

## **B-PERMIT PLAN CHECK MANUAL**

### **11. PLAN SHEETS AND NOTES**

Preformatted B-Permit plans sheets can be downloaded from the internet on the Bureau of Engineering's website. The Plan sheets can be found under the Technical Document Center, Tools and References, B-Permit Templates.

The construction notes, Standard Plans and legends required for the specific project be found using the menus at the same location. After selecting the notes, Standard Plans and legends needed they the can be copied and transferred to the plan sheets. In addition, these standard worded construction notes will not have to be changed except in the most unusual of cases.

There are available standard notes that apply to any type of construction work along with construction specific notes for street, sewer, storm drain and structural work. The Private Engineer can choose the ones that apply to his/her project. If there is a question as to what applies, always call the Bureau of Engineering B-Permit Group in the District where the project is located to get a clarification.

Project specific items not covered in the standard menu of construction notes can always be added.

The following are the standard notes to be added for various types of projects. If more than one type of installation is involved, specific notes for each should be included on the plan sheet.

# NOTICE TO CONTRACTORS - "B" Permit Plans

## GENERAL INSTRUCTIONS

1. All notes shall be numbered and presented as in section "B" below, followed by other applicable notes in section "C" and following. Refer to "B-Permit Templates" for location of notes on plans.  
([http://eng.lacity.org/techdocs/CADDSTDS/B\\_permits\\_templates](http://eng.lacity.org/techdocs/CADDSTDS/B_permits_templates))

## GENERAL NOTES APPLICABLE TO ALL TYPES OF PROJECTS

1. SPECIFICATIONS: ALL WORK SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF "THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK), AND THE CORRESPONDING "ADDITIONS AND AMENDMENTS TO THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (BROWN BOOK).

2. THIS IMPROVEMENT CONSISTS OF WORK CALLED FOR ONLY ON THIS PLAN.

(OR IF APPLICABLE)

THIS IMPROVEMENT ALSO INCLUDES WORK CALLED FOR ON THE FOLLOWING PLANS:

P-\_\_\_\_\_ STREET, D-\_\_\_\_\_ SEWER, D-\_\_\_\_\_ STORM DRAIN, D-\_\_\_\_\_ STREET LIGHTING.

3. STANDARD PLANS FOR THIS PROJECT:  
*(Plans frequently used, but not conclusive. Include all plans applicable to project.)*

|   |         |
|---|---------|
| HOUSE CONNECTION SEWERS                     | S-110-1 |
| HOUSE CONNECTION REMODELING                 | S-111-0 |
| STANDARD SADDLE CONNECTION                  | 27983   |
| ADJUSTING SEWER MAINTENANCE HOLES TO GRADE  | S-137-1 |
| SEWER MANHOLES - GENERAL                    | S-140-0 |
| BRICK MANHOLE                               | S-141-0 |
| PRECAST CONCRETE SEWER MANHOLES             | S-142-0 |
| TERMINAL CLEANOUT STRUCTURE "Y" (T.C.S."Y") | S-164-0 |
| PIPE LAYING IN TRENCHES                     | S-251-1 |
| MANHOLE FRAME AND COVER 27-INCH             | S-282-1 |
| TYPES OF CURB AND GUTTER                    | S-410-2 |
| EXTRUDED ASPHALT CONCRETE (AC) CURB         | S-412-0 |
| JOINTS IN CONCRETE PAVEMENT                 | S-430-1 |
| STANDARD STREET CROWN SECTIONS              | S-432-1 |
| DRIVEWAYS                                   | S-440-3 |

|   |          |
|---|----------|
| CURB RAMPS  | S-442-2M |
| TREE WELL COVER TYPE A  | S-450-2  |
| TREE WELL, ROOT BARRIER AND PLANTING<br>456-1                                 | S-       |
| GUIDE MARKERS   | S-460-0  |
| SYMBOLS FOR CONSTRUCTION NOTES  | S-627-0  |
| TREE STAKING AND GUYING DETAILS   | S-663-0  |
| ADVANCE CONSTRUCTION NOTICE SIGNS   | S-791-1  |
| APWA STORM DRAIN STANDARD PLANS ( <i>BOE SPECIAL ORDER NO.<br/>007-0701</i> ) |          |

4. INSPECTION: ALL WORK AND MATERIALS ARE SUBJECT TO INSPECTION PURSUANT TO SECTION 2-11 OF THE STANDARD SPECIFICATIONS. CALL (213) 580-5080 (METRO) OR (818) 374-1188 (VALLEY) BEFORE NOON OF THE WORKING DAY BEFORE INSPECTION IS REQUIRED.
  
5. THE CONTRACTOR, IN CONFORMANCE WITH LOS ANGELES CITY ORDINANCE NO. 150,478 SHALL POT HOLE EXISTING SUBSURFACE INSTALLATIONS CARRYING UNSTABLE SUBSTANCES TO DETERMINE THEIR LOCATIONS AND ELEVATIONS BEFORE COMMENCING EXCAVATION.
  
6. UNDERGROUND SERVICE ALERT:  
BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT (USA) INQUIRY I.D. NUMBER BY CALLING (800) 227-2600. TWO WORKING DAYS SHALL BE ALLOWED AFTER THE I.D. NUMBER IS OBTAINED AND BEFORE THE CONTRACTOR STARTS THE EXCAVATION WORK SO THAT UTILITY OWNERS CAN BE NOTIFIED. IF THE UTILITY OWNER IS THE CITY OF LOS ANGELES, A CONFIRMATION NUMBER INDICATING THE CITY HAS BEEN NOTIFIED SHALL BE OBTAINED BY USA AND/OR THE CONTRACTOR FROM THE APPROPRIATE CITY DEPARTMENT. THE I.D. NUMBER TOGETHER WITH THE DATE ACQUIRED SHALL BE REPORTED TO THE BUREAU OF CONTRACT ADMINISTRATION WHEN CALLING FOR INSPECTION. I.D. NUMBERS WILL NOT BE GIVEN MORE THAN 10 DAYS BEFORE STARTING EXCAVATION WORK.
  
7. AT LEAST THIRTY (30) DAYS BEFORE THE START OF CONSTRUCTION THE CONTRACTOR/ENGINEER SHALL CONTACT BUREAU OF STREET SERVICES, COORDINATING SECTION AT (213) 485-5691 TO VERIFY THAT THERE IS NO PROPOSED PROJECT IN THIS AREA.

8. NOTIFICATION:  
AT LEAST TEN (10) DAYS BEFORE THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY, IN WRITING, ABUTTING PROPERTY OCCUPANTS OF THE PROPOSED CONSTRUCTION START DATE. A COPY OF SAID WRITTEN NOTIFICATION SHALL BE PROVIDED TO THE INSPECTOR FOR APPROVAL BEFORE THEY ARE DISTRIBUTED TO THE OCCUPANTS OF THE ABUTTING PROPERTY.
9. ADVANCE CONSTRUCTION NOTICE SIGNS:  
IN ADDITION TO SIGNS REQUIRED BY THE PROVISIONS OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (WATCH), LATEST EDITION, FURNISH AND PLACE SIGNS FOR GIVING ADVANCE NOTICE TO MOTORISTS OF TRAFFIC DISRUPTION AS PART OF THIS PROJECT IN ACCORDANCE WITH STANDARD PLAN S-791-1.
10. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE *WORK AREA TRAFFIC CONTROL HANDBOOK* (WATCH) ADOPTED BY THE BOARD OF PUBLIC WORKS OF THE CITY OF LOS ANGELES.
11. CONSTRUCTION STAKES FOR CURB AND LONGITUDINAL GUTTER, WITH GRADE LESS THAN 0.50 %, SHALL BE SET 12.5 FEET ON THE CENTER.
12. REMOVALS:
  - a. REMOVE ALL EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT.
  - b. ALL UTILITIES SHALL BE REMOVED OR RELOCATED BY OTHERS.
13. IN ADDITION TO THE CONSTRUCTION OF PAVEMENT SHOWN HEREON, WORK REQUIRED UNDER THIS PLAN WILL ALSO INCLUDE THE CONSTRUCTION OF PERMANENT TRENCH RESURFACING IN ALL AREAS WHERE UTILITY LINES HAVE BEEN INSTALLED TO SERVE THIS DEVELOPMENT. CONDITIONS OF TRENCH BACKFILL AND RESURFACING SHALL BE AS SPECIFIED ON THE EXCAVATION PERMIT.

14. REPAIR AND/OR REPLACE ANY EXISTING BROKEN OR OFF-GRADE PAVEMENT, CONCRETE CURB, GUTTER OR SIDEWALK IMMEDIATELY ADJACENT TO OR WITHIN THE AREA OF THIS IMPROVEMENT SATISFACTORY TO THE CITY ENGINEER.

15. SURVEY MONUMENT PRESERVATION IS REQUIRED AND SHALL INCLUDE SUBMITTAL OF PRE AND POST CONSTRUCTION SURVEY MONUMENT TIES TO THE ENGINEER, AS NOTED BY SECTION 2-9.3 OF THE "BROWN BOOK".

16. IMPORTANT NOTICE: ALL REQUIRED PUBLIC IMPROVEMENTS MUST BE COMPLETED BEFORE A TEMPORARY CERTIFICATE OF OCCUPANCY OR A CERTIFICATE OF OCCUPANCY WILL BE ISSUED FOR THIS PROJECT PER ORDINANCE NO. 165081.

**ADDITIONAL GENERAL NOTES WHICH MAY BE APPLICABLE TO PROJECT:**

17. CUTS OR EXCAVATIONS IN STREETS THAT HAVE BEEN RESURFACED ONE YEAR OR LESS FROM THE DATE OF A PROPOSED CUT OR EXCAVATION ARE PROHIBITED UNLESS THE PERMITTEE RESURFACES THE ENTIRE BLOCK OR INTERSECTION WITHIN WHICH SUCH CUT OR EXCAVATION OCCURS, PER ORDINANCE NO. 171922, 171923, 171924, AND SPECIAL ORDER NO 006-0400.

18. TRAFFIC LANE REQUIREMENTS:

(List any special lane requirements by DOT, subject to concurrence by the District office).

**OR**

LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND THE CORRESPONDING ISSUE OF THE "BROWN BOOK" WILL BE SATISFACTORY FOR THE TRAFFIC REQUIREMENTS.

19. LOCATION OF EXISTING TRAFFIC SIGNAL CONDUIT SHOWN ON THE PLANS IS APPROXIMATE ONLY. CONTRACTOR SHALL DETERMINE IN ADVANCE OF THE WORK THE LOCATION OF TRAFFIC SIGNAL CONDUIT OR OTHER TRAFFIC SIGNAL EQUIPMENT WHICH MAY INTERFERE WITH THE WORK OR WHICH MAY BE DAMAGED BY HIS OPERATIONS.

20. COMPLY WITH ALL PROVISIONS OF THE STATE DIVISION OF HIGHWAYS ENCROACHMENT PERMIT NO. \_\_\_\_\_ ON FILE IN THE CITY ENGINEER'S OFFICE (District Office address).  
(Use if any of the work is in a state highway. The Permittee or his representative needs to apply for a state encroachment permit and supply a copy to the District Office)
21. NOTIFY THE METROPOLITAN TRANSIT AUTHORITY, (213) 922-4632, 48 HOURS PRIOR TO ANY WORK WHICH WILL AFFECT NORMAL BUS OPERATIONS.
22. HOLIDAY SEASON WORK RESTRICTIONS  
*Enter street name(s)*  
NO WORK WILL BE PERMITTED BETWEEN THE BEGINNING OF THE THANKSGIVING HOLIDAY WEEK AND THE END OF THE FIRST WEEK IN JANUARY OF THE FOLLOWING YEAR. ALL SIDEWALK, TRAFFIC LANES, AND PARKING LANES, INCLUDING THOSE ON ADJOINING SIDE STREETS, SHALL BE CLEAR OF ALL OBSTRUCTIONS AND OPEN TO TRAFFIC DURING THIS PERIOD. THE CONTRACTOR SHALL PROTECT ALL UNCOMPLETED WORK AND TAKE ANY NECESSARY CORRECTIVE ACTIONS TO ALLOW SAFE AND FREE FLOW OF BOTH PEDESTRIAN AND VEHICULAR TRAFFIC DURING THE HOLIDAY SEASON.

***STREET IMPROVEMENTS – ADDITIONAL NOTES (use if applicable)***

1. GRADING REQUIRED ON PRIVATE PROPERTY OUTSIDE THE STREET OR ALLEY DEDICATION, IN CONNECTION WITH THIS IMPROVEMENT, SHALL BE PERFORMED EITHER WITHIN DEDICATED SLOPE EASEMENTS OR IN AREAS FOR WHICH SATISFACTORY RIGHTS-OF-ENTRY HAVE BEEN OBTAINED.
2. DRAINAGE FROM ALL LOTS SHALL BE CARRIED TO THE IMPROVED GUTTER BY MEANS OF A DRIVEWAY, APPROVED OUTLET STRUCTURE, OR SIDEWALK DRAIN (SECTION 306-7 GREENBOOK).
3. PAVING OF ROADWAY AREAS SHALL BE WITHHELD UNTIL THE SEWER AND STORM DRAIN WORK HAS BEEN APPROVED BY UNDERGROUND FINAL INSPECTION.
4. DRIVEWAYS SHALL BE CONSTRUCTED PER STANDARD PLAN S-440-3, CASE 2, X=\_\_\_, Y=\_\_\_, AND t=\_\_\_, UNLESS OTHERWISE SHOWN ON THE PLAN.

5. WHERE TWO STREETS OF UNEQUAL BASE AND PAVEMENT THICKNESS INTERSECT, THE ENTIRE INTERSECTION TO THE E.C.R.'S SHALL BE PAVED WITH THE GREATER THICKNESS OF BASE AND PAVEMENT.
6. PLACE 4" OF CRUSHED MISCELLANEOUS BASE (CMB) UNDER CONCRETE DRIVEWAYS WITHIN THE STREET DEDICATION AND UNDER CONCRETE SIDEWALK ADJACENT TO THE CURB. **OR**
7. ALL DRIVEWAYS SHALL BE CONSTRUCTED ON BASE MATERIAL OF THE SAME KIND AND THICKNESS AS THAT PLACED UNDER THE CONCRETE SIDEWALK.
8. CURB RAMPS SHALL BE CONSTRUCTED PER STANDARD PLAN S-442-2M, CASE \_\_\_\_\_, UNLESS OTHERWISE SHOWN ON THE PLAN.
9. *(THIS NOTE FOR NEW TRACTS ONLY):*  
WITHHOLD CONSTRUCTION OF CURB, GUTTER, WALK AND PAVEMENT UNTIL THE THICKNESS OF BASE AND PAVEMENT HAVE BEEN DETERMINED BY THE BUREAU OF ENGINEERING FROM THE RESULTS OF SOIL TESTS. WHEN SOIL IS READY TO BE TESTED, CALL BUREAU OF STANDARDS, PHONE (213) 485-2242.

***TREES AND TREE WELLS – ADDITIONAL NOTES (use if applicable)***

- A. TREE WELL COVERS, TYPE A, PER STANDARD PLAN S-450-2 SHALL BE PROVIDED FOR TREES PLANTED WITHIN THE SIDE WALK AREA. WHEN EXISTING CURB TO BACK OF WALK IS LESS THAN EIGHT FEET, USE TYPE A-2 TREE WELLS, AND IF EIGHT FEET OR GREATER, USE TYPE A-1 TREE WELLS.
- B. PLANT 24-INCH BOX SIZE TREES OF A SPECIES, QUANTITY, AND LOCATION TO BE DETERMINED BY THE URBAN FORESTRY DIVISION. TREES SHALL BE STAKED PER STANDARD PLAN S-663-0.
- C. THE CONTRACTOR SHALL NOTIFY THE URBAN FORESTRY DIVISION FIVE WORKING DAYS PRIOR TO CONSTRUCTING THE SIDEWALK FOR THE MARKING OF THE TREE LOCATIONS. CALL (213) 847-3088.
- D. TREE REMOVAL:  
  
PRIOR TO THE REMOVAL OF ANY STREET TREE, A BOARD REPORT MUST BE SUBMITTED AND APPROVED BY THE BOARD OF PUBLIC WORKS (30-60 DAYS FROM RECEIPT OF A FORMAL WRITTEN

REQUEST.) A **COPY OF THE PERMIT IS REQUIRED TO BE ON THE JOB SITE WHILE THE TREE WORK IS TAKING PLACE.**

E. WARNING TO B-PERMITTEE:

IF YOU WISH TO CONSTRUCT A DRIVEWAY THAT MAY REQUIRE REMOVAL OF A STREET TREE, YOU MUST CONTACT THE URBAN FORESTRY DIVISION AT (213) 847-3088 FOR PRIOR APPROVAL. **REMOVAL OF A STREET TREE WITHOUT A PERMIT IS A MISDEMEANOR.** FAILURE TO DISCLOSE THE EXISTENCE OF A STREET TREE MAY RENDER YOUR DRIVEWAY PERMIT NULL AND VOID.

F. ROOT TRIMMING:

TREE(S) MUST BE TRIMMED PRIOR TO ROOT PRUNING TO COMPENSATE FOR THE ROOT LOSS AND TO STABILIZE THE TREE. THE CROWN OF THE TREE IS TO BE REDUCED BY NO MORE THAN 25 PERCENT OF FOLIAGE (UNLESS APPROVED OTHERWISE BY AN URBAN FORESTRY ARBORIST). PRUNE THE ROOTS ON ONE SIDE OF THE ROOT SYSTEM ONLY (UNLESS APPROVED OTHERWISE BY AN URBAN FORESTRY ARBORIST). DO NOT PRUNE ROOTS LARGER THAN FOUR INCHES IN DIAMETER (**PERMIT IS REQUIRED**).

CONTRACTOR IS TO TRIM THE TREE(S) TO THE SATISFACTION OF THE **URBAN FORESTRY DIVISION** USING ANSI A300 STANDARDS AND/OR ISA PRUNING GUIDELINES. (**PERMIT IS REQUIRED**).

NOTIFY THE **URBAN FORESTRY DIVISION** AT (213) 847-3077, FIVE WORKING DAYS PRIOR TO TRIMMING AND/OR ROOT PRUNING FOR A REPRESENTATIVE TO INSPECT AND ISSUE THE NECESSARY PERMITS.

***SEWER CONSTRUCTION ADDITIONAL NOTES: (use if applicable)***

1. WHERE THE SEWER IS TO BE PLACED WITHIN A FILL, THE CONTRACTOR SHALL FIRST COMPACT THE FILL A MINIMUM OF 42-INCHES ABOVE THE TOP OF PIPE BEFORE TRENCH EXCAVATION TO LAY PIPE.
2. EXISTING SEWAGE FLOWS IN PRIVATE OR PUBLIC SEWER SYSTEMS COULD BE COMPROMISED, BLOCKED, OR SPILLED DURING THE CONSTRUCTION OF THIS IMPROVEMENT. THE

CONTRACTOR SHALL COMPLY WITH THE CITY'S POLICY OF ZERO SEWER SPILL ADOPTED BY THE BOARD OF PUBLIC WORKS ON JUNE 26, 1998. THE CONTRACTOR IS DIRECTED TO THE POLICY'S REQUIREMENTS AS DETAILED IN SECTIONS 7-8.4 AND 306-6.1 OF THE BROWN BOOK. PRIOR TO COMMENCEMENT OF CONSTRUCTION, AN APPROVED EMERGENCY SPILL REPOSE PLAN AND APPROVED BYPASS PLAN ARE REQUIRED AND SHALL BE AVAILABLE FOR THE INSPECTOR. EMERGENCY CONTACT NUMBERS FOR PERSONNEL OF THE BUREAUS OF CONTRACT ADMINISTRATION, ENGINEERING, AND SANITATION SHALL BE OBTAINED FROM BUREAU OF ENGINEERING.

3. EXCAVATE AND EXPOSE THE EXISTING SEWER LOCATED IN (STREET NAME) AT STA \_\_\_+\_\_\_ FOR VERIFICATION OF THE INVERT ELEVATION BY THE PRIVATE ENGINEER. ANY NECESSARY ELEVATION OR GRADE ADJUSTMENT TO PLAN SHALL BE AS DETERMINED BY THE ENGINEER AND APPROVED AS PART OF AN I.C.A. PRIOR TO THE COMMENCEMENT OF PIPE INSTALLATION BY THE CONTRACTOR.
4. HOUSE CONNECTION EXTENSION: BEFORE CONSTRUCTION TO EXTEND THE EXISTING HOUSE CONNECTION LATERAL AT SEWER STA \_\_\_+\_\_\_, THE HOUSE CONNECTION SHALL BE CCTV'D TO DETERMINE SUFFICIENCY TO ADEQUATELY CONVEY FLOW. DETERMINATION SHALL BE MADE BY AND IN THE PRESENCE OF BUREAU OF CONTRACT ADMINISTRATION PERSONNEL. IF THE EXISTING LATERAL IS FOUND TO BE DEFICIENT, IT SHALL BE REPAIRED OR LINED AS NECESSARY OR ABANDONED AND A NEW LATERAL, AS DETAILED BY ICA, SHALL BE CONSTRUCTED.
5. HOUSE CONNECTION RE-CONNECTION: PRIOR TO BUREAU OF CONTRACT ADMINISTRATION APPROVAL FOR PLACEMENT OF SIDEWALK, CURB AND GUTTER OR PAVEMENT, THE HOUSE CONNECTION AT STA \_\_\_+\_\_\_ SHALL BE CCTV'D TO DETERMINE SUFFICIENCY TO ADEQUATELY CONVEY FLOW. DETERMINATION SHALL BE MADE BY AND IN THE PRESENCE OF BUREAU OF CONTRACT ADMINISTRATION PERSONNEL. IF THE EXISTING LATERAL IS FOUND TO BE DEFICIENT, IT SHALL BE REPAIRED OR LINED AS NECESSARY OR ABANDONED AND A NEW LATERAL, AS DETAILED BY ICA, SHALL BE CONSTRUCTED. IF THE EXISTING HOUSE CONNECTION LATERAL WITHIN THE PUBLIC RIGHT-OF-WAY IS 4-INCH DIAMETER, IT SHALL BE REPLACED WITH 6-INCH DIAMETER PIPE.
6. RESURFACE SEWER TRENCH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK). **OR**

7. ALL SEWER TRENCH RESURFACING SHALL BE \_\_\_\_" AC ON \_\_\_\_" CMB.
8. ALL SEWER MANHOLES SHOWN HEREON TO BE ADJUSTED TO GRADE SHALL BE ADJUSTED TO FINISHED GRADE IN ACCORDANCE WITH STANDARD PLAN S-137.

***STORM DRAIN CONSTRUCTION ADDITIONAL NOTES: (use if applicable)***

1. WHERE THE STORM DRAIN IS TO BE PLACED WITHIN A FILL, THE CONTRACTOR SHALL FIRST COMPACT THE FILL A MINIMUM OF 3- FEET ABOVE THE TOP OF PIPE BEFORE TRENCH EXCAVATION TO LAY PIPE.
2. TRENCH BACKFILL FOR ALL STORM DRAINS CONSTRUCTED IN DRAINAGE EASEMENTS SHALL BE MECHANICALLY COMPACTED TO A RELATIVE DENSITY OF 90%.
3. PROTECTION BARS SHALL BE INSTALLED ON ALL SIDE OPENING CATCH BASINS UNLESS INDICATED OTHERWISE ON PLAN.
4. COMPLY WITH ALL PROVISIONS OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT PERMIT \_\_\_\_\_ (Permit No.) ON FILE IN THE CITY ENGINEER'S OFFICE (District Office address). (Use if the work involves connection to a County storm drain. The Permittee or his representative needs to apply for a County Permit and supply a copy to the District Office).
5. LOCATIONS OF EXISTING HOUSE CONNECTION SEWERS SHOWN HEREON ARE APPROXIMATE. IF INTERFERENCE IS ENCOUNTERED, REMODEL THE HOUSE CONNECTION IN CONFORMANCE WITH THE APPLICABLE DETAIL ON STANDARD PLAN S-111-0.
6. TRENCH RESURFACING SHALL BE \_\_\_\_" AC ON \_\_\_\_" CMB.
7. THE CONTRACTOR SHALL VERIFY THE ELEVATION OF ANY SUBSTRUCTURE INDICATED WITH AN ASTERISK (\*) AND SHALL SECURE CLEARANCE OF THE PRIVATE ENGINEER BEFORE PROCEEDING WITH INSTALLATION OF THE PIPE.
8. APWA STANDARD PLANS FOR CONSTRUCTION PER BUREAU OF ENGINEERING SPECIAL ORDER NO. 007-0701, DATED JULY 16, 2001.

9. SPACE BETWEEN THE BACK OF SIDE OPENING CATCH BASINS AND EXISTING SIDEWALK, IF LESS THAN 2 FEET, SHALL BE FILLED WITH 3" CONCRETE SIDEWALK PLACED MONOLITHICALLY WITH THE TOP SLAB OF THE CATCH BASIN.

***STRUCTURAL CONSTRUCTION ADDITIONAL NOTES: (use if applicable)***

**GENERAL:**

1. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DIMENSION OF ALL BLOCKOUTS, PADS, SLEEVES, OPENINGS, EMBEDDED OR ATTACHED ITEMS. PIPES WITH WATERSTOPS SHALL BE CAST-IN-PLACE.
2. THE STAMPED SET OF PLANS AND SPECIFICATIONS SHALL BE KEPT AT THE JOB SITE AND UPDATED WITH RECORD INFORMATION. THE SET SHALL BE AVAILABE TO THE INSPECTOR, BUILDING OFFICIAL OR ENGINEER AT ANY TIME. THE CONTRACTOR SHALL NOT DEVIATE FROM THE STAMPED SET OF PLANS AND SPECIFICATIONS WITHOUT OFFICIAL APPROVAL.

**CONCRETE:**

1. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE \_\_\_\_\_ PSI.
2. CEMENT SHALL CONFORM TO ASTM C150, TYPES IP, II OR V, UNLESS OTHERWISE NOTED.
3. CONTINUOUS INSPECTION SHALL BE PROVIDED BY REGISTERED DEPUTY INSPECTOR FOR CONCRETE, WHERE DESIGN STRENGTH EXCEEDS 2,500 PSI.

**REINFORCING STEEL:**

1. BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE \_\_\_\_\_.

2. DIMENSIONS TO REINFORCING BARS ARE BAR CENTERLINES, UNLESS NOTED OTHERWISE. BAR COVER IS CLEAR DISTANCE BETWEEN BAR AND THE CONCRETE SURFACE.
3. MINIMUM BAR COVERS FOR CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
  - a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
  - b. CONCRETE EXPOSED TO WEATHER (NORMAL ENVIRONMENT):  
No. 4 THROUGH No. 18 BARS.....2"
  - c. CONCRETE NOT EXPOSED TO WEATHER (NORMAL ENVIRONMENT): No.4 THROUGH No.18 BARS.....1 ½"

MASONRY:

1. UNLESS OTHERWISE SPECIFIED ON PLANS, BLOCKS SHALL BE HOLLOW, LOAD BEARING CONCRETE UNITS, CONFORMING TO ASTM C90, GRADE 'N',  $f'm = 1,500$  PSI MINIMUM.
2. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE DIVISION OF THE LOS ANGELES BUILDING CODE, LATEST EDITION.
3. ALL CELLS WITH REINFORCEMENT BARS SHALL BE FILLED SOLID WITH GROUT.
4. MASONRY MORTAR SHALL CONFORM TO ASTM C270, TYPE 'M' OR 'S'. MINIMUM MORTAR STRENGTH SHALL BE 2,000 PSI.
5. GROUT SHALL ATTAIN A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,000 PSI.
6. UNLESS NOTED OTHERWISE, DEVELOPMENT LENGTH OR SPLICE LENGTH FOR STEEL REINFORCEMENT SHALL BE MINIMUM 48 BAR DIAMETERS.
7. WHERE THE STORM DRAIN IS TO BE PLACED WITHIN A FILL, THE CONTRACTOR SHALL FIRST COMPACT THE FILL A MINIMUM OF 3- FEET ABOVE THE TOP OF PIPE BEFORE TRENCH EXCAVATION TO LAY PIPE.