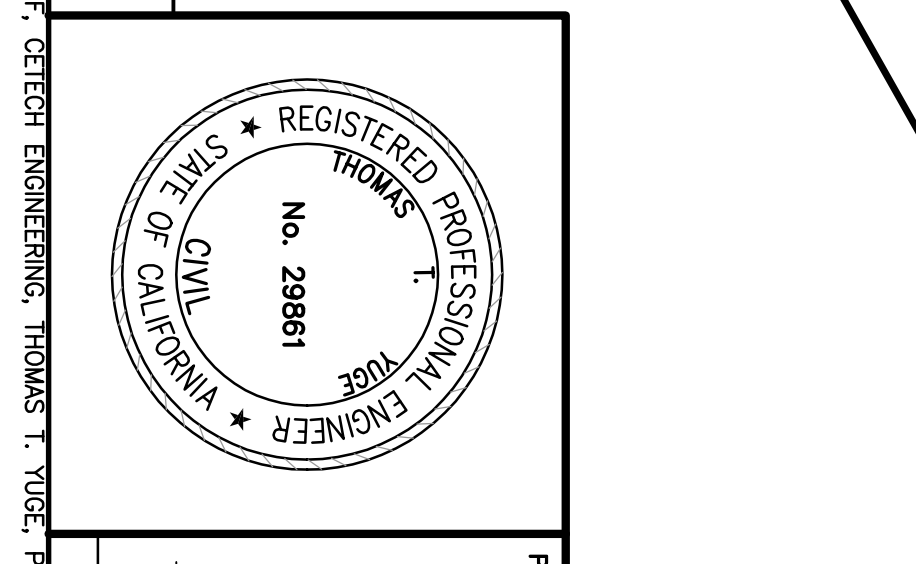
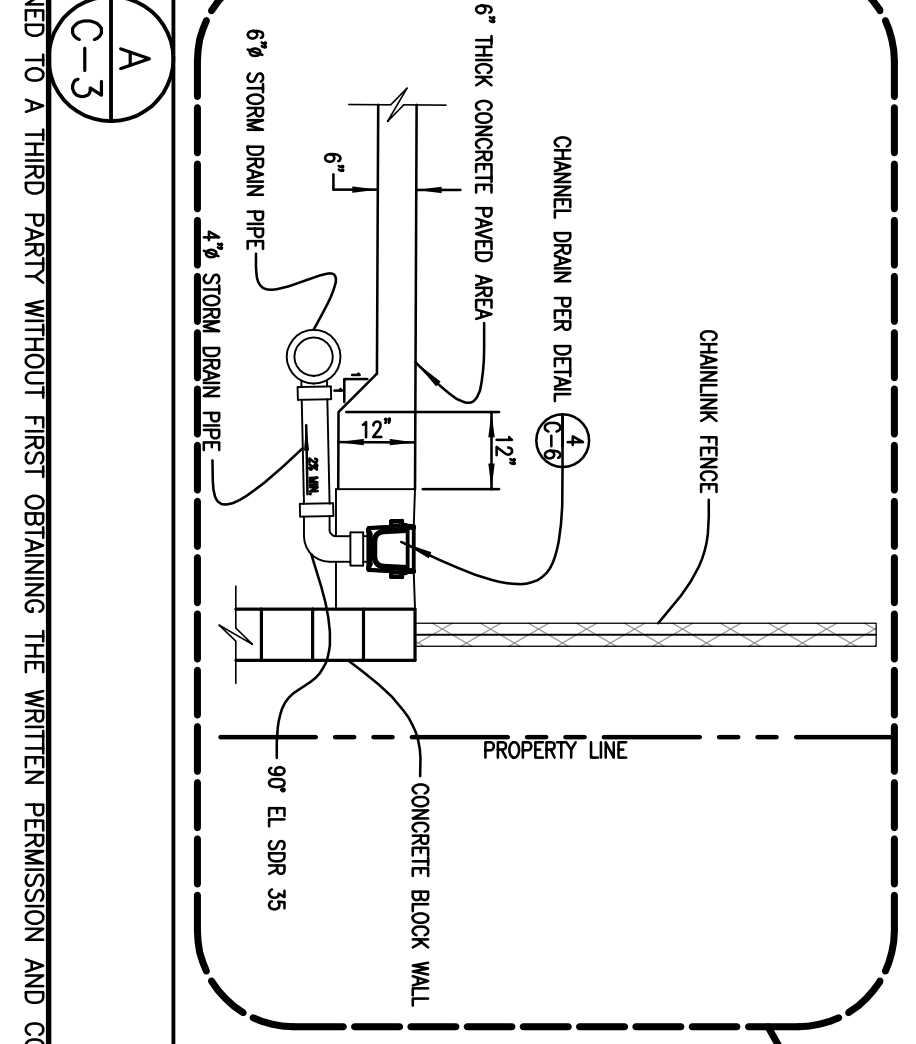
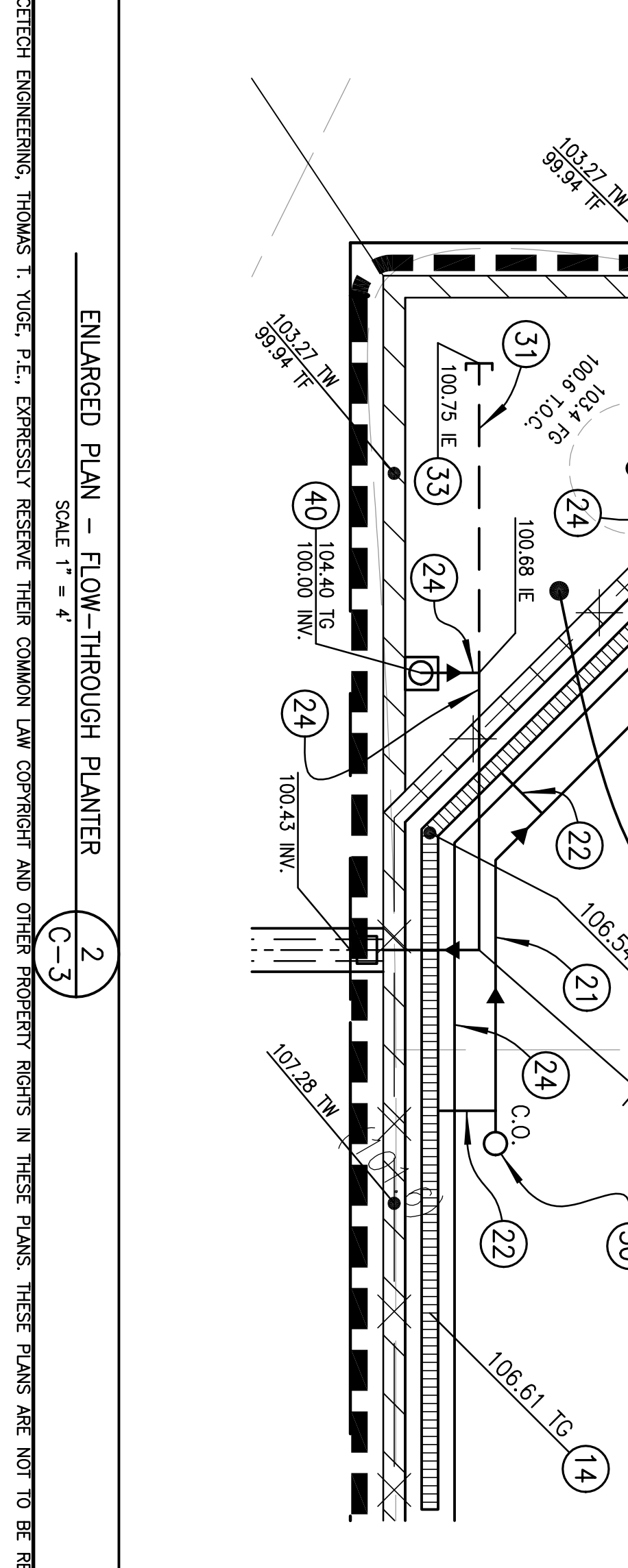
SEE SECTION (A-A) SIM.



LIMITS OF GRADING



LIMITS OF GRADING



811

Know what's below.
Call before you dig.

Cetech Engineering

REGISTERED PROFESSIONAL ENGINEER
No. 29881
STATE OF CALIFORNIA

2252 West Central Street, Suite B, Torrance, California, 90501
Tel: 310.533.1530 Fax: 310.533.1530 Email: cetechengr@comcast.net

THOMAS T. VOEL, P.E.
REGISTERED PROFESSIONAL ENGINEER
No. 29881
STATE OF CALIFORNIA

CETECH Project No. P-1788-1
DATE: 08-27-12

PREPARED BY: THOMAS T. VOEL, P.E.
DATE: 08-27-12

SITE ADDRESS: 845 W. 12TH STREET
SAN PEDRO, CALIFORNIA

TITLE: GRADING AND DRAINAGE PLAN

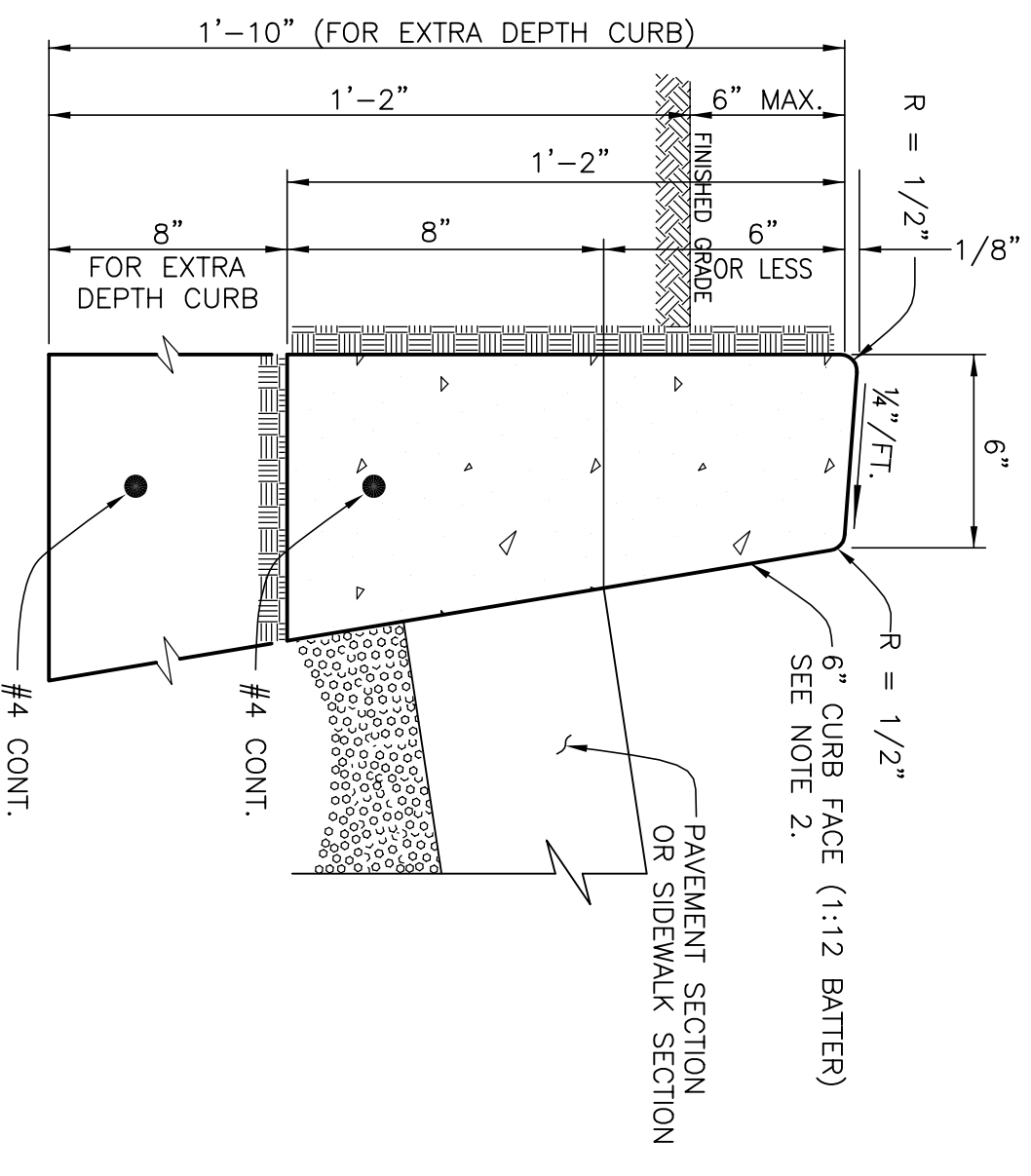
DRAWING NO. C-3

DATE: 08-27-12

SCALE: AS SHOWN

APPROVED BY: THOMAS T. VOEL, P.E.
DATE: 08-27-12

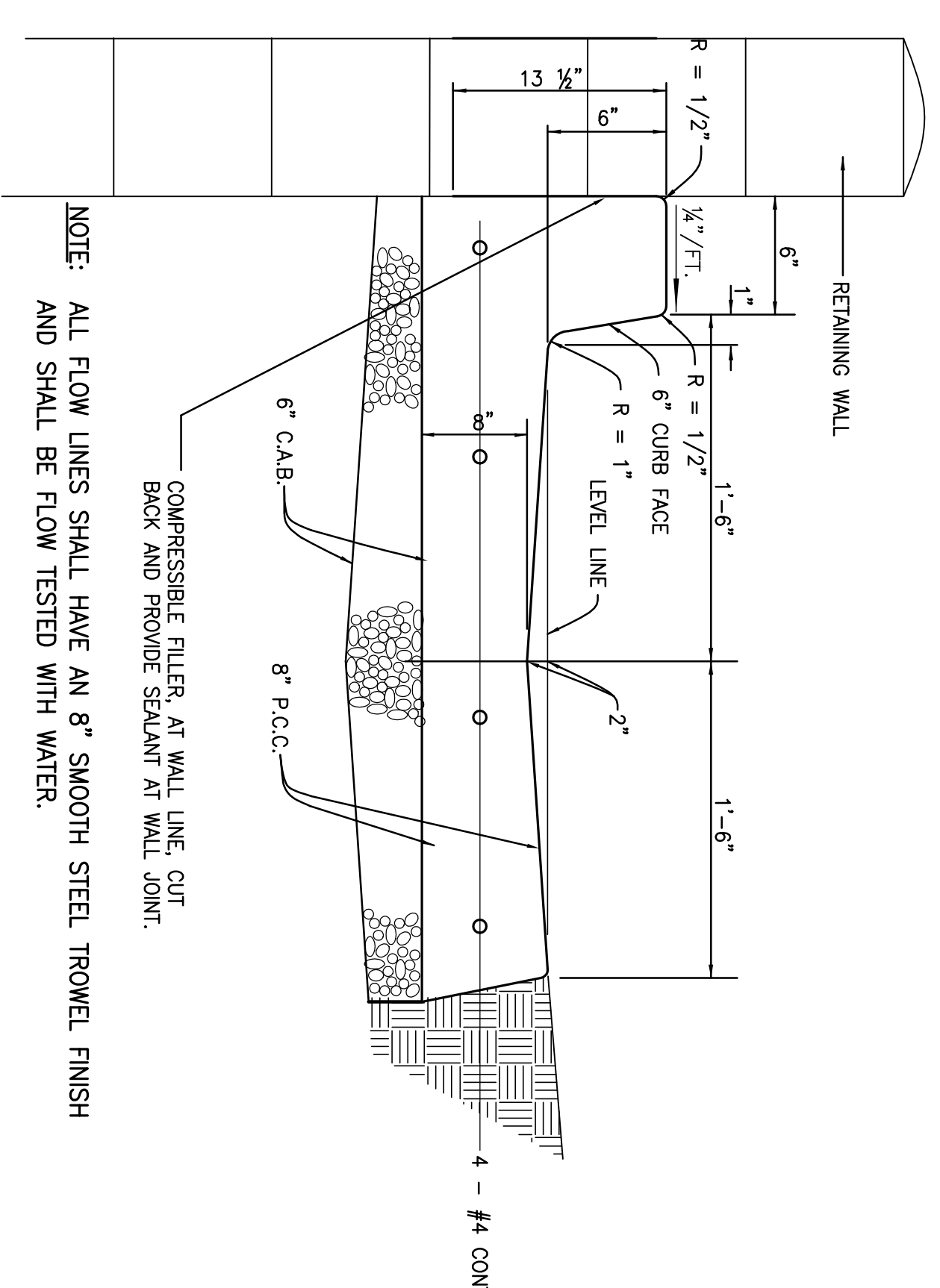
BID SET - 08-27-12



- NOTES:
- EXTRA DEPTH CURB WHERE REQUIRED.
 - WHERE SIDEWALK IS ADJACENT TO BOTH FRONT AND BACK OF CURB, FINISH BOTH SIDES OF CURB WITH 1:1.2 BATTER.

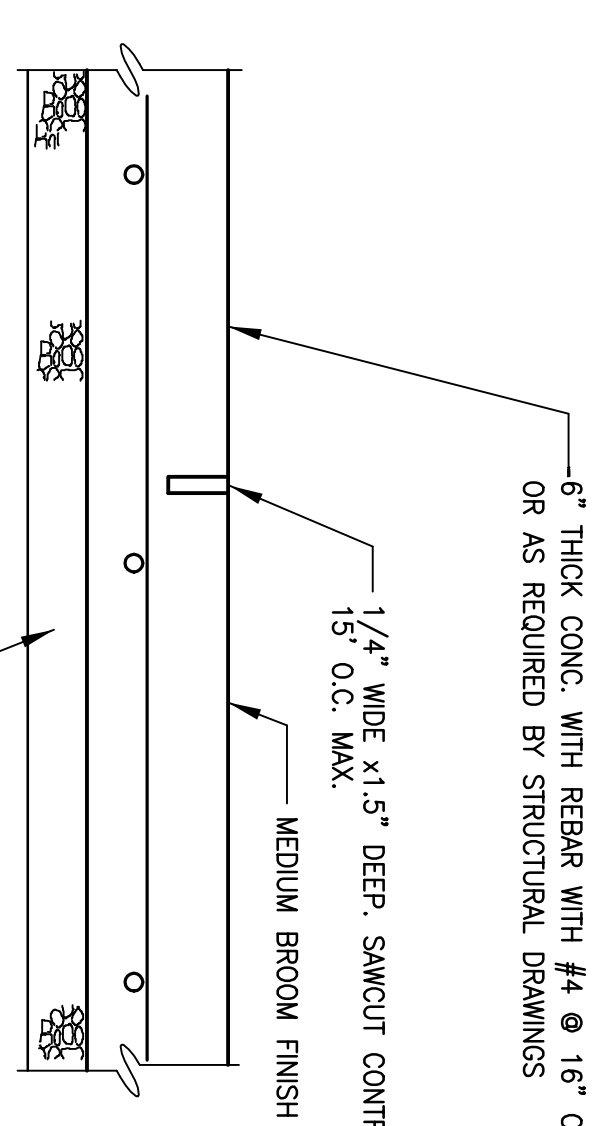
CONCRETE CURB ONLY (1) NOT TO SCALE

NOT USED



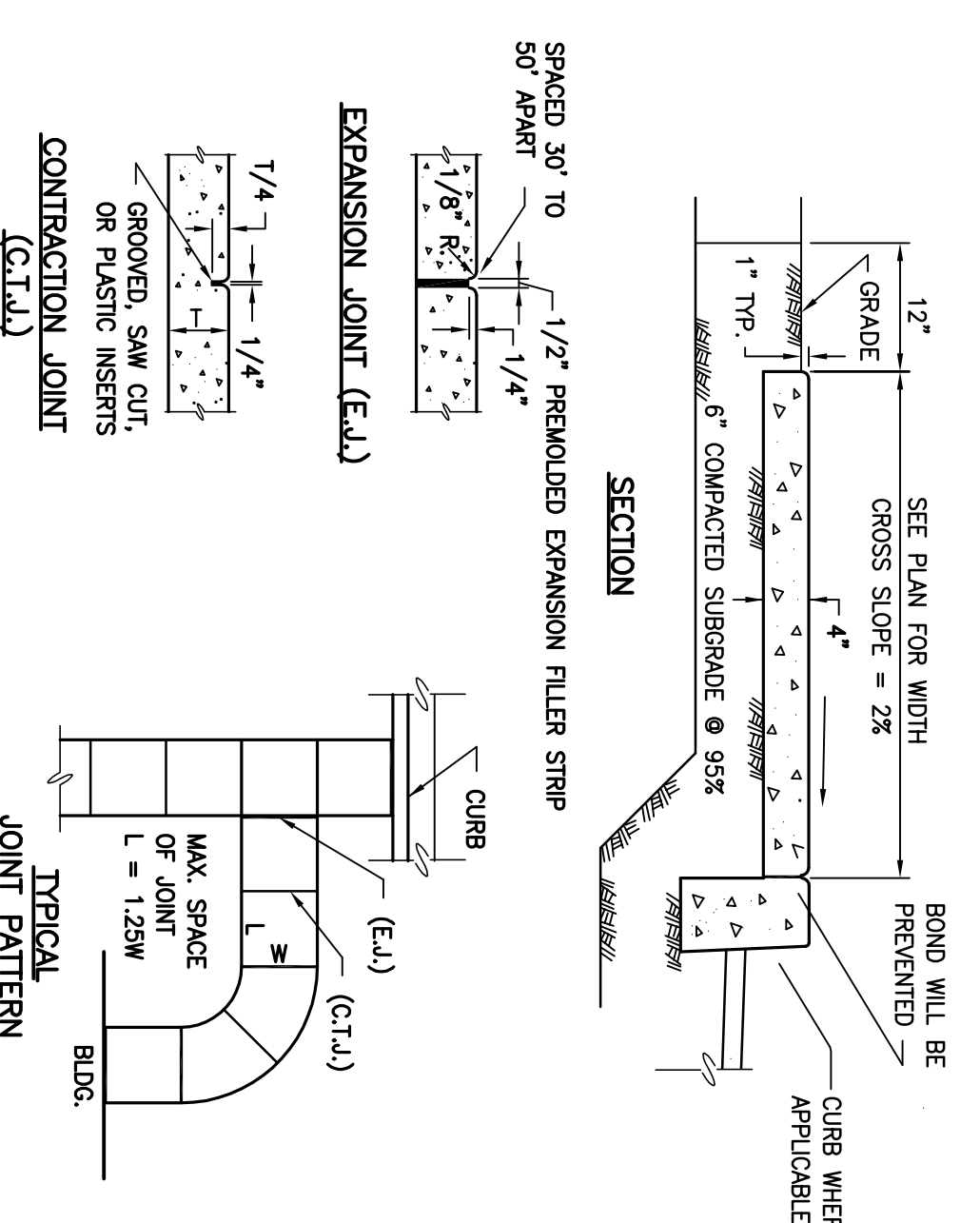
NOTE: ALL FLOW LINES SHALL HAVE AN 8" SMOOTH STEEL TROWEL FINISH AND SHALL BE FLOW TESTED WITH WATER.

6" CONCRETE CURB WITH SUTTER (3) NOT TO SCALE



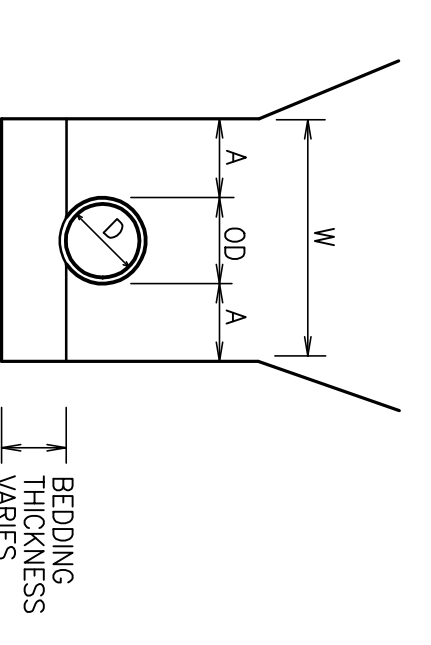
- NOTE:
- SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR CONCRETE FINISH, COLOR AND JOINT SPACING.

CONCRETE PAVEMENT DETAIL (4) NOT TO SCALE



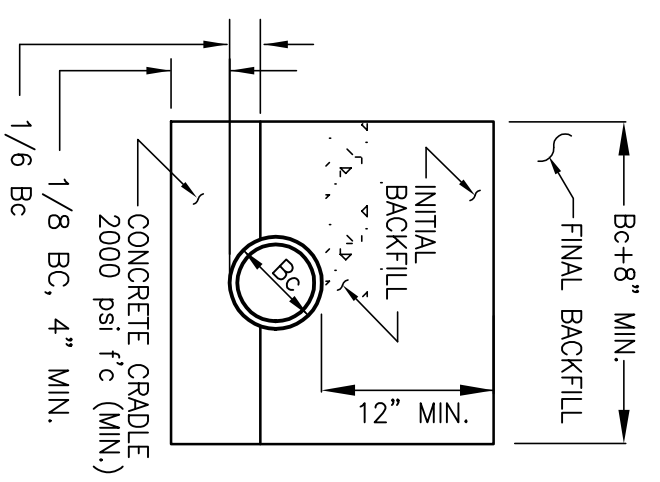
- NOTE:
- SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR CONCRETE FINISH, COLOR AND JOINT SPACING.

CONCRETE SIDEWALK DETAIL (5) NOT TO SCALE



PIPE DIA	MAXIMUM TRENCH WIDTH "W"
4" TO 15"	8"
16" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	18"

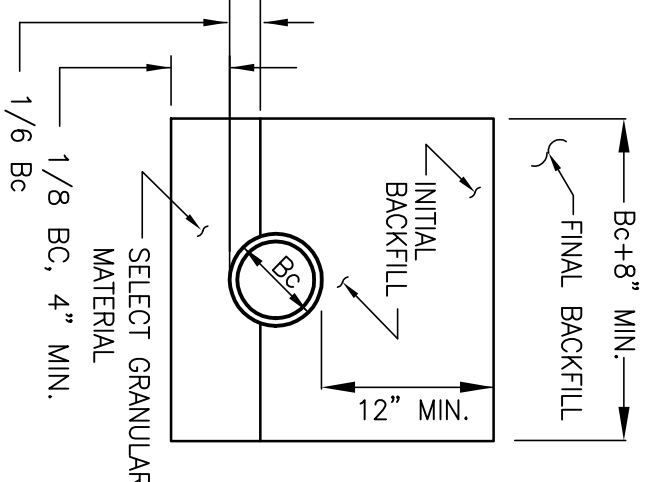
TRENCH WIDTH DETAIL



- * SEE GEOTECHNICAL REPORT FOR BACKFILL REQUIREMENTS. SELECT GRANULAR MATERIAL SHALL CONSIST OF CLEAN SAND HAVING A SAND EQUIVALENCY RATING OF 30 OR MORE.

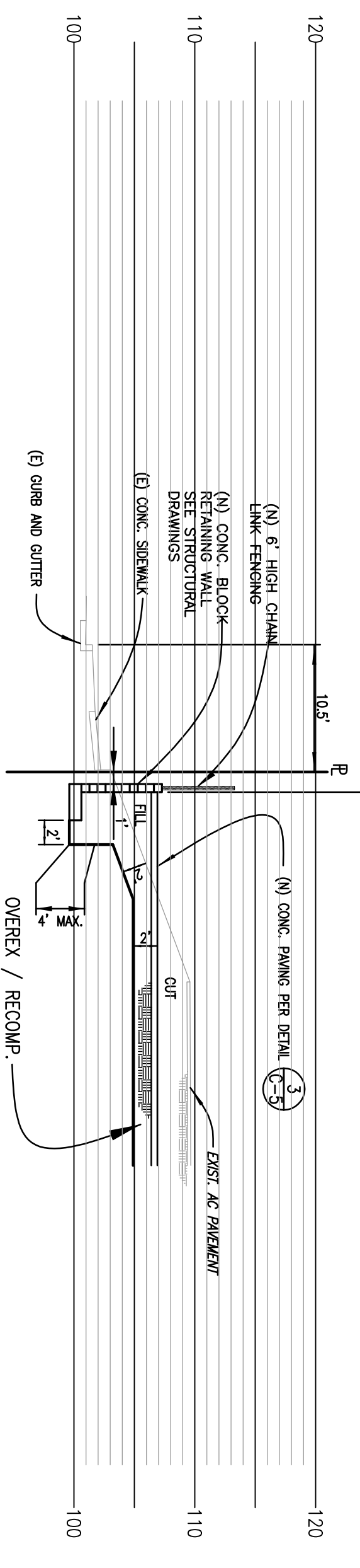
INITIAL BACKFILL PER MATERIAL SPEC. MIN. PARTICLE SIZE	MAX. PARTICLE SIZE
CLASS A	1/2"
CLASS B	1/2"
CLASS C	1-1/2"
OTHER	1-1/2"

TRENCH WIDTH AND PIPE BEDDING DETAIL (6) NOT TO SCALE



INITIAL BACKFILL PER MATERIAL SPEC. MIN. PARTICLE SIZE	MAX. PARTICLE SIZE
CLASS B	1/2"
CLASS C	1-1/2"
OTHER	1-1/2"

PIPE BEDDING DETAIL



SECTION B-B (C-5) NOT TO SCALE

Cetch Engineering
REGISTERED PROFESSIONAL ENGINEER
No. 29861
STATE OF CALIFORNIA
CIVIL

Cetch Engineering
REGISTERED PROFESSIONAL ENGINEERS
2252 West Central Street, Suite B, Torrance, California, 90501
Ph: 310.533.1550 Fax: 310.533.1550 Email: cetchengineering@sbcglobal.net

THOMAS T. VOGE, P.E.
REGISTERED PROFESSIONAL ENGINEER
No. 29861

CETCH Project No. P-788-1

PREPARED BY: _____ DATE: 08-27-12

NO.	DATE	REVISION
1	08-27-12	BID SET

TITLE
GRADING PLAN DETAILS

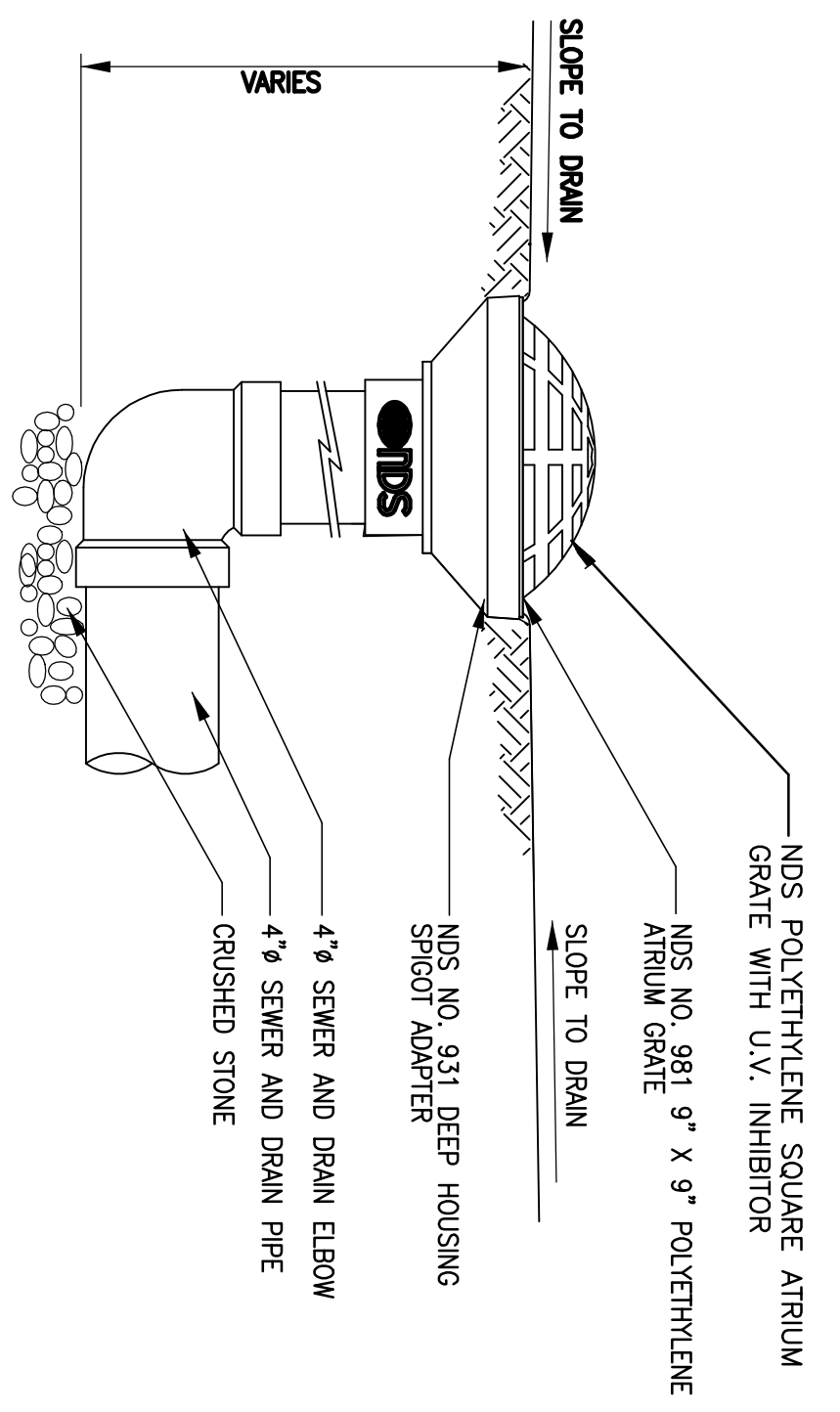
SIT ADDRESS:
845 W. 12TH STREET
SAN PEDRO, CALIFORNIA

DRAWING NO.
C-5

DR: C.V. DATE: 09-28-12

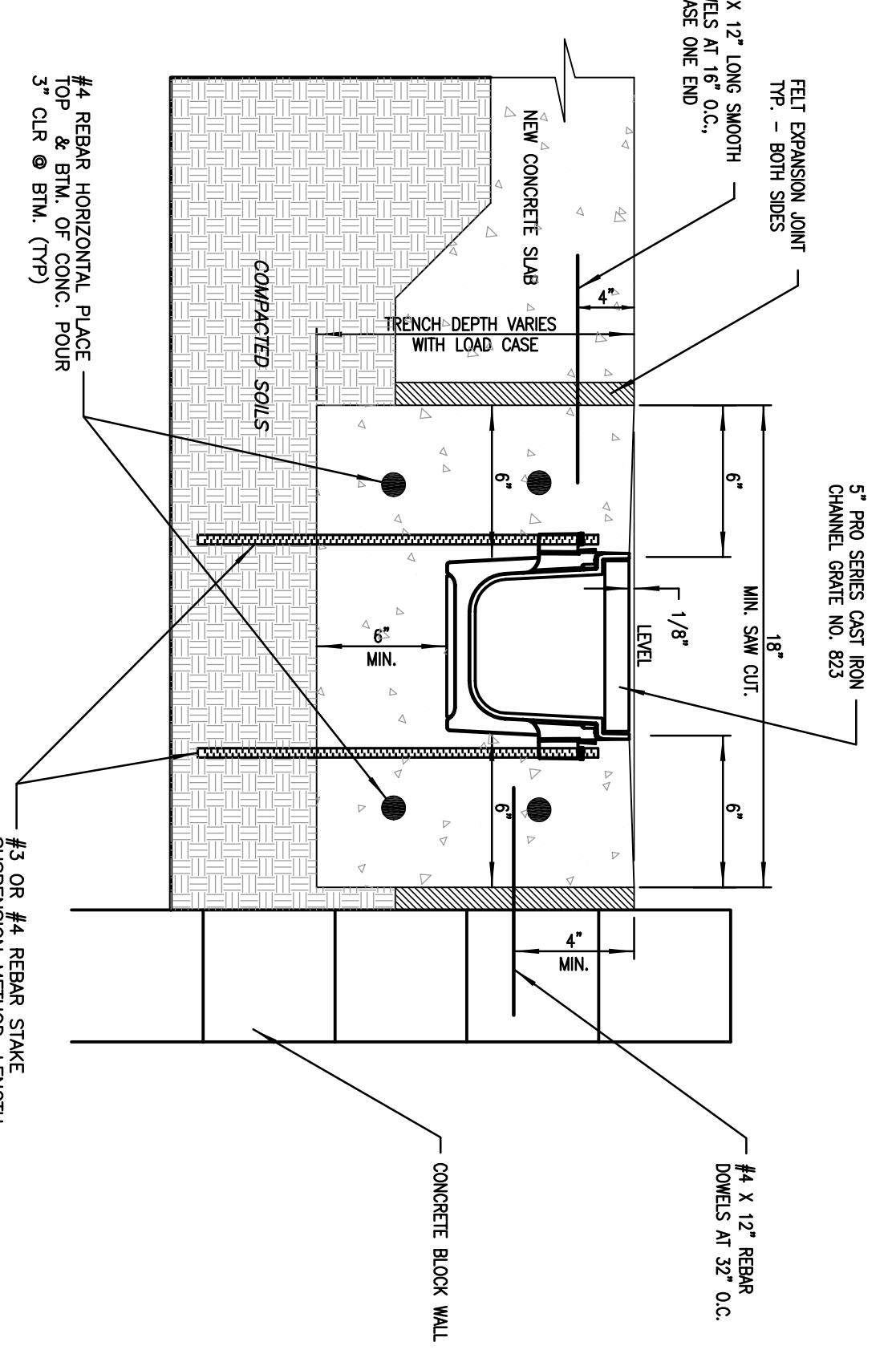
SCALE: AS SHOWN

SHEET _____ OF _____



NOTE:
INSTALLATION SIMILAR FOR 12\"/>

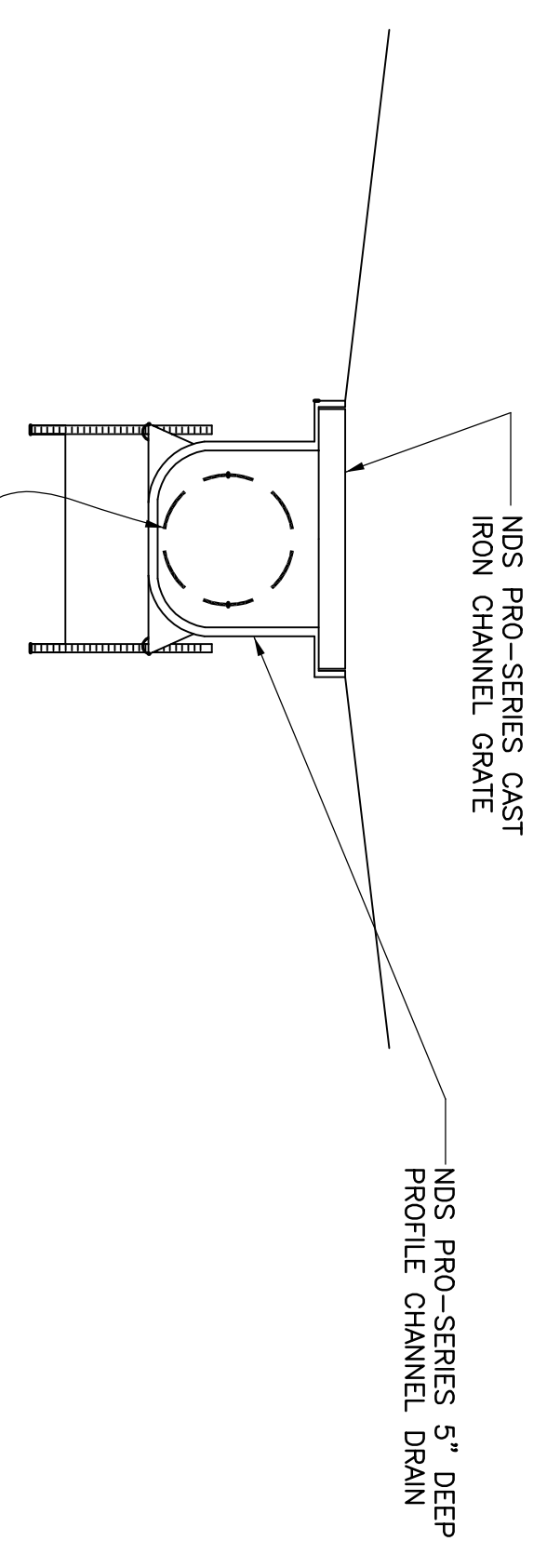
9" X 9" DRAINAGE INLET DETAIL
NOT TO SCALE
1
C-6



NOTE:
CHANNELS TO BE INSTALLED WITH GRATE.
GRATE TO BE PROTECTED FROM CONCRETE
POUR.

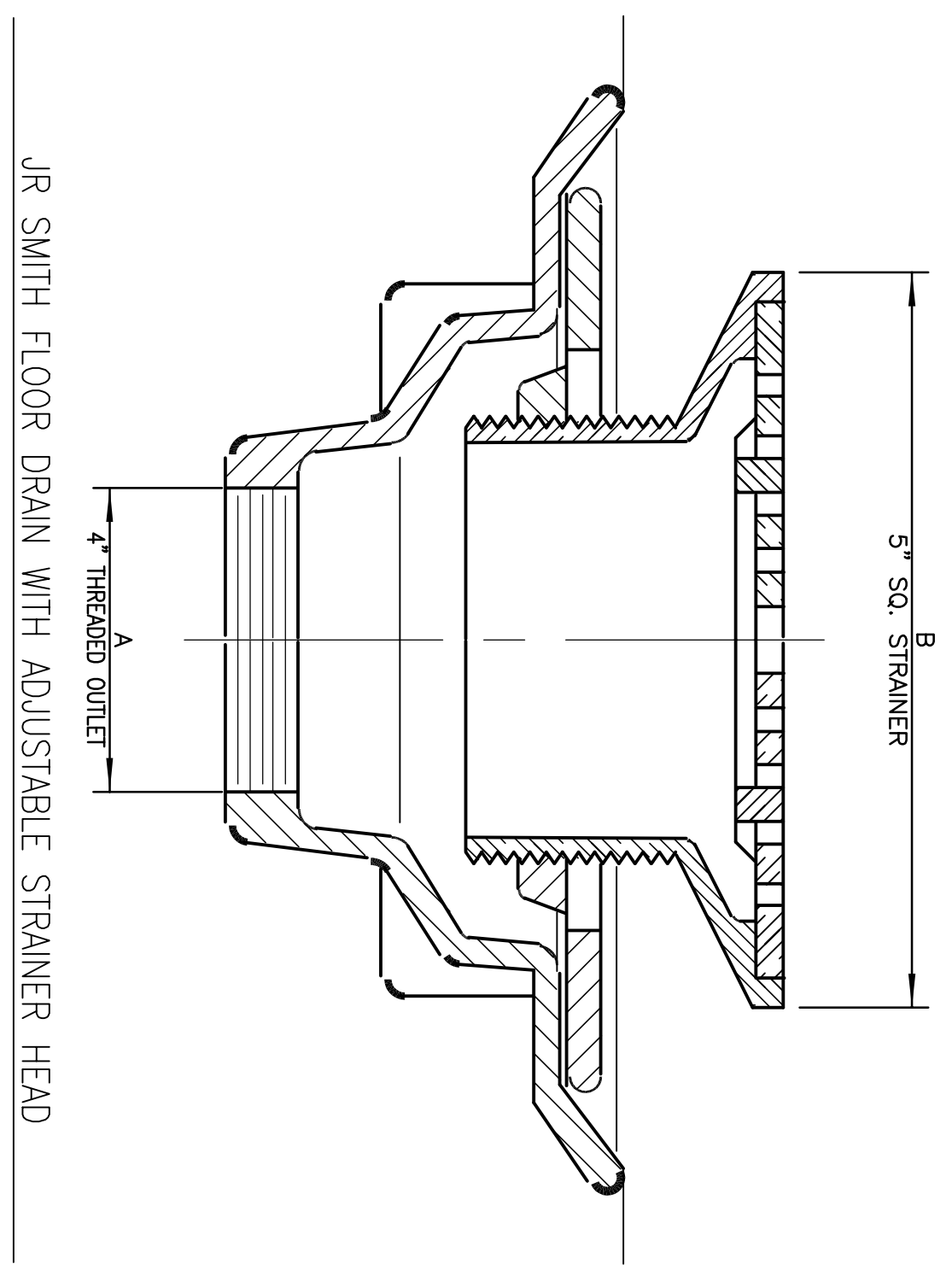
CHANNEL DRAIN DETAIL
NOT TO SCALE
4
C-6

NOT USED



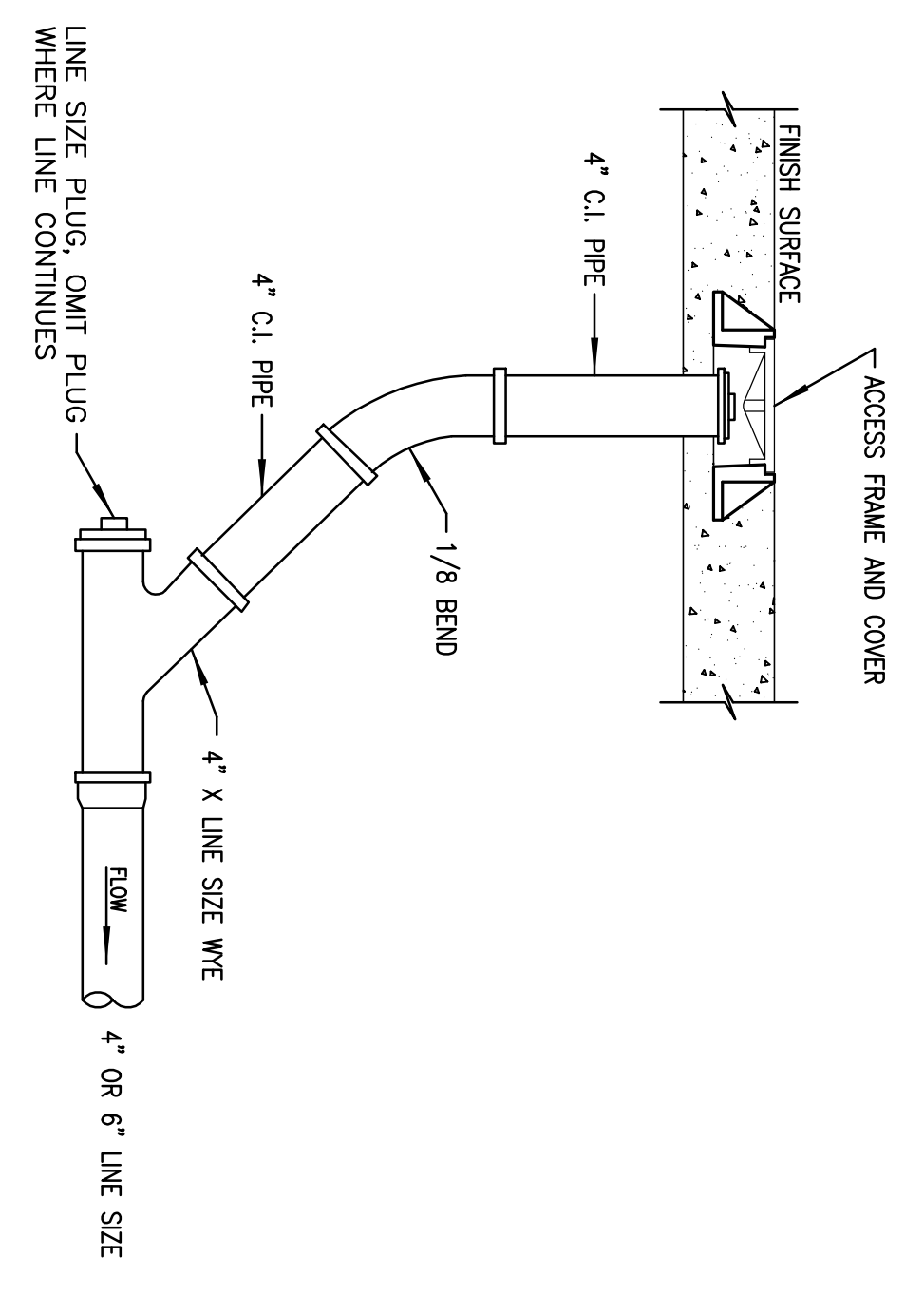
10 FOOT LONG WITH SINGLE OUTLET HEADER, FLOW-GARD
TRENCH DRAIN MEDIA FILTER, MODEL NO. FF-TD03-1, BY
KRISTIAN ENTERPRISES, INC., SANTA ROSA, CA (800)
579-8819, FILTERED FLOW PER 10 L.F. 0.15 CFS.
LENGTH L = 10 UNLESS SPECIFIED OTHERWISE

TRENCH DRAIN MEDIA FILTER DETAIL
NOT TO SCALE
5
C-6

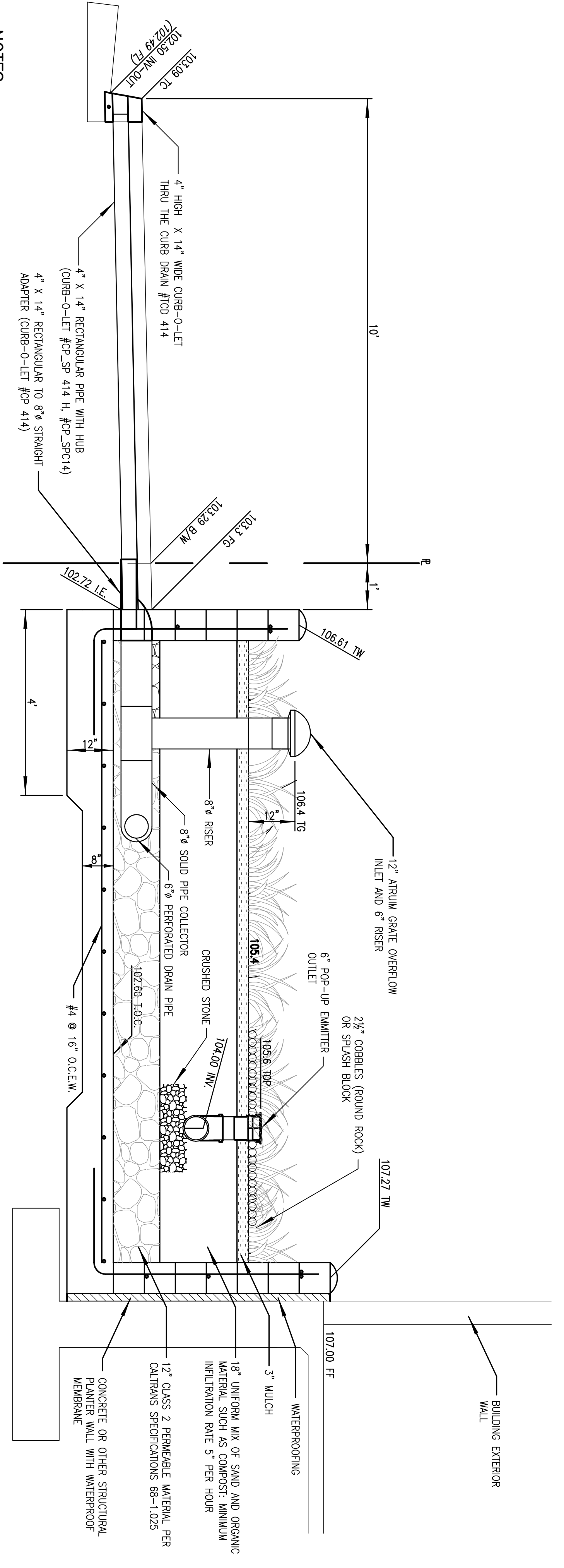


JR SMITH FLOOR DRAIN WITH ADJUSTABLE STRAINER HEAD.
MODEL NUMBER 2010C(B)(U)(T)(SS), A = 4 INCH, B = 5" SQ.,
(V) VANDAL PROOF, (T) THREADED OUTLET, (SS) BHP STRAINER
HEEL PROOF STAINLESS STEEL GRATE. INSTALL FLOOR DRAIN WITH
4" FPT X SEWER PVC SPIGOT ADAPTER (GPK, INC. PRODUCT #229-0004)
TO SDR PIPE

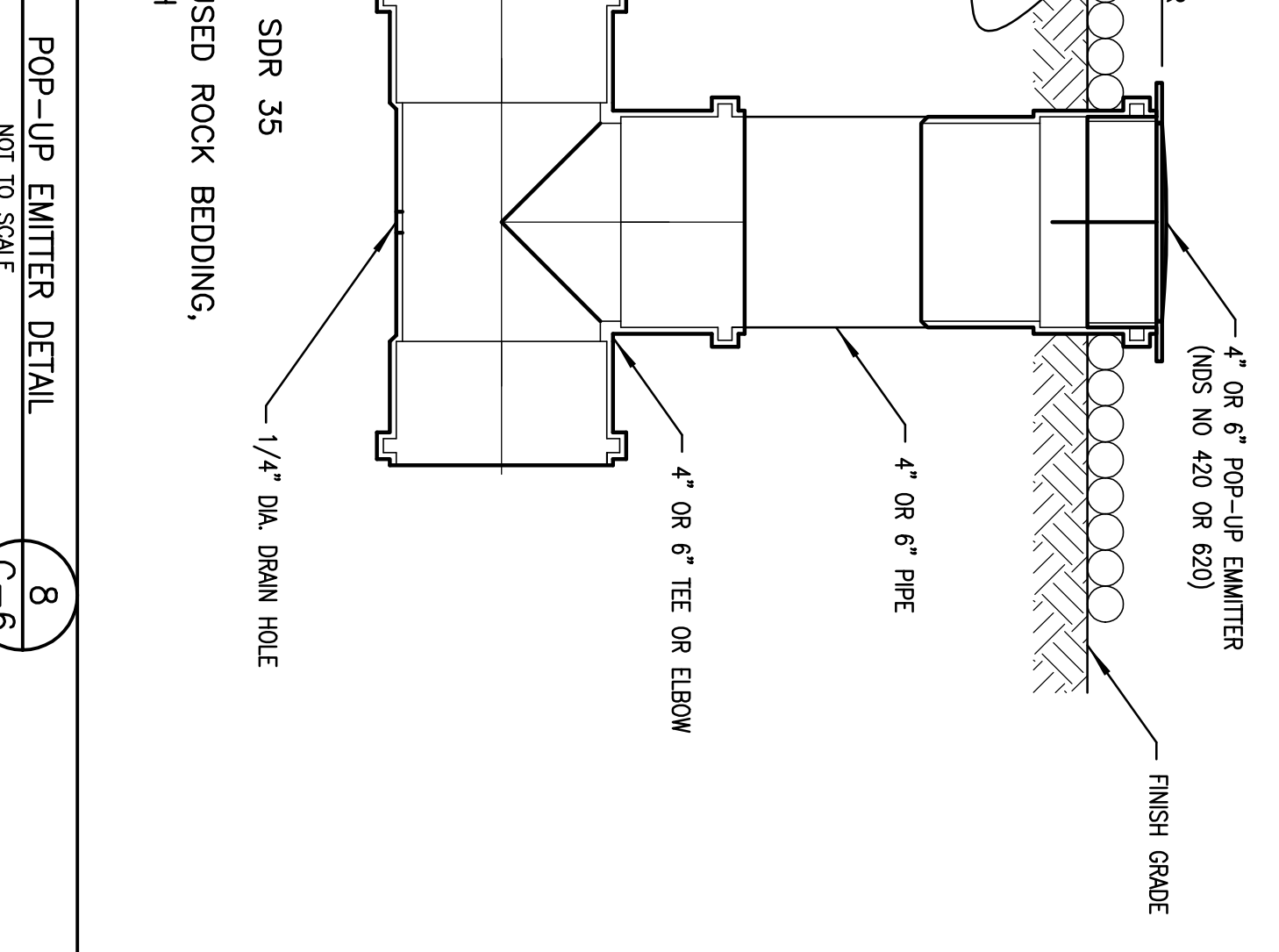
FLOOR DRAIN WITH SQUARE GRATE DETAIL
NOT TO SCALE
3
C-6



CLEANOUT DETAIL
NOT TO SCALE
7
C-6



NOTES:
1. INSTALL BOTTOM OF PLANTER LEVEL
2. PLANT MATERIAL AND SOIL MIX TO BE SPECIED ON LANDSCAP PLANS
3. INSTALLATION FOR SMALLER AREA FLOW-THROUGH PLANTERS IS THE SAME EXCEPT FOR PIPE
4. FOR 6" POP-UP EMITTER OUTLET - 4' Ø AREA OF COBBLES OR SPLASH BLOCKS
5. FOR 4" POP-UP EMITTER OUTLET - 3' Ø AREA OF COBBLES OR SPLASH BLOCKS
6. PROVIDE INTERIOR WALL FACE OF PERIMETER PLANTER WALLS AND CONCRETE WITH CLEAR WATERPROOFED
SEALANT (511 POROUS PLUS BY MIRACLE SEALANT, CA) PER MANUFACTURER'S RECOMMENDATIONS.
PLANTER BOTTOM TO BE WATER-PROOFED ALSO.



POP-UP EMITTER DETAIL
NOT TO SCALE
8
C-6

NOTE:
1. ALL PIPE AND FITTINGS TO BE SPR 35
1. SET RISER OR ELBOW ON CRUSHED ROCK BEDDING
1 CF/LF OF 12" WIDE TRENCH

SECTION AT FLOW-THROUGH PLANTER
NOT TO SCALE
A
C-6

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
No. 29861
THOMAS T. VOGE, P.E.
CIVIL ENGINEER

Prepared By:
THOMAS T. VOGE, P.E.
2252 West Central Street, Suite B, Torrance, California, 90501
Ph: 310.533.1520 Fax: 310.533.1520 Email: cotechengr@comcast.net

CETCH Project No. P-788-1
DATE: 08-27-12

NO.	DATE	REVISION	BY
08-27-12		BID SET	TY

SITE ADDRESS:
845 W. 12TH STREET
SAN PEDRO, CALIFORNIA

TITLE
GRADING PLAN DETAILS

DRAWING NO.
C-6