

APPROVED  
JUN 06 2018

BOARD REPORT

BOARD OF RECREATION  
AND PARK COMMISSIONERS

NO. 18-110

DATE June 6, 2018

C.D. 15

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: KEN MALLOY HARBOR REGIONAL PARK - SYNTHETIC SOCCER FIELD  
AND WALKING PATH (PRJ20761) (W.O. #E170384F) PROJECT - FINAL  
ACCEPTANCE

AP Diaz	_____	V. Israel	_____
*R. Barajas	<u>DP</u>	S. Pifa-Cortez	_____
H. Fujita	_____	N. Williams	_____

Rof

M. Shue  
General Manager

Approved X Disapproved \_\_\_\_\_ Withdrawn \_\_\_\_\_

RECOMMENDATIONS

1. Approve the final acceptance of the work performed for the Ken Malloy Harbor Regional Park - Synthetic Soccer Field and Walking Path (PRJ 20761) (W.O. #E170384F) Project, constructed by the Department of Recreation and Parks (RAP) as-needed prequalified on-call vendors, as outlined in the Summary of this Report.
2. Accept the Project work completed under the RAP contract with Byrom-Davey Contractors for the synthetic soccer field, as outlined in the Summary of this Report;
3. Accept the Project work completed under the RAP contract with Commercial Paving and Coatings for the synthetic soccer field, as outlined in the Summary of this Report; and,
4. Authorize the Board of Recreation and Park Commissioners' (Board) Secretary to furnish Byrom-Davey Contractors and Commercial Paving and Coatings a letter of completion for their portion of the work in the subject Project; and,
5. Authorize the release of retention to Byrom-Davy, in the amount of Fifty-One Thousand, Sixty-Eight Dollars and Ninety Cents (\$51,068.90).

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SUMMARY

The Ken Malloy Harbor Regional Park (Park) is located at 1501 West L Street, Los Angeles, California 90744, in Council District No. 15. On June 1, 2016, the Board approved the final plans for construction of the Ken Malloy Harbor Regional Park - Synthetic Soccer Field (PRJ20761) (W.O. #E170384F) Project (Report No. 16-139). That Report stated that RAP had secured a total of One Million, Two Hundred Fifty Thousand Dollars (\$1,250,000.00) in funding from Proposition K. The scope of work consisted of construction of a synthetic soccer field, and walking paths. Plans for the synthetic soccer field project were prepared by the Department of Public Works, Bureau of Engineering (BOE). Construction of the Project began in August 2016 and the Project was deemed complete on November 13, 2017. The walking paths were completed under a separate phase of the Project.

After the completion of the soccer field by Byrom-Davey Contractors, RAP issued a Notice to Proceed (NTP) to Commercial Paving and Coatings to construct an eight foot (8') wide walking path in the Park from the south end of the north parking lot along Vermont Avenue to the fitness area in the Park, a distance of 336 feet. The exact description of the work is shown on Commercial Paving and Coating's final invoice (Attachment No. 2).

BOE and the Department of Public Works, Bureau of Contract Administration (BCA) were involved in the construction management and inspection of the Project. Project Management was performed by BOE.

RAP's approved on-call contractor and vendor, Byrom Davey Contractors and Commercial Paving and Coating completed all of the construction work for a total construction cost of One Million, One Hundred Forty-Eight Thousand, Two Hundred Fifty-Three Dollars (\$1,148,253.00). The breakdown of the total construction cost is as follows:

<b>Vendor/Contractor Name</b>	<b>Base Bid</b>	<b>Change Orders</b>	<b>Total Cost</b>
Byrom-Davey Contractors	\$964,400	\$56,978	\$1,021,378
Commercial Paving and Coatings	\$126,875	\$0	\$126,875
Totals	\$1,091,275	\$56,978	\$1,148,253

Indirect costs (i.e. design, permits, survey, inspection, construction management, project management, etc.) are projected to be Two Hundred Forty-Five Thousand Dollars (\$245,000.00). The total cost of the Project, including direct and indirect costs will not exceed One Million, Three Hundred Eighty-Seven Thousand, Nine Hundred Thirty-Five Dollars (\$1,393,253.00). Therefore, the Project has a shortfall of One Hundred Forty-Three Thousand, Two Hundred Fifty-Three Dollars (\$143,253.00). As this amount is for BOE's in-house labor costs, it will be absorbed by the RAP's and BOE's General Fund,

The BOE Program Manager has reviewed BCA's Statement of Completion, As-Built Drawings, (Attachment 3) and the project as constructed, and concurs that RAP has completed the construction of the Project and that the quality of the work is satisfactory.

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### TREES AND SHADE

As part of the Project, five (5) dead trees were removed to make room for the synthetic soccer field and the walkway. The Proposition K funds for the Project only allow for the scope of work identified in the grant. No shade trees or shade structures were included in the grant scope of work; however, there are shade trees next to the adjacent fields.

### FISCAL IMPACT STATEMENT

The construction and indirect costs for the soccer field and walking path were funded entirely with Proposition K funds and by RAP's and BOE's General Fund. The funding shortfall will be covered by RAP's and BOE's General Fund, inasmuch as it is for Department of Public Works, Bureau of Engineering's in-house labor costs.

The annual maintenance cost of the synthetic soccer field and walking path will not increase the annual maintenance cost of the park.

This Report was prepared by Richard Campbell, BOE Architectural Division; Neil Drucker Proposition K – Program Manager, and Cathie Santo Domingo, RAP Superintendent, Planning, Maintenance and Construction Branch.

### LIST OF ATTACHMENT(S):

1. Board Report No. 16-139 – Approval of Final Plans
2. Commercial Paving & Coating – Final invoice dated 8/8/17
3. As-Built Drawings
4. Change Order Log

APPROVED  
06-01-2016

BOARD OF RECREATION  
& PARK COMMISSIONERS

BOARD REPORT

NO. 16-139

DATE June 01, 2016

C.D. 15

**BOARD OF RECREATION AND PARK COMMISSIONERS**

SUBJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD (PRJ20761) (W.O. E170384F) – APPROVAL OF FINAL PLANS; EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PURSUANT TO ARTICLE III, SECTION 1, CLASS 3 (6), CLASS 11 (3, 6) OF THE CITY CEQA GUIDELINES

AP Diaz	<u>✓</u>	V. Israel	_____
<i>for</i> R. Barajas	<u>USD</u>	K. Regan	_____
H. Fujita	_____	N. Williams	_____

[Signature]  
General Manager

Approved ✓

Disapproved \_\_\_\_\_

Withdrawn \_\_\_\_\_

RECOMMENDATIONS

1. Approve the final plans, substantially in the form on file in the Board Office, for the Ken Malloy Harbor Regional Park Synthetic Soccer Field (PRJ20761) (W.O. #E170384F) project (Project); and,
2. Find that the proposed project is exempt from the California Environmental Quality Act (CEQA).

SUMMARY

In June 2013, the Department of Recreation and Parks (RAP) was awarded a Proposition K 8<sup>th</sup> Cycle Competitive Grant to design and construct a synthetic soccer field, walking paths, and fencing at the Ken Malloy Harbor Regional Park. The Project is located at 25820 Vermont Avenue, Harbor City, California 90744.

The proposed Project is the construction of the synthetic soccer field and perimeter fencing. The remaining component of the competitive grant, walking paths, will be constructed in a future phase.

Department of Public Works, Bureau of Engineering (BOE), Architectural Division prepared the plans and specifications, and obtained all the necessary permits for the Project. The plans and specifications provide for the following scope of work: installation of a synthetic soccer field in an existing open space informally used as a soccer field and installation of perimeter fencing.

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The synthetic turf area is approximately 325 feet by 177 feet. It will integrate water shedding features, which will allow the field to drain quickly after rain events and improve the overall drainage in the park.

The project is proposed to be constructed through RAP's pre-qualified on call synthetic field contract. The on-call contract includes construction, retrofit, maintenance, and repairs of synthetic turf. BOE will provide construction management services for RAP in the construction of these improvements.

Approved project funds are available for the construction work in the following fund and accounts:

<u>Funding Source</u>	<u>Fund/Dept./Acct No.</u>
Proposition K Year 11	43K/10/10KM13
Proposition K Year 17	43K/10/10LM13

### TREES AND SHADE

The Proposition K funds for the Project only allow for the scope of work identified in the grant. No shade trees or shade structures were included in the grant; however, there are shade trees next to the adjacent fields.

### ENVIRONMENTAL IMPACT STATEMENT

RAP Environmental Staff has determined that the subject project will consist of construction and location of limited numbers of new structures that are accessory (appurtenant) to existing institutional facilities, including fences and play areas, and therefore, is exempt from the provisions of the CEQA pursuant to Article III, Section 1, Class 3 (6), Class 11 (3, 6) of the City CEQA Guidelines. A Notice of Exemption (NOE) was filed with the Los Angeles City Clerk and the Los Angeles County Clerk on June 20, 2013. It was also determined that this project and the environmental conditions of the site have not substantially changed since the previous evaluation. Therefore, no additional CEQA documentation is required.

### FISCAL IMPACT STATEMENT

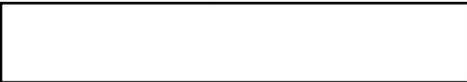
Funding for the design and construction of the project is provided by Proposition K – L.A. for Kids Program Competitive funds. The assessments of the future operations and maintenance costs have yet to be determined and would be addressed in future budget requests.

This report was prepared by Richard Campbell, Project Manager, Recreational and Cultural Facilities Program, BOE. Reviewed by Neil Drucker, Program Manager, Recreational and

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Cultural Facilities Program, BOE; Deborah Weintraub, Chief Deputy City Engineer, BOE; and Cathie Santo Domingo, Superintendent, Planning, Construction and Maintenance Branch.



Attachment 2

# INVOICE



P.O. Box 65557  
Los Angeles, CA 90065

License # 475564

Office 323-256-1331  
Fax - 323-256-2273

INVOICE NO. 1708025  
INVOICE DATE 08/08/2017  
CLIENT I.D. 61906  
TERMS Upon Receipt  
DUE DATE 08/08/2017

Job 41714

**DEPT. OF RECS. & PARK  
VALLEY REGION HEADQUARTERS  
6335 WOODLEY AVE  
VAN NUYS  
CA 91406**

**25820 S. VERMONT AVE./LOS ANGE**

SALES PERSON: 104 - RICK KING

*Description* *Amount*

NOTICE TO PROCEED - KEN MALLOY HARBOR REGIONAL PARK -  
HANDICAP PARKING AND ADA PATH OF TRAVEL - PARK FACILITY  
CONSTRUCTION PROJECT (PRJ20761)/E170384A) - CONTRACT NO. 3467  
SERVICE DATES: 7/5/17 - 8/5/17

HANDICAP PARKING AND ADA PATH OF TRAVEL: 126,875.00

1. SAW CUT AS NEEDED
2. REMOVE PORTION OF EXISTING CONCRETE CURB AT PARKING LOT
3. REPAVE ASPHALT AREA APPROX (35X24) TO ESTABLISH NEW ADA PARKING WITH SIGNAGE AND STRIPING
4. REMOVE SECTION OF LAWN AREA FROM PARKING LOT TO PLAY AREA FOR NEW ADA PATH OF TRAVEL (336' X 8')
5. INSTALL 4" C.M.B. TO NEW PATHWAY AND COMPACT
6. SET REBAR #4 18" ON CENTER EACH WAY, FORM, AND POUR NEW PATHWAY WITH 5 1/2" THICK CONCRETE
7. SET REBAR #4, FORM, AND POUR BULKHEADS FOR PORTION OF PATHWAY THAT WILL SPAN THE DRAINAGE CHANNEL (BRIDGE) INCLUDES (2) 8" DRAIN PIPES IF NEEDED FOR DRAINAGE
8. FURNISH AND INSTALL HANDRAILS ON BOTH SIDES OF BRIDGE (24' X 8')
9. REGRADE SIDES OF NEW PATHWAY SO NO WATER IS TRAPPED.
10. REMOVE & HAUL AWAY (3) LARGE PINE TREES AND GRIND STUMP 8" BELOW FINISH SURFACE
11. REPLACE SLEEVE & ADJUST EXISTING IRRIGATION SYSTEM THAT WILL ACCOMMODATE NEW PATHWAY, ALSO RE-GRADE SLOPES, RE-SOD

**Please Pay This Amount** \$126,875.00

**Terms: All invoices are due and payable upon receipt**

**Thank You . . . We appreciate your business.**













LANDSCAPE CONSTRUCTION NOTES

GENERAL

The General Conditions and General Requirements, the latest edition and supplements of the Standard Specifications for Public Works Construction, hereinafter referred to as (SSPWC) adopted by the Board of Public Works and the City of Los Angeles including the City of Los Angeles Department of Public Works SSPWC additions and amendments (Brown Book) shall be made a part of these plans.

Website: http://eng.lacity.org/techdocs/stdplans/s-600/BB2006.pdf

Where conflicts occur between the General Conditions and General Requirements and the Standard Specifications for Public Works Construction, the General Conditions and General Requirements shall take precedence. Where conflicts occur between these Landscape Construction Notes and the SSPWC, these LANDSCAPE CONSTRUCTION NOTES shall take precedence.

Precedence of Contract Documents shall be in accordance with Article 7 of the General Conditions.

Subsections included within these LANDSCAPE CONSTRUCTION NOTES modify or add to the corresponding subsection (by number) of the SSPWC, latest edition with current yearly supplements; where options for materials and/or methods appear in the SSPWC, the option listed hereon shall be used.

This improvement consists only of work called for on these plans.

PLANS AND SPECIFICATIONS

The General Contractor shall be responsible for issuing a complete set of plans and specifications to all Sub-Contractors.

Indicates approvals or submittals, including items to be turned over at the pre-final. All approvals and submittals shall be transmitted to the Project Manager.

Indicates required field inspections with the Bureau of Contract Administration (BCA) Inspector and the Project Manager. Notify all party's three (3) days prior to the required inspection.

SCHEDULE OF WORK

The Contractor shall submit a Schedule of Work for approval to the Project Manager prior to the commencement of work. The Project Manager, Contractor and Department Maintenance Personnel shall coordinate the Contractor's schedule of work with ongoing Department maintenance of the facility outside the work area and the Contractor's maintenance of the area within the work area, as defined in the maintenance portion of the Landscape Planting Section. The Contractor shall schedule all work in accordance with the General Requirements Article 18. The work area shall be as defined on the Title Sheet, or as indicated on the Plans by means of a contract limit line.

JOB START MEETING

The Contractor shall schedule a Job Start Meeting with the Project Manager after receipt of the Notice To Proceed. This meeting shall include the following participants: the Project Manager, Bureau of Contract Administration (BCA) Inspector, Landscape Architect, and Region Maintenance personnel, prior to the commencement of meeting to review the content of the plans and discuss the coordination of the project with the Department's operations at the project site. The pre-construction meeting can be held at the same time as the Job Start Meeting at the Contractors discretion.

INSPECTIONS

All work and materials are subject to inspection and approval by the Project Manager. Any work done without proper inspection will be subject to rejection. As indicated in Section 2-11 of the Standard Specifications for Public Works Construction.

The Contractor shall notify the Bureau of Contract Administration (BCA) Inspector and Project Manager three (3) days prior to inspection of the following for approval:

1. ROUGH GRADING: When forms have been set, to approve alignment. Offsets or vertical controls shall be verifiable in the field, or be provided in grade sheet form, and submitted to the Project Manager for approval prior to the inspection.

2. TREE TAGGING: Tagging of 24" box or larger trees at the grower with Recreation and Parks tags. This inspection will be for compliance with the caliper, height and spread requirements given on the plant legend and general health and appearance of plants.

3. ON-SITE PLANT MATERIAL INSPECTION: The inspection of all plant materials under 24" box size at the job site. This inspection will be for compliance with the caliper, height and spread requirements given on the plant legend and to confirm the general health and appearance of plants. The Contractor shall also stake all tree planting locations at this time for approval.

4. IRRIGATION PRESSURE AND COVERAGE TESTS: The pressure test shall take place under the direction of the BCA Inspector. Following the pressure test the entire irrigation system shall be tested for coverage under the direction of the Project Manager. The coverage test shall cycle through each station of the irrigation system from the automatic controller for all new or revised irrigation systems. Existing irrigation systems shall be tested prior to new construction. The BCA Inspector, Project Manager, Contractor and Recreation and Parks Regional maintenance staff shall be notified three (3) days before the scheduled test.

5. FINISH GRADE REVIEW: For all finish grades in planting areas following rolling and prior to turf or landscape planting.

6. PRE-FINAL INSPECTION: Approximately two weeks before the Completion of the Work, the contractor shall schedule a Pre-final Inspection. The Pre-Final Inspection shall be attended by the BCA Inspector, the Project Manager, the Contractor, and invited parties associated with the Project. At this time, a list of items requiring correction or completion before the Final Inspection will be compiled. The following items shall be delivered to the appropriate Department of Recreation and Parks personnel: manufacturers' data, manuals, operating instructions, and keys. NOTE: If play equipment has been installed, the play equipment manufacturer, or a representative of the manufacturer, shall submit in writing, prior to the Pre-Final Inspection, a letter certifying that the play equipment has been installed in compliance with the manufacturer's installation procedures. See Play Equipment Safety Inspection section. The Contractor shall also arrange to have a representative present at the Pre-Final Inspection.

CONTRACT FINAL INSPECTION: Approximately seven (7) days prior to completion of the Pre-final Inspection Correction List Work, the Contractor shall first notify the BCA Inspector and then the Project Manager that he desires a Final Inspection of the Project. During this inspection, the BCA Inspector, the project Manager, the Contractor and other parties concerned only with the contractual requirements of the Work will compile a Final Inspection Correction List, incorporating all items of work and corrections required to complete the Project. This list must be completed with thirty (30) days of the Final Inspection, or a new Final Inspection and Correction List shall be required.

IN-PLANT INSPECTION: Contractor shall be responsible for scheduling all in-plant inspections with the Bureau of Contract Administration plant inspection. In-plant inspection shall be required, but not limited to, the following items:

- 1. Galvanizing
2. Chain link fabric
3. Grates and frames
4. Portland cement concrete & base

FORM OF MATERIALS SUBMITTAL AND SUBSTITUTIONS

The Contractor shall submit appropriate catalog cuts with a corresponding index listing all required items, including but not limited to irrigation equipment, site furnishings, chain link and tubular steel fencing materials, concrete and asphalt mixes, soil amendments, and masonry units specified in the contract plans, schedules or legends. Any proposed deviation from any specified equipment indicated in any portion of the plans and specifications shall be included in the Materials Submittal. Deviations from the specified equipment or materials shall be accompanied by a reasonable written justification for the proposed change. Substitutions are only allowed within thirty days after the Notice to Proceed date.

CONTRACTOR shall make substitution submittals in accordance with Article 11 of the General Requirements.

RECORD DRAWINGS (AS-BUILTS) SUBMITTALS

Record drawings shall reflect any changes made to the plans or specifications during the progress of the work as a result of addenda, change orders or adjustments due to field conditions or plan clarification. They shall also indicate any additional information discovered during the progress of construction that was not a part of the contract documents. All deviations from the specified depth at which materials are constructed shall be shown on the record drawings. Record all appropriate as-built information on the record drawings in red ink. As-built information shall include but not be limited to drain lines, valve locations, mainline locations and mainline wire installed separately from mainline. The record of each trade shall be made on the plan sheets for each trade as provided in the original plan set. The Contractor shall be responsible for coordinating all sub-Contractors work and shall produce a complete record of all installations, which shall be kept on the job site and updated daily during construction. The project Inspector shall review the record drawings monthly before approving the Contractor's payment request and shall report any discrepancies to the Project Manager. At the completion of the Work and prior to final inspection, the Contractor shall submit signed 'as-built' blue-line prints to the Project Manager at the Operational Final Inspection, prior to the City's acceptance of the Contract Work.

DEPARTMENT OF PUBLIC WORKS STANDARD PLANS: The following Department of Public Works Standard Plans are to be included as a part of these plans:

Table with 2 columns: NUMBER, TITLE. Includes items like S-251-1 Pipe Laying in Trenches, S-351-1 Side Opening Catch Basins, S-430-1 Contraction, Expansion & Weakened Plane Joints in Concrete Pavement.

SSPWC 2006 Edition of the Additions and Amendments to the SSPWC website: http://eng.lacity.org/techdocs/stdplans/s-600/s61028.pdf

UNDERGROUND SUBSTRUCTURES

The construction plans provided to the Contractor will show existing on-site underground substructures to the extent of the Department's records. Service lines from other public utilities, including the Department of Water and Power shall be located by notifying UNDERGROUND SERVICE ALERT at 1 - (800) 422-4133, prior to commencing any excavation.

TREE PROTECTION

All trees that occur within the area of work, as shown on the plans, and NOT specifically designated for removal, shall be protected by the following means:

ANY FAILURE BY THE CONTRACTOR TO ADHERE TO THE REQUIREMENTS SPECIFIED BELOW WILL RESULT IN THE SUSPENSION OF ALL CONSTRUCTION ACTIVITIES, TO BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF OR PAYMENT FOR ANY TREES DAMAGED THROUGH NON-COMPLIANCE WITH THESE SPECIFICATIONS. THE MONETARY OR REPLACEMENT VALUE OF IMPACTED TREES WILL BE DETERMINED BY A RECREATION AND PARKS (RAP) ARBORIST OR BY A RAP APPROVED ARBORIST.

- 2. Defining the Tree Protection Zone (TPZ) - The radius ( not the diameter ) of the TPZ, measured from the outside of the tree trunk, shall be calculated according to the following: (a) Single trunk trees - multiply the trunk diameter in inches, measured 4.5' above grade, by 1.5 feet. (b) Multi trunk trees - multiply the sum of the diameters of all trunks in inches, measured 4.5' above grade, by 1.5 feet. (c) Palm trees - 5' from the base of the trunk.
3. Beyond the TPZ, the contractor shall also be responsible for protecting all trees within the boundaries of the construction zone, including vehicular access areas, lay down areas, and any other areas impacted by construction activities. Any damage to trees in these areas shall also be subject to the same monetary or replacement requirements specified in #1 above. Any necessary root cutting in this area must be confirmed with either the RAP or other approved arborist. See also the General Conditions for any damage done by the contractor to landscaping or other park amenities that fall outside the boundaries of the construction zone.
4. Within the boundaries of the construction zone (including the TPZ), the contractor shall be responsible for mitigating construction-related dust accumulation on all trees by spraying the trunks, limbs, and foliage with water to a maximum height of 30 feet during the months of April through November, at monthly intervals.
5. Within the TPZ, the contractor shall adhere to the following requirements, including, but not limited to: (a) No stockpiling or storage of any material, debris, or soil. (b) No storage of any construction equipment. (c) No vehicular access. (d) No cutting of roots. (e) No disturbance of soil or grade changes. (f) No objects of any kind to be attached to tree trunks.
6. The contractor shall install a 5' temporary chain link fence with one pedestrian access gate along the boundary of the TPZ. See detail for temporary chain link fence on detail sheet.
7. The contractor shall provide one sign per each 20 lineal ft. of fence bordering the TPZ indicating that fencing shall not be removed. See sign detail.
8. No work is permitted within the TPZ without the approval of: 1) the project landscape architect, 2) the project manager, and 3) RAP Forestry staff. Any work authorized within the TPZ must be done in accordance with the recommendations of a RAP arborist and under the supervision of a Monitoring Arborist. A Monitoring Arborist must be: 1) an ISA Certified Arborist or a Registered Consulting Arborist, with verifiable experience in protecting trees; 2) approved by RAP Forestry.
9. Irrigation to all trees NOT specifically designated for removal shall be kept in operation for the duration of the project. Contractor shall be responsible for hand watering all impacted trees if necessitated by temporary shutdowns to existing irrigation systems. Trees are to be irrigated deeply and infrequently so that soil { [ a c : A s A c S z z i n A s s a q a { A a } c A A A a a A A [ a ] [ a ^ E
10. Upon job completion, contractor shall remove all items installed to protect trees during the construction process.
11. Any of the following Southern California native tree species fall under Ordinance No. 177404 of the Los Angeles Municipal Code: (a) Oaks, including Valley Oak (Quercus lobata), California Live Oak (Quercus agrifolia), or any other tree of the oak genus indigenous to California but excluding Scrub Oak (Quercus dumosa); (b) Southern California Black Walnut (Juglans californica var. californica); (c) Western Sycamore (Platanus racemosa); (d) California Bay (Umbellularia californica). Contractor shall comply with the requirements of the ordinance found at: http://cityplanning.lacity.org/Code\_Studies/Other/ProtectedTreeOrd.pdf

TYPICAL WORK PROCEDURES

All work around any existing oak trees shall follow this work procedures program. This program has been developed to minimize the impacts to each tree and protect them from unscheduled damage.

- 1. All work within a tree's root zone shall be observed by a Recreation and Parks-approved certified Arborist, hired by the contractor.
2. The extent of all work affecting any oaks shall be staked by field survey and reviewed with the Recreation and Parks Arborist prior to construction.
3. Any approved pruning of oaks shall be done by a Recreation and Parks Arborist prior to the start of construction.
4. Hand dig vertical trench at the final cut line to final grade and cleanly cut any roots encountered and seal with approved tree seal. (This procedure will protect the root system from unnecessary damage by excavation equipment).
5. A five (5) foot high chain link fence shall be constructed at the limit of approved work to protect the trees from further unauthorized damage and remain in place until completion of construction.
6. No further work within the root zone shall be done beyond that which was approved, without obtaining written approval from the Recreation and Parks Arborist prior to proceeding.
7. The area within the chain link fence shall not be used for material or equipment storage or parking during construction.

- 8. During construction, the impacted trees should be closely monitored to further mitigate shock symptoms if they occur. The contractor should be prepared to provide temporary water to irrigate and wash the dust from foliage if needed. Contact a Recreation and Parks Arborist if a decline in tree condition is noted.
9. Recreation and Parks Arborists are available to answer any general questions regarding trees in parks.

DAMAGES

If a tree that is designated to remain is removed or caused to be irreversibly damaged as determined by the Recreation and Parks Arborist, install a replacement tree matching in size, quality and variety using an installer designated by the Recreation and Parks Arborist. If an acceptable replacement tree is not available, pay damages to the City for the value of the damaged tree as assessed by the tree value formula in the ISA Guide for Establishing Value of Trees and Other Plants.

IMPLEMENTATION

The qualifications of oak tree consultants shall also be reviewed prior to report preparation. If tree removals are requested, the Street Tree Division reviews applications and passes their recommendations to The Board of Public Works for action. If pruning is required, contact Steve Dunlap, Tree Surgeon Supervisor III, at Central Service Yard, (213) 485-6547.

1. GENERAL EARTHWORK

METHODS

The stamped set of plans shall be on the job site at all times. Geotechnical Engineering Report dated January 15, 2014 shall be a part of these plans.

All grades between contours and/or spot elevations shall be assumed to be straight grades. There shall be no localized depressions or humps, (308-2.1).

The Contractor shall verify all grades and amounts of cut and fill before commencing work.

The area to be filled shall be cleared of all vegetative material, except the existing trees to remain. Protect remaining trees during all construction.

All fill soil shall be compacted to a minimum 90% relative compaction, as determined by ASTM Test Method D1557 as required by the geotechnical report dated January 15, 2014. Structural fill with less than 15% finer than 0.005 millimeters shall be compacted to a minimum 95% of the ASTM Test Method D1557 laboratory maximum density. The Geotechnical Engineer shall determine the compaction test locations in the field. The contractor shall obtain and pay for all soil compaction tests.

Prior to placing fill rip existing subgrade to a depth of 6 inches. Intermix first 6 inches of fill placed with ripped subgrade to eliminate interface lens. Place remaining fill in 8" lifts.

The source of import soil shall be approved by the Project Manager prior to any grading operations. The Contractor shall be required to provide an Agricultural Suitability soil test to establish the suitability of imported soil and that soil concentrations of boron and salinity are within agricultural limits. The Contractor shall, at his own expense, amend the soil according to the recommendations of the soils report. Any import soil shall be inspected and approved at the borrow site by the Geotechnical Engineer and tested prior to import. The Geotechnical Engineer shall be notified a minimum of (3) three working days prior to schedule of import soil to the project site.

Fill material 24 inches, or more, below the finish grade may contain up to 25 percent broken concrete or bituminous paving with maximum dimension of 3 inches of any piece. The top 24 inches shall be compacted to a minimum 95% relative compaction.

The contractor shall be responsible for removal and disposal of all excess soil and debris from the work area, (300-1.3.1, 300-2.6) . No soil or debris shall be disposed of on Recreation and Parks Property without the permission of the Project Manager.

The Contractor shall conform to Section 7-8.1 of the SSPWC latest edition with the current yearly supplements for clean up and dust control.

If any grading operation covered by this section shall extend into or through, or shall be commenced during the period of October 15 to April 15, the contractor shall be required to submit plans of the temporary erosion control methods and devices he proposes to use in connection with the grading operations to be performed during that period. Said plans shall be submitted to the City Engineer for approval on or before September 15 or at least 30 days before any grading is performed during said period.

Grading, excavation, compaction, and soil testing shall be observed by the Geotechnical Engineer of Record.

GEO is the Geotechnical Engineer of Record. Requests for inspection shall be directed to GEO a minimum of (2) two working days prior to inspections.

REVISION DATE: 01/2016 1:20 PM FILE: 0-IN-HOUSE-DESIGN/LANDSCAPE SECTION/GUILLEMER/MALLOY SYN. SOCCER FIELD PROJECT/CS/L001.L004\_GEN\_SPECS.DWG

THE CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING

Professional stamps and title block including: ENGINEERING CITY OF LOS ANGELES, AS-BUILTS, GARY LEE MOORE, PE, ENV SP, ARCHITECTURAL DIVISION, ARCHITECT: JANE ADRIAN, L.C. NO. 9880, DESIGNED BY: GUILLERMO BARRAGAN, DRAWN BY: GUILLERMO BARRAGAN, CHECKED BY: JANE ADRIAN, APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT, LANDSCAPE ARCHITECT, LICENSE NO. 3940, SIGNATURE, REVIEW DATE, DATE, BUILDING NO. XX/XX, INDEX NO. -

STORM WATER POLLUTION CONTROL

All construction works or activities due to site development and redevelopment, and applicable linear underground/overhead project (LUP) shall have erosion controls and measures as required by the Federal Clean Water Act (CWA). The erosion controls and measures used shall be from approved Best Management Practices (BMPs) conforming with the City of Los Angeles municipal code requirements and/or the California Construction General Permit Order 2009-0009-DWQ adopted by the State Water Board Resources Control Board (SWRCB), whichever is applicable. These erosion controls and measures are in addition to the hydrology report, excavation support, the dewatering plan, the emergency plan or the equipment, and all other requirements as required by the Grading and/or Building Permit or from the other local governing authorities, or the recommendations provided in Geotechnical or Soil Report by the Geotechnical or Soil Engineer, or from the Standard Specifications of Public Works as amended by BOE Brown Book, or the Project Documents. Should any conflict occur, the most stringent requirements shall govern. The BMPs shall include, but not limited to, erosion and sediment control, tracking control, wind erosion control, non-storm water control, waste management and material pollution control, and post construction storm water control. No storm water discharges and authorized non-storm water discharges shall contain pollutants that cause or contribute to an exceedance of any applicable water quality objective or water quality standards. The BMPs shall also conform to the Minimum Storm Water Requirements as specified herein and with the best management practices as specified in California Stormwater Best Management Practice Handbook Portal: Construction (or known as Construction Best Management Practice Handbook, http://www.cabmphandbooks.com) published by the California Storm Water Quality Association (CASQA); Development Best Management Practices Handbook, Part A-Construction Activities, latest edition (http://www.lastormwater.org/siteorg/download/techman.htm), published by Watershed Protection Division of Bureau of Sanitation of the Department of Public Works of the City of Los Angeles; and the Wet weather Erosion Control Plan (http://bca.ci.la.ca.us/index.cfm) approved and adopted by the Board of Public Works per applicable Sections 61.02, 61.09, 64.72, 91.106 of the Los Angeles Municipal Code (LAMC) and other related City ordinances. No discharge of any hazardous substance shall be allowed. All Minimum Storm Water Requirements and/or the BMPs shall be incorporated or attached to the construction plans, the building plans and/or the grading plans and submitted to the appropriate jurisdictional City department(s) and the governing authorities for review and approval and to be used to complete all necessary work permits. (Note: Since the runoff from any construction site in private development can enter the public right of ways and City's storm drain system, review and approval of the BMPs by the Los Angeles Department of Building and Safety and the Bureau of Engineering of Department of Public Works shall also be required. If storm water runoffs may enter neighboring area under jurisdiction of other local governing authority, additional approval from such authority shall also be required.)

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Contractor is responsible for the payment of the Notice of Intent (NOI) to the State of California and the development of the Storm Water Pollution Prevention Plan (SWPPP) document, which is to be prepared by a Qualified SWPPP Developer (QSD). This document is to be submitted to the City Engineer/Project Manager for approval and submission to the State Water Resources Control Board. The SWPPP must describe the erosion control practices to be implemented during construction and the selection and implementation of appropriate BMPs to account for site-specific and seasonal conditions. Contractor shall draft the SWPPP before start of construction and submit it to the Engineer for approval, no construction work shall commence without an approved SWPPP. The document is to remain on the construction site and all of the measures stated in the document are to be implemented during the duration of construction. The QSD shall be responsible for creating, revising, overseeing and implementing the SWPPP and the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

2. CONCRETE

All concrete construction shall be as specified in this Section unless specified otherwise in these Landscape Construction Notes.

MATERIALS

BASE MATERIAL

Base material for Portland Cement concrete shall be (CMB) crushed miscellaneous base, (200-2.4).

CONCRETE SPECIFIED BY CLASS

Placed concrete shall be class 520-C-2500, maximum 4 inch slump. Pumped concrete shall be class 560-E-2500, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The receipt shall be given to the BCA Inspector, (201-1.1.2).

PORTLAND CEMENT

All cement shall be Type II, low alkali Portland cement conforming to ASTM C150 (201-1.2).

CONCRETE SPECIFIED BY CLASS

Placed concrete shall be class 520-C-2500, maximum 4 inch slump. Pumped concrete shall be class 560-E-2500, maximum 6 inch slump. A complete delivery receipt shall be required for each truckload of concrete delivered. The receipt shall be given to the BCA Inspector, (201-1.1.2).

PORTLAND CEMENT

All cement shall be Type II, low alkali Portland cement conforming to ASTM C150 (201-1.2).

AGGREGATES

The aggregates for all concrete construction shall be fractured face aggregates obtained from a quarry in the San Gabriel River drainage area only and shall be certified non-reactive by an approved testing laboratory as approved by the Bureau of Contract Administration, (201-1.2.2).

COMBINED AGGREGATE GRADINGS

Combined aggregate gradings for Portland Cement shall be as specified under this section, (201-1.3.2).

EXPANSION JOINTS

Expansion joints shall use a 3/8 inch thick asphalt impregnated felt expansion joint.

JOINT URETHANE SEALANT

When specified, expansion joint material shall be urethane elastomeric sealant for concrete pavement shall be Lithoseal Trafficalk-G3 by L. M. Scofield Company, or an approved equal, (201-3). Color to match concrete.

EXPANSION JOINT PREMOLDED ASPHALTIC JOINT MATERIAL

When specified, expansion joint material shall be 1/4 inch thick asphaltic joint material as manufactured by Sealtight Co., or an approved equal, (201-3).

DOWELS (EXPANSION AND END-OF-POUR JOINTS)

Shall be grade 40 or grade 60 billet steel, (201-2.2).

END OF POUR JOINTS

End of pour joints shall be 1/4 inch thick asphaltic joint material as manufactured by Sealtight Co., or an approved equal, (201-3).

COLORED CONCRETE ADMIXTURES

Admixtures for colored concrete shall be Lithochrome Color Hardener by L.M. Scofield Company (800) 800-9900, or Davis Mix-in Colors for concrete by Davis Colors, (800) 800-6856, or an approved equal.

METHODS

EXPANSION JOINTS

Shall be placed against previously constructed concrete structures or as indicated in the plans (303-5.4.2) and the applicable details.

CONCRETE SURFACE FINISHING

Concrete walks, pads, or mow strips shall have a medium broom finish, unless otherwise noted on the plans. The Contractor shall prepare a minimum three foot by three foot sample for approval by the Project Manager before any concrete is placed, (303-5.5.3). Any sidewalk in the public street right of way constructed as a portion of this contract shall be finished as directed by the BCA Inspector.

COLORED CONCRETE ADMIXTURES

Colored concrete admixtures shall be formulated and mixed according to manufacturer's printed instructions. Calcium chloride set-accelerators shall not be used.

PAVEMENT MARKINGS

Paint for parking stalls and game courts shall be regular dry type non-reflective paint, applied to a wet film thickness of 7 mil. Paint shall be Zone-Loc, Traffic Line Paint, as manufactured by Morton, or an approved equal, in the specified color, (310-5.6 and 210.6)

3. IRRIGATION SYSTEMS

MATERIALS

SOLVENT WELDED PLASTIC PIPE

Schedule 40 PVC plastic pipe shall be used for pipe sizes up to and including 2 1/2 inch diameter on both the discharge and supply side of control valves, (212-2.1.3). Class 200 PVC plastic pipe shall be used for pipe sizes from 3 inch up to and including 6 inch diameter.

RESTRAINED PLASTIC PIPE

For Irrigation main lines, Class 200 PVC pipe shall be used for pipe sizes of 3 inch up to and including 6 inch diameter.

For fire lines, Class 150, DR 18, C900 PVC pipe shall be used for pipe sizes of 4 inch up to and including 10 inch diameter.

DUCTILE IRON FITTINGS FOR RESTRAINED PLASTIC PIPE

Fittings shall be manufactured of ductile iron, Grade 65-45-12 in accordance with ASTM A536. Fittings shall have deep bell push-on joints with gaskets meeting ASTM F477.

GASKET LUBRICANT

Push on fitting joint lubricant shall be non-toxic, odorless, tasteless and shall not support bacteria.

VALVE TO PIPE RESTRAINTS

Valve to pipe restraint shall consist of ductile iron (ASTM A536) grip rings with machined serrations and ductile iron restraint rods. The ring that grips the pipe shall meet the requirements of UNI-B-13-94. The restraint rod nuts shall be made from low alloy steel to AWWA/ANSI C111/A21.11 or ductile iron to ASTM A536.

FITTING TO PIPE RESTRAINTS

Fitting to pipe restraint shall allow the full rating of the pipe on which it is use. Grip rings and restraint structures shall be made of ductile iron to ASTM A536. Grip ring serrations (gripping features) shall be fully machined or cast. Clamp bolts and nuts shall meet or exceed ASTM A307.

PIPE TO PIPE RESTRAINTS

Pipe to pipe restraints shall allow the full rating of the pipe on which it is used. Grip rings and bell rings shall be made of ductile iron to ASTM A536. Grip ring serrations (gripping features) shall be fully machined or cast. Restraint rod nuts shall be of low alloy steel to AWWA/ANSI C111/A21.11. Clamp bolts and nuts shall meet or exceed ASTM A307.

REMOTE CONTROL VALVES

All remote control valves shall be electrically operated with body of cast brass or bronze construction, (212-2.2.4) and installed per details.

CONTROL WIRE

Connection between the automatic controller(s) and the remote control valves shall be made with direct burial 14 gage, AWG-UF, 600 volt, copper wire. Wires shall be provided in the following colors: red, yellow, blue, green, orange, tan, purple, pink, brown, gray, and white.

CONTROL WIRE CONNECTIONS

Control wire connections shall be made with 3-M brand of DBY or DBR Direct Burial Splice kits, or approved equal. The splice kit shall consist of a one-piece malleable plastic bulb body with internal locking fingers, filled with re-enterable gel sealant and a Scotchlok Electrical Spring Connector. Materials shall be as follows:

- Connector shall be a flame retardant PVC insulator with a steel spring and shell within.
Connector shall be a non-crimping system
Tube material shall be clear see-through polypropylene.
Gel material shall be hixotropic calcium poly complex.

Wire sizes and numbers of wires shall be as shown below:

Table with 3 columns: CONNECTOR, COLOR, NO. AND SIZE OF WIRE. Rows include 3M Model DBY (Yellow, Max. 4-12 gage UF wires), 3M Model DBR (Red, Max. 3-14 gage UF wires).

QUICK COUPLING VALVES AND ASSEMBLIES

Quick couplers shall be 1 inch i.p.s., two piece, brass or bronze construction equipped with a cover, unless otherwise specified on plans. The Contractor shall provide one quick coupler key with those swivel for each five quick couplers installed. Contractor shall supply a minimum of one quick coupler key with hose swivel, (212-2.2.6) and shall be installed per details.

VALVE BOXES

Valve boxes shall be of Portland Cement with a cast iron frame and hinged double toggle locking cover, or as specified on plan or in plan details. The inside dimensions of the box shall be 10 1/2 inches by 17 1/4 inches, Model 363 1/2 HFL by Eisel Enterprises Inc., or approved equal. The cast iron cover shall be permanently embossed, "GV" for gate valve, "RCV" for remote control valves, "QC" for quick coupler valves, MV for Master Valves, or FM for Flow Meter. Paint is not acceptable. Contractor shall supply one (1) valve box cover key for each five (5) valve boxes installed. Provide a minimum of two (2) cover keys, (212-2.2.7). Boxes are to be installed per the applicable details.

DOMESTIC WATER LINES FOR DRINKING FOUNTAINS

Install water piping in accordance with the latest edition of the Uniform Building Code and all local ordinances. Prior to allowing human consumption of water from newly installed drinking fountains the contractor shall perform domestic sterilization procedures as indicated in applicable details and meet standards indicated. New drinking fountains shall be turned off or otherwise made inoperable until this testing is successfully accomplished.

Domestic Cold Water Piping ABOVE GRADE shall be installed with ANSI B 16.22 wrought copper fittings. Joints shall be made up with lead-free, nickel bearing alloy solder such as Harris Bridget.

Domestic Cold Water Piping BELOW GRADE shall be installed with ANSI B 16.22 wrought copper fittings. Joints shall be made up with lead-free, nickel bearing alloy solder such as Harris Bridget.

METHODS

EXISTING IRRIGATION SYSTEM REPAIR - GENERAL

The Contractor shall reconstruct any existing irrigation lines that are to remain in service, when they interfere or are damaged by construction. Reconstruction of the irrigation lines shall conform to the applicable sections of the Landscape Construction Notes using all new materials except existing irrigation heads, which may be reinstalled. When modifications to an existing irrigation system are part of the project, the Contractor shall verify the operation of all existing irrigation controllers, remote control valves, quick coupling valves, and irrigation heads prior to the commencement of work. The Project Manager shall be notified, in writing, of any inoperable equipment encountered.

When pipelines run parallel they shall be separated horizontally by a minimum distance of 12". When pipelines cross each other they shall be separated vertically by a minimum distance of 3".

NEW PIPELINE INSTALLATION - GENERAL

No irrigation trenching shall pass closer than eight feet of the base of any tree. No tree root larger than 2" diameter shall be cut without approval of the Project Manager.

No irrigation trenching shall pass closer than eight feet of the base of any tree. No tree root larger than 2" diameter shall be cut without approval of the Project Manager.

COVER OVER MAINLINES:

Maintain 12 inches of cover over all lateral lines.

COVER OVER LATERAL LINES:

Maintain 12 inches of cover over all lateral lines.

Pipe bedding and backfill: bedding shall surround the pipe to one foot above the top of the pipe. Bedding shall be placed in 6 inch lifts. All bedding shall be densified by water jetting. Water jetting shall be sufficient to thoroughly wet bedding material around the pipe, (306-1.2.1). There shall be no rocks over 1/2" in greatest dimension and no organic matter placed in the bedding material. Backfill shall be the material placed above the bedding. Backfill shall be placed in one-foot lifts and densified by water jetting. Jetting shall be continued until backfill collapses and water is forced to the surface, (306-1.3.1). Pipe trenches thoroughly densified by water settling shall have a minimum relative compaction of 85%. There shall be no rocks over 2" in greatest dimension or organic matter in the backfill. Trench areas which exhibit insufficient densification shall be subject to compaction tests as requested by the BCA Inspector or the Project Manager. All such compaction tests shall be at the expense of the Contractor. Additional tests may be

required until the 85% minimum compaction is achieved. Finished trenches shall match finish grades flush with adjacent finish grades. The Contractor shall be responsible for maintaining the trenches flush and smooth until final acceptance of the project. Trenches in existing lawn shall be repaired per method A lawn repair of the Landscape Planting Section of the Landscape Construction Notes.

The maximum trench width shall be two and a half diameters of the pipe.

PIPES AND REMOTE CONTROL WIRING CROSSING UNDER PAVING:

Where irrigation piping crosses a vehicular roadway or other paving having a width of less than 25 feet, a Schedule 40 PVC sleeve which is a minimum of two pipe sizes larger than the piping to pass through it, shall be jacked under the paving at a depth of 36 inches minimum. Where remote control wiring crosses under paving having a width of less than 25 feet, a 3 inch Schedule 40 PVC sleeve shall be jacked under the paving at a depth of 30 inches minimum. All sleeves shall extend 3 feet minimum beyond the edges of paving.

Where irrigation piping crosses a vehicular roadway or other paving having a width greater than 25 feet, a trench shall be excavated across the roadway or paving to accommodate a Schedule 40 PVC sleeve a minimum of two pipe sizes larger than the piping to pass through it, at a depth of 30 inches below the bottom of the paving, as measured from the top of the sleeve. Where remote control wiring crosses under paving having a width greater than 25 feet, a 3 inch Schedule 40 PVC sleeve shall be installed at a depth of 30 inches below the bottom of the paving, as measured from the top of the sleeve. The backfill of the trench shall be a 2 sack cement slurry. The slurry shall extend from the bottom of the trench to within one inch of the bottom of the existing paving. The trench in the existing paving shall be repaired with a like paving material and join the existing paving both horizontally and vertically.

FITTINGS ON MAINLINES:

All outlets from a mainline shall be accomplished with line sized tees with an outlet of the specified size. No saddle tees shall be permitted.

INSTALLATION OF VALVE BOXES

Boxes shall be set flush with existing grade, including sloped areas, and all soil within 12 inches of the perimeter of the box shall be compacted by water settlement as indicated in the trench repair section of this specification. Boxes are to be positioned per details.

LAYOUT OF PIPING

Pipe layout as shown on irrigation plan is schematic. Contractor may route piping in the most expedient manner consistent with the requirements set forth herein, including avoidance of tree roots. Contractor shall adhere to As-Built requirements as shown below.

PLACEMENT OF IRRIGATION HEADS

Note: Irrigation plans are designed, as a minimum standard, for head-to-head coverage. Head locations shall be scaled from center of head symbol directly from the irrigation plan. Accuracy of placement shall be within plus or minus two feet for all rotary heads having a throw of 25 feet or greater; within plus or minus 12 inches for all head types with a throw of under 25 feet. Where heads are located adjacent to paving, the heads shall be placed within three inches of such paving.

INSTALLATION OF IRRIGATION HEADS

Sprinkler heads in lawn areas shall be set flush with finish grade at initial installation and protected during construction. All soil 12 inches from the perimeter of the head shall be compacted by water jetting as indicated in this specification, or set in sand as shown on details.

SPRINKLER HEAD RISER

All plastic sprinkler heads shall be installed on swing joint assemblies as shown on details.

AUTOMATIC CONTROL SYSTEM INSTALLATION

The foundation of the automatic controller shall be per details. Each remote control valve shall have a separate 24 volt control wire from the automatic irrigation controller.

LOW VOLTAGE WIRE CONNECTIONS

Connectors shall be DBY or DBR as manufactured by 3M Corp. Control wires shall be stripped of 1/2 inch insulation, inserted into the electrical spring connector, and the connector twisted in a clockwise direction until the wires are tight. Insert the completed splice into the gel-filled tube, and check visually to confirm that the wire nut has been pushed past the fingers and is seated in the bottom of the tube. Position wires in wire channels and close insulator cover.

CONTROL WIRE

Connection between the automatic controller(s) and the remote control valves shall be made with direct burial 14 gage, AWG-UF, 600 volt, copper wire. Wires shall be color coded as follows:

Table with 5 columns: CONTROLLER WIRE COLOR, CONTROLLER STATION, CONTROLLER STATIONS, CONTROLLER STATIONS, CONTROLLER STATIONS. Rows include RED (1, 11, 21, 31), YELLOW (2, 12, 22, 32), BLUE (3, 13, 23, 33), GREEN (4, 14, 24, 34), ORANGE (5, 15, 25, 35), TAN (6, 16, 26, 36), PURPLE (7, 17, 27, 37), PINK (8, 18, 28, 38), BROWN (9, 19, 29, 39), GRAY (10, 20, 30, 40).

Table with 2 columns: CONTROLLER, TAPE BUNDLE COLOR. Rows include A (RED), B (YELLOW), C (BLUE), D (GREEN), E (WHITE), F (BLACK).

Each exterior controller enclosure shall have a ground rod installed if detailed on controller installation detail.

Wire shall not be taped to mainline (308-5.5). If control wires run in same trench as lateral lines, or are dead headed, wire depth shall be maintained at 24". For installation, see details.

IRRIGATION SYSTEM FLUSHING AND TESTING

The irrigation system shall be flushed in the presence of the BCA Inspector. Flushing shall start with the valve closest to the point of connection and proceed with each consecutive valve toward the valve farthest from the point of connection. Each lateral system shall have each riser capped during the flushing commencing with the riser closest to the valve and proceeding to the farthest riser. After the entire irrigation system has been flushed the system shall be pressure tested in accordance with section 308-5.6 of the SSPWC.

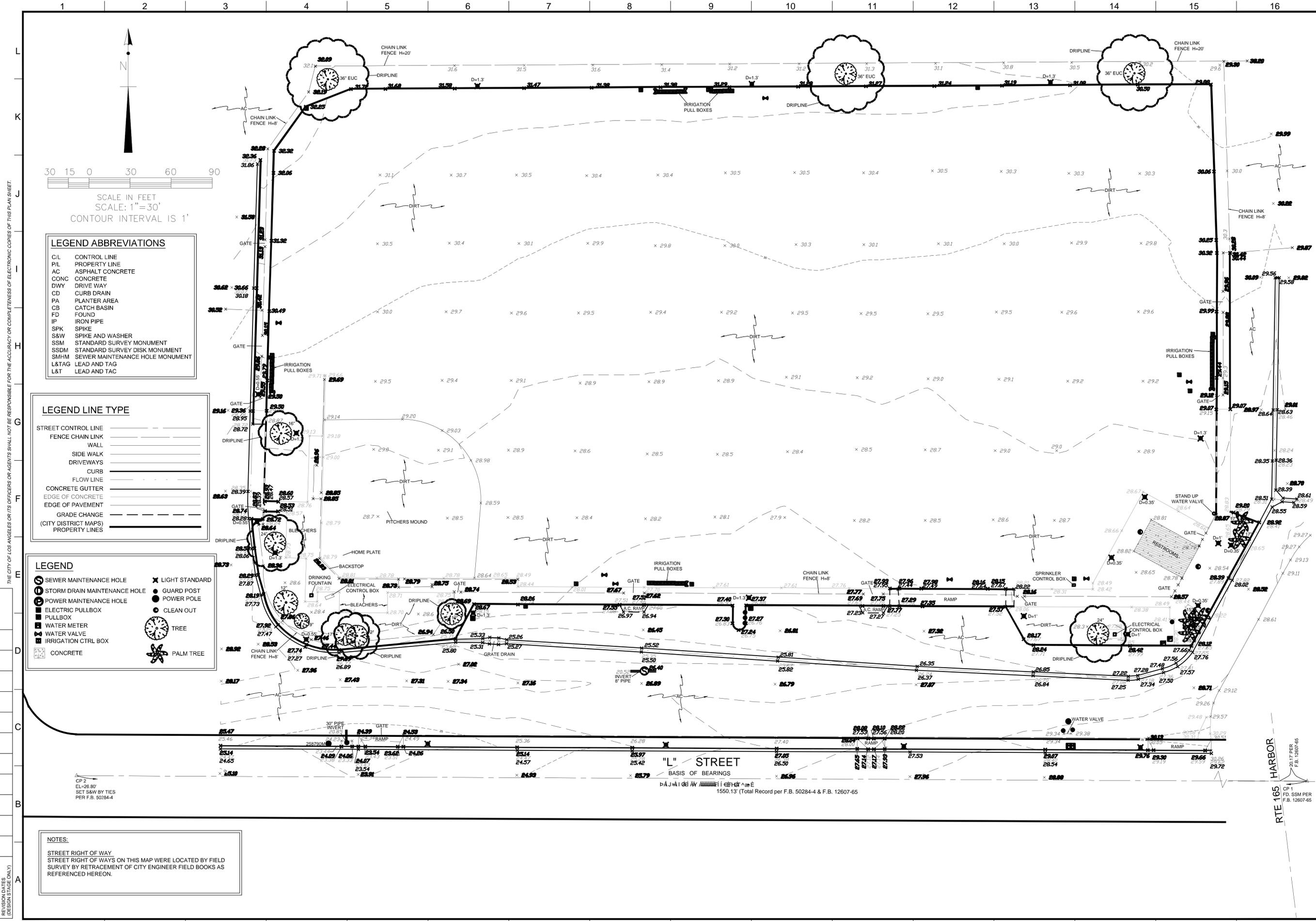
REVISION DATE: 04/2016 1:00 PM FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTIONS\GULLERMO\MALLOY SYN. SOCCER FIELD PROJECT\CD\001\_LOA\_GEN\_SPECS.DWG THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

Vertical sidebar containing: BUREAU OF ENGINEERING logo, ENGINEERING CITY OF LOS ANGELES logo, AS-BUILTS logo, REVISIONS table, LICENSED ARCHITECT logo, GARY LEE MOORE, PE, ENV SP logo, ARCHITECTURAL DIVISION logo, ARCHITECT: JANE ADRIAN, DESIGNED BY: GUILLERMO BARRAGAN, DRAWN BY: GUILLERMO BARRAGAN, CHECKED BY: JANE ADRIAN, APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT, LANDSCAPE CONSTRUCTION NOTES, SHEET 2, PROJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT, ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90710, WORK ORDER NO. E170384A, RAP PRJ20761, DRAWING NO. L002, SHEET 4 OF 24 SHEETS, PLOTTED: 1/29/2016 2:59 PM







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 SCALE IN FEET  
 SCALE: 1"=30'  
 CONTOUR INTERVAL IS 1'

**LEGEND ABBREVIATIONS**

CL	CONTROL LINE
PL	PROPERTY LINE
AC	ASPHALT CONCRETE
CONC	CONCRETE
DWY	DRIVE WAY
CD	CURB DRAIN
PA	PLANTER AREA
CB	CATCH BASIN
FD	FOUND
IP	IRON PIPE
SPK	SPIKE
S&W	SPIKE AND WASHER
SSM	STANDARD SURVEY MONUMENT
SSDM	STANDARD SURVEY DISK MONUMENT
SMHM	SEWER MAINTENANCE HOLE MONUMENT
L&TAG	LEAD AND TAG
L&T	LEAD AND TAC

**LEGEND LINE TYPE**

---	STREET CONTROL LINE
---	FENCE CHAIN LINK
---	WALL
---	SIDE WALK
---	DRIVEWAYS
---	CURB
---	FLOW LINE
---	CONCRETE GUTTER
---	EDGE OF CONCRETE
---	EDGE OF PAVEMENT
---	GRADE CHANGE
---	(CITY DISTRICT MAPS)
---	PROPERTY LINES

**LEGEND**

⊗	SEWER MAINTENANCE HOLE	⊗	LIGHT STANDARD
⊗	STORM DRAIN MAINTENANCE HOLE	⊗	GUARD POST
⊗	POWER MAINTENANCE HOLE	⊗	POWER POLE
⊗	ELECTRIC PULLBOX	⊗	CLEAN OUT
⊗	PULLBOX	⊗	TREE
⊗	WATER METER	⊗	PALM TREE
⊗	WATER VALVE		
⊗	IRRIGATION CTRL BOX		
⊗	CONCRETE		

**NOTES:**  
 STREET RIGHT OF WAY.  
 STREET RIGHT OF WAY ON THIS MAP WERE LOCATED BY FIELD SURVEY BY RETRACEMENT OF CITY ENGINEER FIELD BOOKS AS REFERENCED HEREON.

**BUREAU OF ENGINEERING**

**AS-BUILTS**

DATE: \_\_\_\_\_  
 NO. REVISIONS: \_\_\_\_\_

**DEPARTMENT OF PUBLIC WORKS**

DEBORAH WEINTRAUB, AIA, LEED AP  
 INTERIM CITY ENGINEER

SURVEYOR: ARTURO CORDERO  
 SURVEY DIVISION

DATE: 09-17-2013  
 P.L.S.: 09-26-2013  
 09-30-2013

FIELD SURVEYOR: PAUL BLECHERT  
 DRAWN BY: EDMUNDO ASUNCION  
 CHECKED BY: PAUL BLECHERT  
 APPROVED BY: \_\_\_\_\_

**CITY OF LOS ANGELES**

SHEET TITLE: SITE SURVEY  
 PROJECT: KEN MALLOY HARBOR REGIONAL PARK  
 SYNTHETIC SOCCER FIELD  
 ADDRESS: NW CORNER OF 'L' ST. AND FIGUEROA PL.

WORK ORDER NO. E170384D  
 DRAWING NO. L101

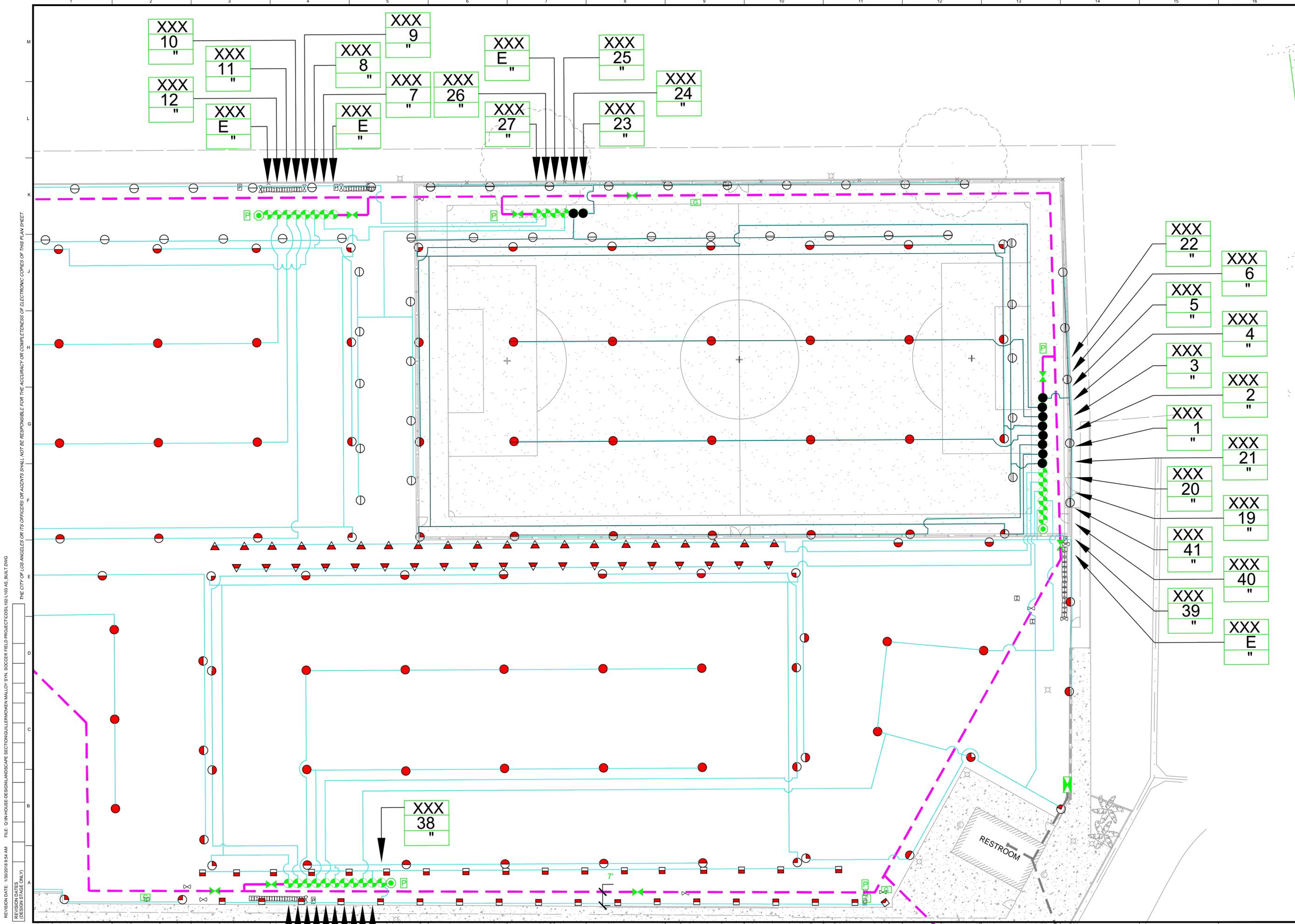
SURVEY NO. 52778  
 INDEX NO. \_\_\_\_\_

CP 1  
 20.17 PER  
 F.B. 12607-65

CP 2  
 EL-26.80  
 SET SAW BY TIES  
 PER F.B. 50284-4

1550.13 (Total Record per F.B. 50284-4 & F.B. 12607-65)

Sheet Version 2.01



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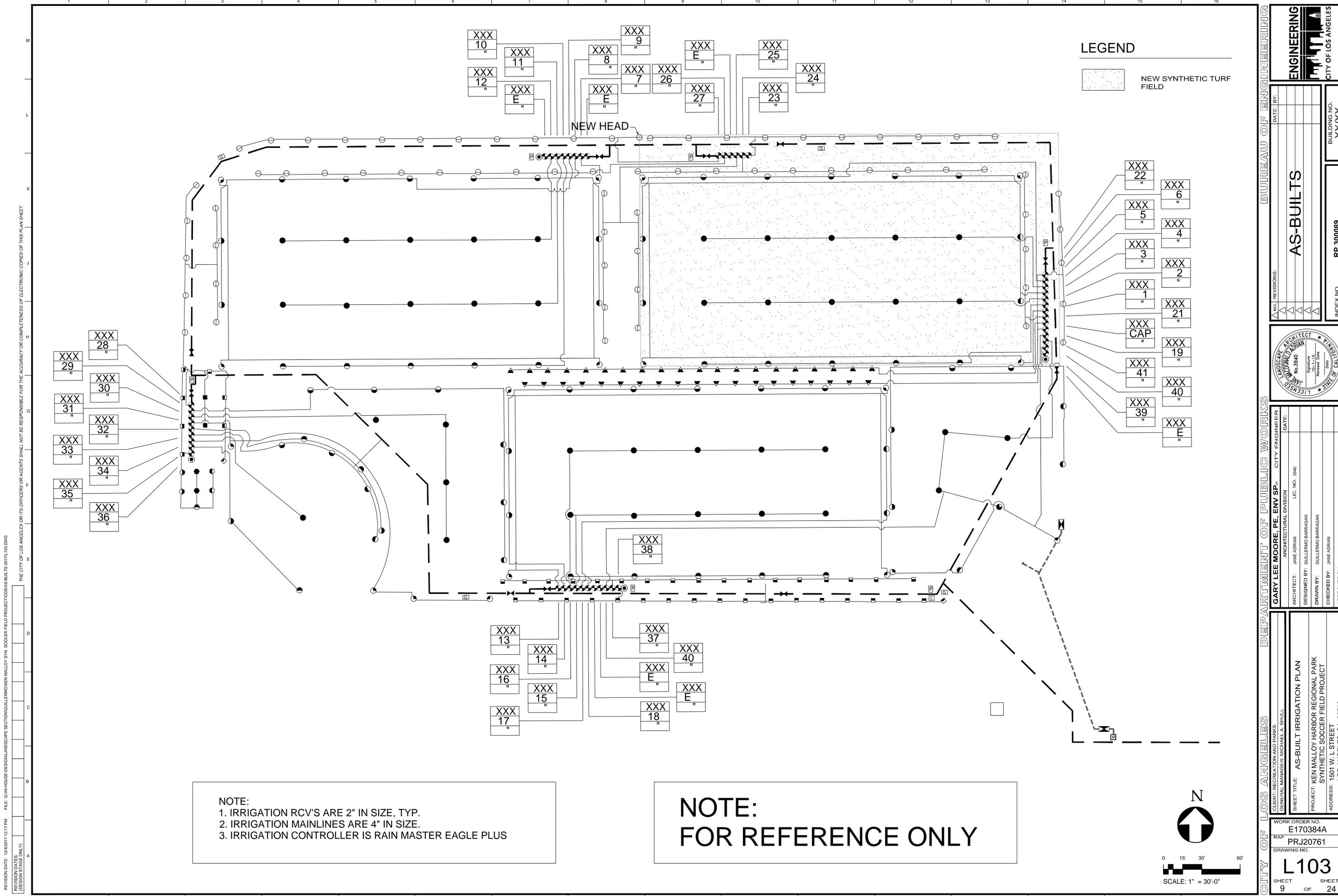
**CITY OF LOS ANGELES**  
 DEPARTMENT OF PUBLIC WORKS  
 GARY LEE MOORE, PE, ENV SP  
 ARCHITECTURAL DIVISION  
 ARCHITECT: JANE ADRIAN  
 LIC. NO. 3940  
 DESIGNED BY: GUILLERMO BARRAGAN  
 DRAWN BY: GUILLERMO BARRAGAN  
 CHECKED BY: JANE ADRIAN  
 APPROVED BY: WAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

**BUREAU OF ENGINEERING**  
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 CITY OF LOS ANGELES  
 BUILDING NO. XXXX  
 INDEX NO. -

**LANDSCAPE ARCHITECT**  
 JANE ADRIAN  
 No. 3940  
 State of California  
 License No. 10-1-15  
 Expired Date

CLIENT: RECREATION AND PARKS  
 GENERAL MANAGER: MICHAELA A. SHULL  
 SHEET TITLE: AS-BUILT IRRIGATION PLAN  
 PROJECT: KEN MALLOY HARBOR REGIONAL PARK  
 SYNTHETIC SOCCER FIELD PROJECT  
 ADDRESS: 1501 W. L STREET  
 LOS ANGELES, CA 90710

WORK ORDER NO. E170384A  
 RAP PRJ20761  
 DRAWING NO.  
**L103**  
 SHEET 8 OF SHEETS 24  
 PLOTTED: 1/30/2018 3:01 PM



**LEGEND**

NEW SYNTHETIC TURF FIELD

**NOTE:**  
 1. IRRIGATION RCV'S ARE 2" IN SIZE, TYP.  
 2. IRRIGATION MAINLINES ARE 4" IN SIZE.  
 3. IRRIGATION CONTROLLER IS RAIN MASTER EAGLE PLUS

**NOTE:**  
 FOR REFERENCE ONLY

N

0 15' 30' 60'

SCALE: 1" = 30'-0"

REVISION DATE: 12/4/2017 12:17 PM FILE: QUN-HOUSE-DESIGN/LANDSCAPE SECTION/GUILLEMOUEN MALLOY SYN. SOCCER FIELD PROJECT/CSS-AS-BUILTS 2017L103.DWG  
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 Sheet Version 2.2

**CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS**

**BUREAU OF ENGINEERING**

**ENGINEERING**

CITY OF LOS ANGELES

CLIENT: RECREATION AND PARKS  
 GENERAL MANAGER: MICHAELA A. SHULL

SHEET TITLE: AS-BUILT IRRIGATION PLAN

PROJECT: KEN MALLOY HARBOR REGIONAL PARK  
 SYNTHETIC SOCCER FIELD PROJECT

ADDRESS: 1501 W. L STREET  
 LOS ANGELES, CA 90710

ARCHITECT: JANE ADRIAN  
 ARCHITECTURAL DIVISION LIC. NO. 3940

DESIGNED BY: GUILLERMO BARRAGAN

DRAWN BY: GUILLERMO BARRAGAN

CHECKED BY: JANE ADRIAN

APPROVED BY: WAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

CITY ENGINEER  
 GARY LEE MOORE, PE, ENV SP  
 ARCHITECTURAL DIVISION LIC. NO. 3940

DATE: \_\_\_\_\_

NO. REVISIONS: \_\_\_\_\_

DATE: \_\_\_\_\_

BUILDING NO. XXXX

INDEX NO. - RP 300089

WORK ORDER NO. E170384A

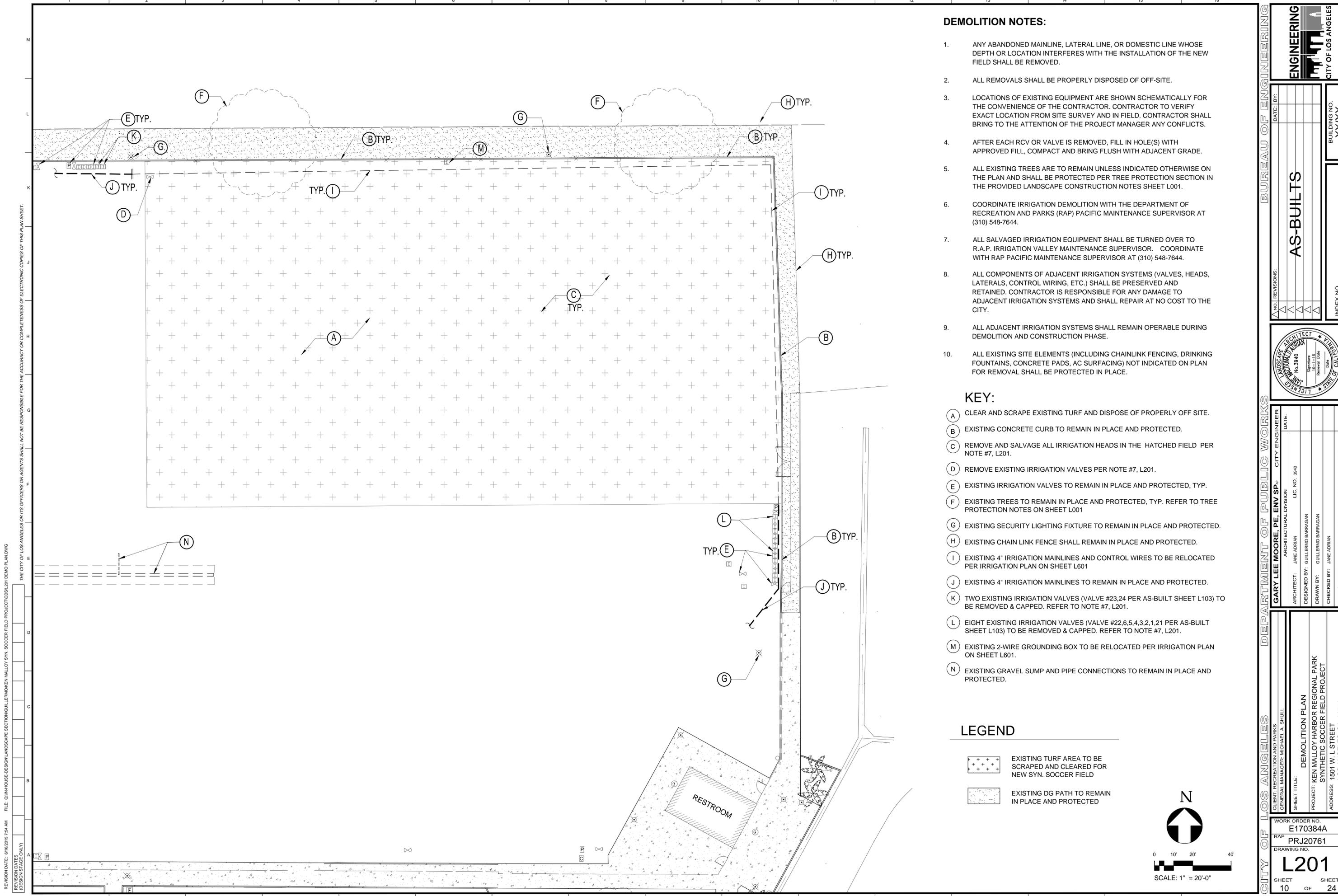
RAP PRJ20761

DRAWING NO.

**L103**

SHEET 9 OF SHEETS 24

PLOTTED: 1/29/2018 1:38 PM



**DEMOLITION NOTES:**

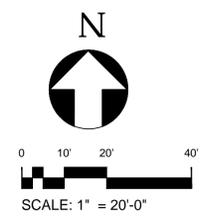
1. ANY ABANDONED MAINLINE, LATERAL LINE, OR DOMESTIC LINE WHOSE DEPTH OR LOCATION INTERFERES WITH THE INSTALLATION OF THE NEW FIELD SHALL BE REMOVED.
2. ALL REMOVALS SHALL BE PROPERLY DISPOSED OF OFF-SITE.
3. LOCATIONS OF EXISTING EQUIPMENT ARE SHOWN SCHEMATICALLY FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR TO VERIFY EXACT LOCATION FROM SITE SURVEY AND IN FIELD. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE PROJECT MANAGER ANY CONFLICTS.
4. AFTER EACH RCV OR VALVE IS REMOVED, FILL IN HOLE(S) WITH APPROVED FILL, COMPACT AND BRING FLUSH WITH ADJACENT GRADE.
5. ALL EXISTING TREES ARE TO REMAIN UNLESS INDICATED OTHERWISE ON THE PLAN AND SHALL BE PROTECTED PER TREE PROTECTION SECTION IN THE PROVIDED LANDSCAPE CONSTRUCTION NOTES SHEET L001.
6. COORDINATE IRRIGATION DEMOLITION WITH THE DEPARTMENT OF RECREATION AND PARKS (RAP) PACIFIC MAINTENANCE SUPERVISOR AT (310) 548-7644.
7. ALL SALVAGED IRRIGATION EQUIPMENT SHALL BE TURNED OVER TO R.A.P. IRRIGATION VALLEY MAINTENANCE SUPERVISOR. COORDINATE WITH RAP PACIFIC MAINTENANCE SUPERVISOR AT (310) 548-7644.
8. ALL COMPONENTS OF ADJACENT IRRIGATION SYSTEMS (VALVES, HEADS, LATERALS, CONTROL WIRING, ETC.) SHALL BE PRESERVED AND RETAINED. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ADJACENT IRRIGATION SYSTEMS AND SHALL REPAIR AT NO COST TO THE CITY.
9. ALL ADJACENT IRRIGATION SYSTEMS SHALL REMAIN OPERABLE DURING DEMOLITION AND CONSTRUCTION PHASE.
10. ALL EXISTING SITE ELEMENTS (INCLUDING CHAINLINK FENCING, DRINKING FOUNTAINS, CONCRETE PADS, AC SURFACING) NOT INDICATED ON PLAN FOR REMOVAL SHALL BE PROTECTED IN PLACE.

**KEY:**

- (A) CLEAR AND SCRAPE EXISTING TURF AND DISPOSE OF PROPERLY OFF SITE.
- (B) EXISTING CONCRETE CURB TO REMAIN IN PLACE AND PROTECTED.
- (C) REMOVE AND SALVAGE ALL IRRIGATION HEADS IN THE HATCHED FIELD PER NOTE #7, L201.
- (D) REMOVE EXISTING IRRIGATION VALVES PER NOTE #7, L201.
- (E) EXISTING IRRIGATION VALVES TO REMAIN IN PLACE AND PROTECTED, TYP.
- (F) EXISTING TREES TO REMAIN IN PLACE AND PROTECTED, TYP. REFER TO TREE PROTECTION NOTES ON SHEET L001
- (G) EXISTING SECURITY LIGHTING FIXTURE TO REMAIN IN PLACE AND PROTECTED.
- (H) EXISTING CHAIN LINK FENCE SHALL REMAIN IN PLACE AND PROTECTED.
- (I) EXISTING 4" IRRIGATION MAINLINES AND CONTROL WIRES TO BE RELOCATED PER IRRIGATION PLAN ON SHEET L601
- (J) EXISTING 4" IRRIGATION MAINLINES TO REMAIN IN PLACE AND PROTECTED.
- (K) TWO EXISTING IRRIGATION VALVES (VALVE #23,24 PER AS-BUILT SHEET L103) TO BE REMOVED & CAPPED. REFER TO NOTE #7, L201.
- (L) EIGHT EXISTING IRRIGATION VALVES (VALVE #22,6,5,4,3,2,1,21 PER AS-BUILT SHEET L103) TO BE REMOVED & CAPPED. REFER TO NOTE #7, L201.
- (M) EXISTING 2-WIRE GROUNDING BOX TO BE RELOCATED PER IRRIGATION PLAN ON SHEET L601.
- (N) EXISTING GRAVEL SUMP AND PIPE CONNECTIONS TO REMAIN IN PLACE AND PROTECTED.

**LEGEND**

- EXISTING TURF AREA TO BE SCRAPED AND CLEARED FOR NEW SYN. SOCCER FIELD
- EXISTING DG PATH TO REMAIN IN PLACE AND PROTECTED



REVISION DATE: 01/16/2016 7:44 AM FILE: Q:\IN-HOUSE\DESIGN\LANDSCAPE SECTION\GUILLEMOUEN\MALLOY SYN. SOCCER FIELD PROJECT\CD\SL201 DEMO PLANDWG  
 THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.  
 REVISION DATES (DESIGN STAGE ONLY)

**CITY OF LOS ANGELES**  
**DEPARTMENT OF PUBLIC WORKS**  
**BUREAU OF ENGINEERING**

<p>CLIENT: RECREATION AND PARKS          GENERAL MANAGER: MICHAEL A. SHUL</p> <p>ARCHITECT: JANE ADRIAN          DESIGNED BY: GUILLERMO BARRAGAN          DRAWN BY: GUILLERMO BARRAGAN          CHECKED BY: JANE ADRIAN          APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT</p>	<p>DATE: BY:</p> <p>NO. REVISIONS:</p> <p>DATE: BY:</p> <p>DATE: BY:</p> <p>DATE: BY:</p> <p>DATE: BY:</p>
<p><b>ENGINEERING</b> CITY OF LOS ANGELES</p>	
<p><b>AS-BUILTS</b></p>	
<p>WORK ORDER NO. E170384A          RAP PRJ20761          DRAWING NO. L201</p>	
<p>PROJECT: KEN MALLOY HARBOR REGIONAL PARK          SYNTHETIC SOCCER FIELD PROJECT          ADDRESS: 1501 W. L STREET          LOS ANGELES, CA 90710</p>	
<p>SHEET 10 OF 24 SHEETS</p>	



**GRADING NOTES:**

- ALL REQUIRED FILL OR BACKFILL SHALL BE PLACED IN LOOSE LEVEL LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, MOISTURE CONDITIONED BETWEEN OPTIMUM MOISTURE CONTENT AND A FEW PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT. STRUCTURAL FILL SHALL BE MECHANICALLY COMPACTED TO AT LEAST 95% OF THE MAXIMUM DENSITY OBTAINED BY THE ASTM D1557 METHOD.
- ALL WORK SHALL COMPLY TO CITY GRADING REGULATIONS.
- THE STAMPED SET OF PLANS SHALL BE ON THE JOB SITE AT ALL TIMES.
- PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ADJACENT PROPERTIES AND FIXED IMPROVEMENTS IN THE PUBLIC RIGHT-OF-WAY DURING GRADING OPERATIONS.
- DUST SHALL BE CONTROLLED BY WATERING.
- NO TRENCHES OR EXCAVATION 5'-0" OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND SHALL BE ALLOWED. AN EXCEPTION WILL BE MADE ONLY IF A NECESSARY PERMIT IS OBTAINED FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRY SAFETY PRIOR TO THE ISSUANCE OF A BUILDING OR GRADING PERMIT.
- REFER TO THE CONSTRUCTION AND LAYOUT PLAN FOR ADDITIONAL DIMENSIONS, TIES, OR OTHER STAKING DATA.
- FOR REFERENCE TO EXISTING CONDITIONS, SEE TOPOGRAPHIC SURVEY SHEET L101.
- ALL GRADING SHALL BE IN ACCORDANCE WITH THE LANDSCAPE CONSTRUCTION NOTES, GENERAL EARTHWORK, SHEET L001. ALL OTHER GRADING ISSUES NOT COVERED HEREIN OR LANDSCAPE CONSTRUCTION NOTES, GENERAL EARTHWORK SHALL BE GOVERNED BY THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (SSPWC), LATEST EDITION APPROVED BY THE CITY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS.
- STRAIGHT GRADE SHALL BE RUN BETWEEN CONTOURS AND SPOT ELEVATIONS UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY METHODS, MATERIALS, AND LABOR TO EFFECTIVELY CONTROL ANY EROSION ACTIVITY THAT MAY OCCUR DURING THE COURSE OF GRADING AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL OBTAIN THE APPROVAL FROM THE PROJECT ENGINEER PRIOR TO IMPLEMENTATION OF ANY EROSION CONTROL ACTIVITY.
- SYNTHETIC TURF FIELD PERIMETER DRAINAGE PIPE SYSTEM SHALL BE INSTALLED PER DET. A1 SHEET L406.

**KEY:**

- (A) EXISTING GRAVEL SUMP SCHEMATIC LAYOUT, PLEASE REFER TO SHEET L102.
- (B) EXISTING 6" DIA. PIPE, PLEASE REFER TO SHEET L102.
- (C) NEW 8" SDR PVC DRAIN PIPE TO CONNECT TO EXISTING 6" DIA. PIPE.

**CUT AND FILL CALCATIONS:**

FILL : 0  
CUT : 1,065 CY OF SOIL

**LEGEND**

EXISTING DG PATH TO REMAIN IN PLACE AND PROTECTED

**ABBREVIATIONS**

- FS FINISH SURFACE
- FG FINISH GRADE
- INV INVERT ELEVATION
- HP HIGH POINT
- TC TOP OF CURB
- (30.3) EXISTING GRADE
- 30.3 PROPOSED GRADE
- - - - - EXISTING CONTOUR
- - - - - PROPOSED NEW CONTOUR
- - - - - DIRECTION OF FLOW
- - - - - DIRECTION OF SUBSURFACE FLOW
- - - - - 4" RIGID PVC PERFORATED DRAIN PIPE (SDR)
- - - - - ADS ADVANEDGE PERFORATED FLAT DRAIN OR APPROVED EQUAL

**DIGALERT**

Call Toll Free  
1-800-227-2600

TWO  
WORKING DAYS  
BEFORE YOU  
DIG

Underground Service Alert  
of Southern California

**N**

0 10' 20' 40'

SCALE: 1" = 20'-0"

**PLAN CLARIFICATION #1**

**BUREAU OF ENGINEERING**

**ENGINEERING**

**CITY OF LOS ANGELES**

**AS-BUILTS**

**RP 300089**

**INDEX NO. XX/XX**

**DATE: 7-4-16 GB**

**PLANT CLARIFICATION #1**

**NO. REVISIONS:**

**CITY ENGINEER**

**ARCHITECTURAL DIVISION**

**ARCHITECT: JANE ADRIAN**

**DESIGNED BY: GUILLERMO BARRAGAN**

**DRAWN BY: GUILLERMO BARRAGAN**

**CHECKED BY: JANE ADRIAN**

**APPROVED BY: MAHMOOD VARMAZADEH, A.I.A., PRINCIPAL ARCHITECT**

**LIC. NO. 3940**

**PROJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT**

**ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90070**

**WORK ORDER NO. E170384A**

**RAP PRJ20761**

**DRAWING NO. L301**

**SHEET 11 OF 24**

**PLOTTED: 10/20/16 1:40 PM**

REVISION DATE: 11/17/2017 11:17 AM FILE: QIN-HOUSE DESIGN/LANDSCAPE SECTION/GUILLEMMOEN MALLOY SYN. SOCCER FIELD PROJECT/CDS/AS-BUILTS 2017/01.DWG

REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 2.2



**KEY:**

- ① NEW SYNTHETIC TURF SOCCER FIELD.
- ② EXISTING CHAIN LINK GATE SHALL BE REPLACED WITH A NEW CHAIN LINK GATE WITH TRILOGY GATE LOCK SYSTEM.
- ③ NEW 4' HIGH X 5' WIDE SINGLE LEAF CHAIN LINK GATE.
- ④ NEW 4' HIGH X 10' WIDE DOUBLE LEAF CHAIN LINK GATE.
- ⑤ NEW 4' TALL CHAIN LINK FENCE WITH MOW BAND.
- ⑥ EXISTING CURB TO REMAIN IN PLACE AND PROTECTED.
- ⑦ EXISTING DECOMPOSED GRANITE PATH TO REMAIN IN PLACE AND PROTECTED.
- ⑧ EXISTING ADA PARKING.
- ⑨ PATH OF TRAVEL TO EXISTING RESTROOM AND NEW SYNTHETIC SOCCER FIELD.
- ⑩ NEW 4' HIGH X 20' WIDE DOUBLE LEAF CHAIN LINK GATE.

SIZE OF SOCCER FIELD  
APPROX. 325' X 177'

ACTUAL PLAYING FIELD  
295' X 157'



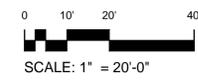
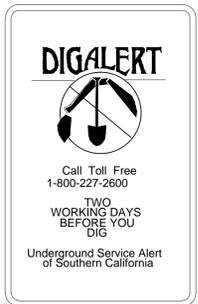
EXISTING RESTROOMS INSTALLED IN 2013



EXISTING CHAINLINK GATE WITH THE TRILOGY LOCKING SYSTEM



EXISTING CHAINLINK GATE TO BE MODIFIED WITH THE TRILOGY LOCKING SYSTEM



**CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING**

ENGINEERING CITY OF LOS ANGELES

AS-BUILTS

DATE: BY:

INDEX NO. - RP 300089 BUILDING NO. XX/XX

NO. REVISIONS:

ARCHITECT: JANE ADRIAN LIC. NO. 3940

DESIGNED BY: GUILLERMO BARRAGAN

DRAWN BY: GUILLERMO BARRAGAN

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

CLIENT: RECREATION AND PARKS GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: ADA PATH OF TRAVEL

PROJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT

ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90710

WORK ORDER NO. E170384A

DRAWING NO. PRJ20761

SHEET 12 OF 24 SHEETS

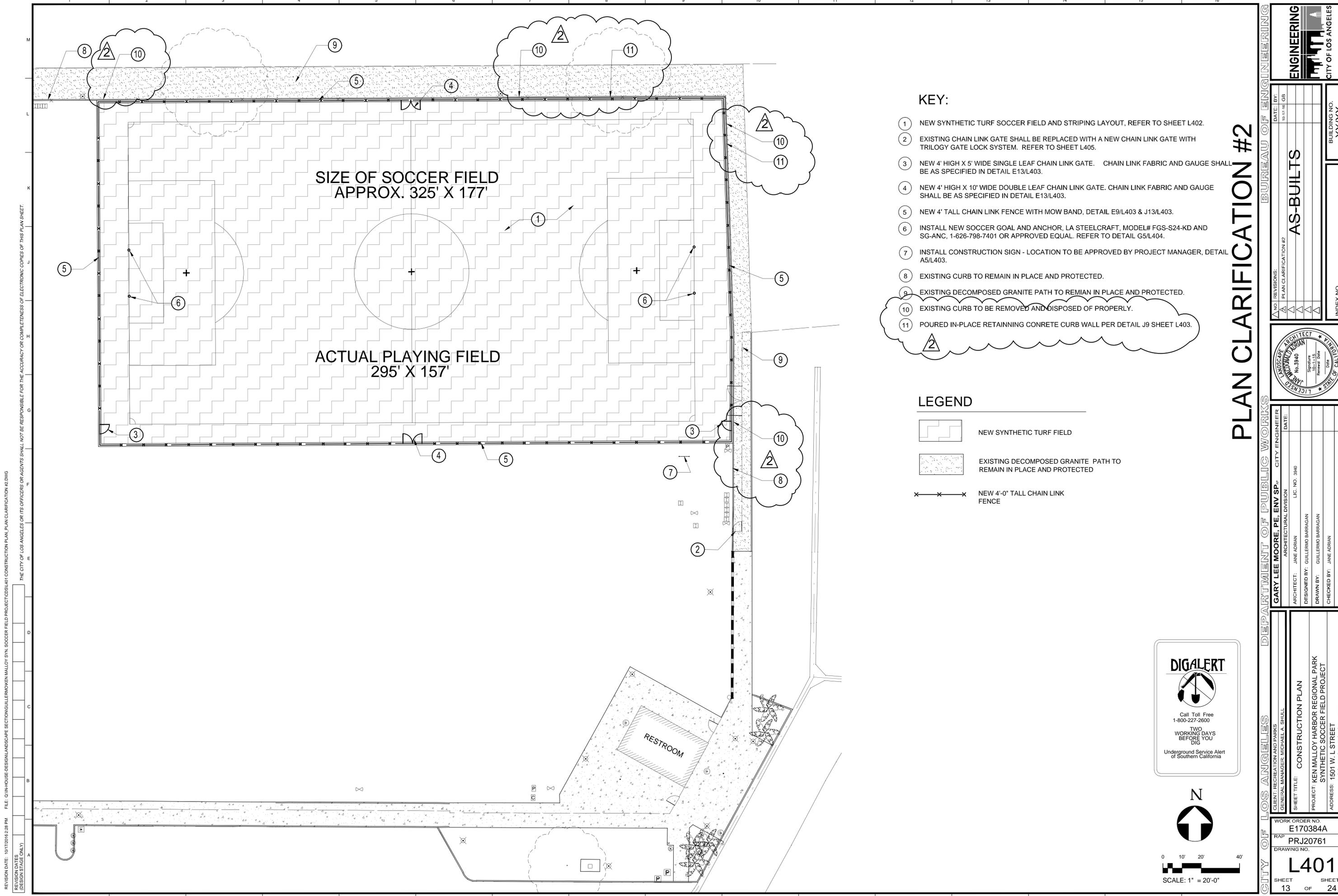
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REVISION DATES (DESIGN STAGE ONLY)

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Sheet Version 2.2



**KEY:**

- ① NEW SYNTHETIC TURF SOCCER FIELD AND STRIPING LAYOUT, REFER TO SHEET L402.
- ② EXISTING CHAIN LINK GATE SHALL BE REPLACED WITH A NEW CHAIN LINK GATE WITH TRILOGY GATE LOCK SYSTEM. REFER TO SHEET L405.
- ③ NEW 4' HIGH X 5' WIDE SINGLE LEAF CHAIN LINK GATE. CHAIN LINK FABRIC AND GAUGE SHALL BE AS SPECIFIED IN DETAIL E13/L403.
- ④ NEW 4' HIGH X 10' WIDE DOUBLE LEAF CHAIN LINK GATE. CHAIN LINK FABRIC AND GAUGE SHALL BE AS SPECIFIED IN DETAIL E13/L403.
- ⑤ NEW 4' TALL CHAIN LINK FENCE WITH MOW BAND, DETAIL E9/L403 & J13/L403.
- ⑥ INSTALL NEW SOCCER GOAL AND ANCHOR, LA STEELCRAFT, MODEL# FGS-S24-KD AND SG-ANC, 1-626-798-7401 OR APPROVED EQUAL. REFER TO DETAIL G5/L404.
- ⑦ INSTALL CONSTRUCTION SIGN - LOCATION TO BE APPROVED BY PROJECT MANAGER, DETAIL A5/L403.
- ⑧ EXISTING CURB TO REMAIN IN PLACE AND PROTECTED.
- ⑨ EXISTING DECOMPOSED GRANITE PATH TO REMAIN IN PLACE AND PROTECTED.
- ⑩ EXISTING CURB TO BE REMOVED AND DISPOSED OF PROPERLY.
- ⑪ POURED IN-PLACE RETAINING CONCRETE CURB WALL PER DETAIL J9 SHEET L403.

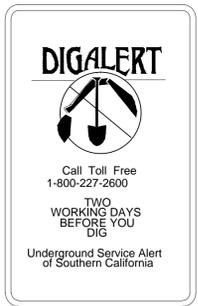
**LEGEND**

- NEW SYNTHETIC TURF FIELD
- EXISTING DECOMPOSED GRANITE PATH TO REMAIN IN PLACE AND PROTECTED
- NEW 4'-0" TALL CHAIN LINK FENCE

**PLAN CLARIFICATION #2**

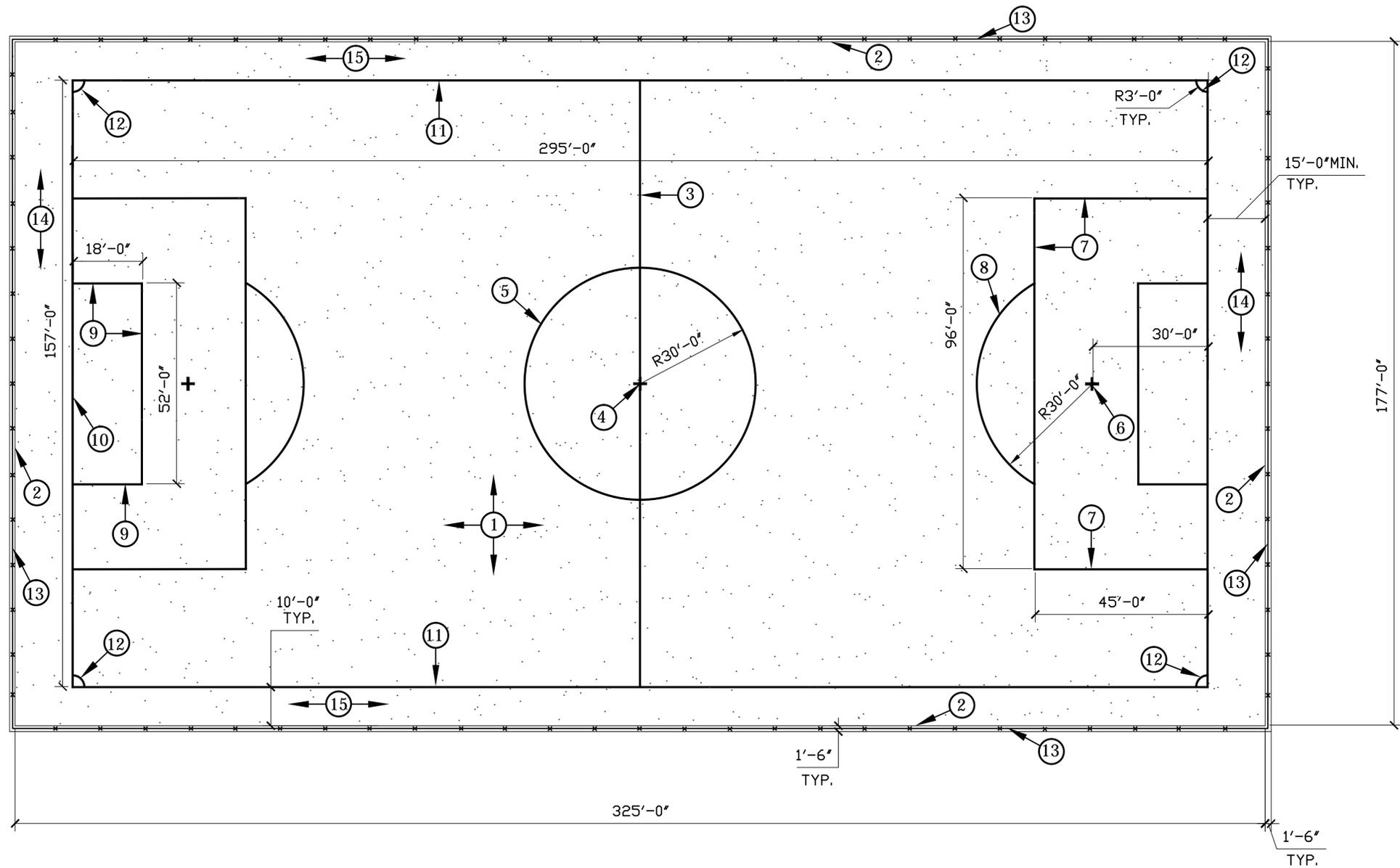
REVISION DATE: 10/17/2016 2:28 PM FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTIONS\GUILLERMO\KEN MALLOY SYN. SOCCER FIELD PROJECT\CD\1401 CONSTRUCTION PLAN PLAN CLARIFICATION #2.DWG  
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 Sheet Version 2.2

<b>ENGINEERING</b> CITY OF LOS ANGELES	
BUREAU OF ENGINEERING PLAN CLARIFICATION #2 <b>AS-BUILTS</b>	DATE: BY: 10-17-16 GB BUILDING NO. XX/XX INDEX NO. -
<b>DEPARTMENT OF PUBLIC WORKS</b> <b>GARY LEE MOORE, PE, ENV SP</b> ARCHITECTURAL DIVISION LIC. NO. 3940 ARCHITECT: JANE ADRIAN DESIGNED BY: GUILLERMO BARRAGAN DRAWN BY: GUILLERMO BARRAGAN CHECKED BY: JANE ADRIAN APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT	
<b>CITY OF LOS ANGELES</b> CLIENT: RECREATION AND PARKS GENERAL MANAGER: MICHAEL A. SHULL SHEET TITLE: CONSTRUCTION PLAN PROJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90710	
WORK ORDER NO. E170384A RAP PRJ20761 DRAWING NO. <b>L401</b> SHEET 13 OF 24 PLOTTED: 1/29/2018 3:07 PM	



SCALE: 1" = 20'-0"

REVISION DATE: 9/22/2016 1:20 PM  
 FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTION\GUILLEMOEN\MALLOY SYN. SOCCER FIELD PROJECT\CD\SL402 285X157 SOCCER FIELD PLAN.DWG  
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 REVISION DATES (DESIGN STAGE ONLY)  
 A  
 B  
 C  
 D  
 E  
 F  
 G  
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 J  
 K  
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 M



**SYNTHETIC SOCCER FIELD PLAN**  
**ACTUAL PLAYING FIELD 157' X 295'**

- LEGEND:**
- ① 157'X295' SYNTHETIC TURF FIELD WITH SYNTHETIC TURF BUFFER ON ALL 4 SIDES, REFER TO SPECIFICATIONS FOR INSTALLATION.
  - ② CONCRETE PERIMETER CURB AND SYNTHETIC TURF EDGE TREATMENT, SEE DETAILS J13/L403 AND A5/L406, UNLESS NOTED OTHERWISE.
  - ③ HALFWAY LINE, COLOR: WHITE, 4" WIDE.
  - ④ CENTER CIRCLE MARK, COLOR: WHITE, 4" WIDE.
  - ⑤ CENTER CIRCLE, COLOR: WHITE, 4" WIDE.
  - ⑥ PENALTY MARK, COLOR: WHITE, 4" WIDE.
  - ⑦ PENALTY BOX LINE, COLOR: WHITE, 4" WIDE.
  - ⑧ PENALTY ARC, COLOR: WHITE, 4" WIDE.
  - ⑨ GOAL BOX LINE, COLOR: WHITE, 4" WIDE.
  - ⑩ GOAL LINE, COLOR: WHITE, 4" WIDE.
  - ⑪ SIDE LINE, COLOR: WHITE, 4" WIDE.
  - ⑫ CORNER ARC, COLOR: WHITE, 4" WIDE.
  - ⑬ 4' HIGH FENCE. SEE E5/L403 CHAIN LINK FENCE, UNLESS NOTED OTHERWISE ON CONSTRUCTION LAYOUT PLAN.
  - ⑭ MIN. 15'-WIDE SYNTHETIC TURF BUFFER, REFER TO SPECIFICATIONS FOR INSTALLATION.
  - ⑮ 10'-WIDE SYNTHETIC TURF BUFFER, REFER TO SPECIFICATIONS FOR INSTALLATION.

- NOTES:**
- 1. CONTRACTOR TO SUBMIT MFR. SHOP DRAWINGS, DETAILS AND MATERIALS TO PROJECT MANAGER FOR APPROVAL PRIOR TO INSTALLATION.



**CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS**

**BUREAU OF ENGINEERING**

**ENGINEERING CITY OF LOS ANGELES**

DATE: \_\_\_\_\_

NO. REVISIONS: \_\_\_\_\_

**AS-BUILTS**

BUILDING NO. XX/XX

INDEX NO. -

ARCHITECT: JANE ADRIAN LIC. NO. 3940

DESIGNED BY: GUILLERMO BARRAGAN

DRAWN BY: GUILLERMO BARRAGAN

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

CLIENT: RECREATION AND PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: SYNTHETIC TURF SOCCER FIELD

PROJECT: KEN MALLOY HARBOR REGIONAL PARK

SYNTHETIC SOCCER FIELD PROJECT

ADDRESS: 1501 W. L. STREET

LOS ANGELES, CA 90710

WORK ORDER NO. E170384A

RAP PRJ20761

DRAWING NO.

**L402**

SHEET 14 OF 24 SHEETS

PLOTTED: 1/28/2016 3:08 PM

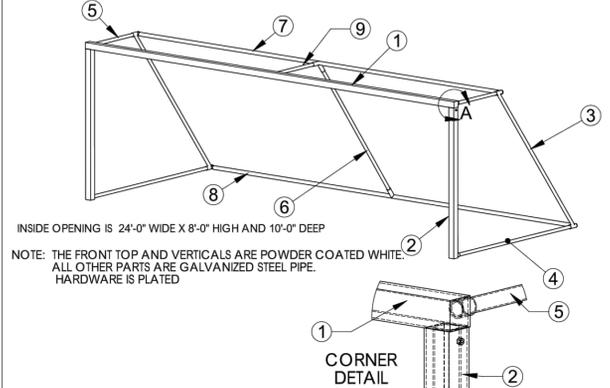


REVISION DATE: 11/21/2017 12:18PM FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTIONS\GUILDERMOKEN MALLOY SYN. SOCCER FIELD PROJECT\GISAS-BUILTS\2017L404.DWG  
 REVISION DATES (DESIGN STAGE ONLY)  
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**STEELCRAFT PRODUCTS**  
 P.O. Box 90365 - Pasadena, CA 91109  
 PHN 626-798-7401 FAX 626-798-1482

MODEL  
 FGS-S24-KD  
 SOCCER GOAL

SHEET  
 1 of 2



NOTE: THE FRONT TOP AND VERTICALS ARE POWDER COATED WHITE. ALL OTHER PARTS ARE GALVANIZED STEEL PIPE. HARDWARE IS PLATED

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	F02SG024	4" SQ. TUBE - BEAM - P C WHITE (24'-8")
2	2	F02SG025	4" SQ. TUBE - POST (L & R) P C WHITE (8'-0")
3	2	F04SG024	1-7/8" OD. Sch 40 END STAY (L & R) (10'-0")
4	2	F04SG025	1-7/8" OD. Sch 40 BOTTOM RUNNER (10'-0")
5	2	F04SG026	1-7/8" OD. Sch 40 TOP STAY (48 1/2")
6	1	F04SG027	1-7/8" OD. Sch 40 BACK STAY (9'-9")
7	1	F04SG028	2-3/8" OD. Sch 40 BACK TOP HORIZ (24')
8	1	F04SG029	2-3/8" OD. Sch 40 BACK BOTTOM HORIZ (24')
9	1	F04SG030	1-7/8" OD. Sch 40 TOP STAY (46")
10	4	F02SG0UA	U ANCHOR
11	4	P02SGSS58	5/8" X 1" SET SCREW
12	16	P02SGSS34	3/4" X 1/2" SET SCREW
13	1	P02SGAW1	5/16" ALLEN WRENCH (5/8" SET SCREW)
14	1	P02SGAW2	1/4" ALLEN WRENCH (1/2" SET SCREW)

NOTE: SPECIFICATIONS ARE SUBJECT TO CHANGE

DO NOT SCALE DRAWING DATE: 7/11/12 DRAWN BY: AFS

G5 SOCCER GOAL POST AND SLEEVE INSTALLATION  
 N.T.S.

**STEELCRAFT PRODUCTS**  
 P.O. Box 90365 - Pasadena, CA 91109  
 PHN 626-798-7401 FAX 626-798-1482

MODEL  
 FGS-S24-KD  
 SOCCER GOAL

SHEET  
 2 of 2

ASSEMBLY AND INSTALLATION INSTRUCTIONS

ASSEMBLY OF THE FRONT UNIT

- LAY FRONT CROSS BAR (1) FACE DOWN ON THE GROUND AND SLIDE THE FRONT VERTICAL SUPPORTS (2) INTO THE SOCKETS. MAKE SURE THE ANCHOR RING IS ON THE OUTSIDE OF EACH FRAME. TIGHTEN THE SET SCREWS.

ASSEMBLY OF THE BACK UNIT

- SLIDE THE CENTER BACK SUPPORT BRACE (6) INTO THE SLEEVES WELDED TO BACK CROSS BAR (7) AND BOTTOM CROSS BAR (8). TIGHTEN THE SET SCREWS.
- SLIDE BACK ANGLE SUPPORT (3) INTO BACK CROSS BARS (7) AND TIGHTEN THE SET SCREWS.

ATTACH FRONT TO BACK UNIT

- STAND THE FRONT AND BACK ASSEMBLIES.
- SLIDE TOP BRACES (5), CENTER TOP BRACE AND BOTTOM BRACES (4) INTO THE SLEEVES OF FRONT AND BACK UNITS.
- TIGHTEN ALL SET SCREWS ON THE SLEEVES.

EACH GOAL IS ANCHORED WITH TWO 1/2" X 18" STEEL RODS. THE RODS HAVE 3/16" CHAIN WELDED TO THE BOTTOM OF THE TWO VERTICAL SUPPORTS.

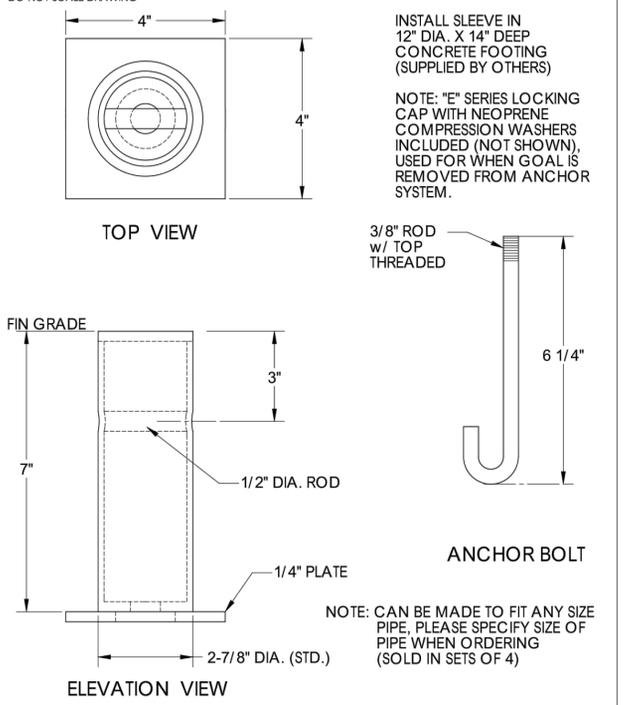
NOTE: SPECIFICATIONS ARE SUBJECT TO CHANGE

DO NOT SCALE DRAWING DATE: 7/11/12 DRAWN BY: AFS

**STEELCRAFT PRODUCTS**  
 P.O. Box 90365 - Pasadena, CA 91109  
 PHN 626-798-7401 FAX 626-798-1482

MODEL  
 SG-ANC  
 SOCCER ANCHOR

SHEET  
 1 of 1



**ENGINEERING**  
 CITY OF LOS ANGELES

BUREAU OF ENGINEERING

DATE: \_\_\_\_\_

AS-BUILTS

INDEX NO. XX/XX

BUILDING NO. RP 300089

REVISIONS:

NO.	REVISIONS

ARCHITECT: GARY LEE MOORE, PE, ENV SP  
 ARCHITECTURAL DIVISION  
 ARCHITECT: JANE ADRIAN  
 LIC. NO. 3940  
 DESIGNED BY: GUILLERMO BARRAGAN  
 DRAWN BY: GUILLERMO BARRAGAN  
 CHECKED BY: JANE ADRIAN  
 APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

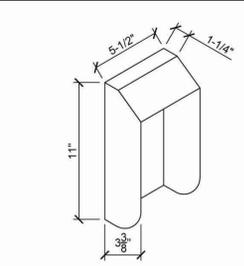
CLIENT: RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: CONSTRUCTION DETAILS, SHEET 2  
 PROJECT: KEN MALLOY HARBOR REGIONAL PARK  
 SYNTHETIC SOCCER FIELD PROJECT  
 ADDRESS: 1501 W. L STREET  
 LOS ANGELES, CA 90710

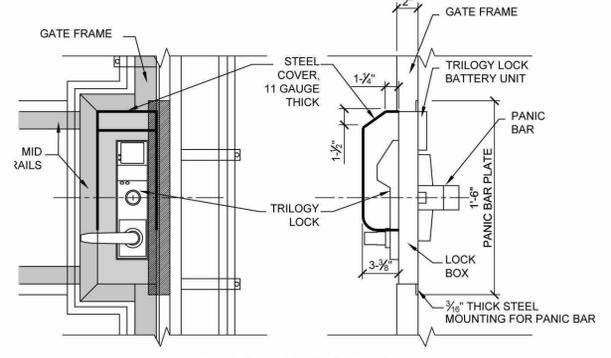
WORK ORDER NO. E170384A  
 PRJ20761  
 DRAWING NO.

**L404**  
 SHEET 16 OF SHEETS 24

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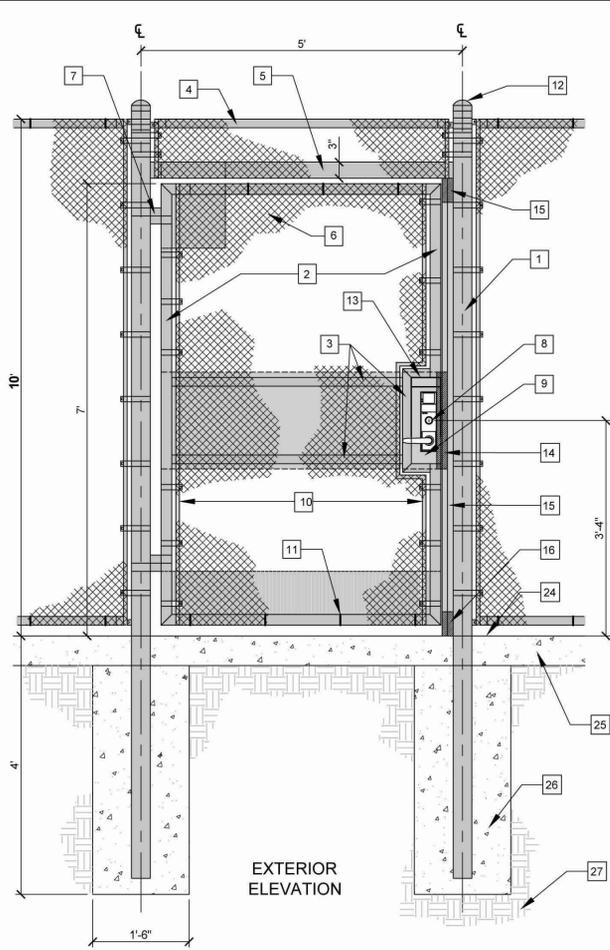


TRILOGY LOCK STEEL COVER

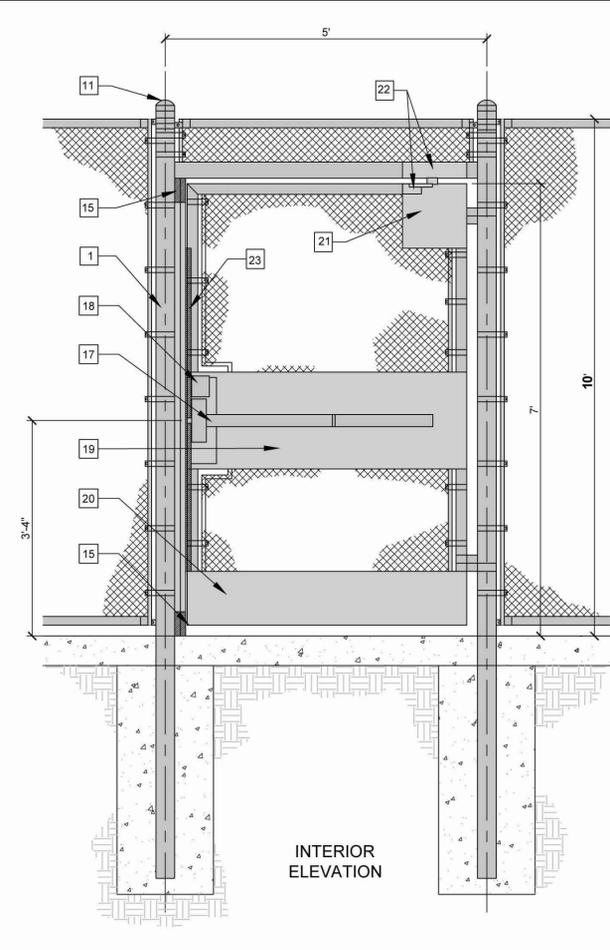


TRILOGY LOCK DETAILS

- NOTES:**
- CHAIN LINK FENCE, GATE AND POST MATERIALS SHALL BE GALVANIZED STEEL UNLESS NOTED. ALL COMPONENTS SHALL CONFORM TO THE CHAIN LINK FENCE AND MISCELLANEOUS METAL CONSTRUCTION SECTION OF THE SPECIFICATIONS.
  - CONCRETE FOOTINGS SHALL BE ALLOWED TO SET FOR SEVEN (7) DAYS PRIOR TO INSTALLATION OF FABRIC OR HARDWARE.
  - HOLD DOWN CONC. FTG. TO RECEIVE FINISH SURFACE PAVEMENT WHERE FTG. IS NOT SURROUNDED BY LANDSCAPED AREA. IN SUCH CASES, PROVIDE 1" CROWN ON TOP OF ALL POST FTG.'S AT FINISH GRADE.
  - CONCRETE FOOTING TO BE 2500 PSI @ 28 DAYS. PROVIDE 3" OF GRAVEL UNDER CONCRETE FOOTING.
  - PEDESTRIAN GATE SHALL BE COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENT FOR ACCESSIBILITY OF DOORS AND GATES.
  - VERIFY FENCE AND GATE LAYOUT WITH RAP PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
  - ALL MATERIALS GALVANIZED.



EXTERIOR ELEVATION



INTERIOR ELEVATION

- GATE MATERIALS**
- POSTS: 3-1/2" O.D. WITH 12" DIA. X 4'-0" DEEP FOOTINGS.
  - GATE FRAMES: TOP, BOTTOM AND SIDE MEMBERS: 2" O.D., MITER GATE FRAME CORNERS, WELD AND GRIND SMOOTH.
  - GATE RAILS: MID RAILS, 1-5/8" O.D. WELD TO GATE FRAME SIDE MEMBERS AND GRIND SMOOTH.
  - RAILS: TOP AND BOTTOM RAILS, 1-5/8" O.D.
  - 2"X3", 3/16" THICK, TUBULAR STEEL WELD TO GATE POST AT ALL FOUR SIDES.
  - FABRIC: 9-GAUGE, 1" SQUARE MESH, KNUCKLE TOP AND BOTTOM, PLACE ON EXTERIOR SIDE OF GATES.
  - HINGES: INDUSTRIAL BULLDOG HINGE (180° SWING), 2 HINGES PER GATE, ONE AT TOP AND BOTTOM.
  - ALARM LOCK TRILOGY ETDL-S10-26D-V99 KEYLESS CONTROL UNIT WITH ALARM LOCK ET-BIC/26D BEST KIT. SATIN CHROME FINISH.
  - 5-1/2" WIDTH X 16" LENGTH X 1-3/4" DEPTH STEEL BOX TO HOUSE TRILOGY LOCK ASSEMBLY. STEEL TO BE 3/8" THICK.
  - STRETCHER BAR: 3/16" X 3/4" WITH 1/8" X 1" TENSION BANDS AT 1'-0" O.C.
  - TIE WIRES: 11-GAUGE AT 1'-6" O.C AT GATE FRAME TOP, BOTTOM AND MID RAILS.
  - POST CAPS SHALL BE MALLEABLE IRON OR PRESSED STEEL.
  - TRILOGY LOCK STEEL COVER, 5-1/2" WIDE, 11 GAUGE THICK AROUND TRILOGY LOCK, WELD ONTO FACE OF LOCKING ASSEMBLY BOX ON ALL SIDES, SEE ENLARGED DETAILS, THIS SHEET.
  - 2" X 1'-6", 3/8" THICK, METAL LATCH PROTECTOR WELD TO LOCK BOX AND GATE FRAME.
  - 2 - 2" X 1" METAL SPACERS, TACK WELD TOGETHER AND WELD TO 2" X 4" METAL PLATE WELD TO GATE POST FOR THE ENTIRE LENGTH OF GATE.
  - 2" X 4", 3/8" THICK METAL PLATE WELD TO GATE POST AND 2"X1" METAL SPACERS.
  - PANIC BAR ASSEMBLY. AVAILABLE THROUGH VON DUPRIN MODEL #99E0 26D 48" OR APPROVED EQUAL. SATIN CHROME FINISH.
  - TRILOGY LOCK BATTERY UNIT.
  - 3/8" THICK X 18" WIDTH, STEEL MOUNTING PLATE FOR PANIC BAR. BEAD WELD PLATE TO GATE FRAME AND LOCK BOX. LENGTH TO BE EQUAL TO WIDTH OF GATE FRAME.
  - 10" METAL KICK PLATE 3/8" THICK (INSIDE OF PARK), WELD TO GATE FRAME ON PARK SIDE OF GATE.
  - 12" X 12", 3/8" THICK STEEL GATE CLOSURE MOUNTING PLATE. WELD TO GATE FRAME.
  - GATE CLOSURE UNIT, AVAILABLE THROUGH LCN, MODEL # 4040XP R-WIPA 689 OR APPROVED EQUAL.
  - 1"X1"X80", 3/8" THICK, L' SHAPE, 90 DEGREE ANGLE METAL STRIP ATTACHED TO METAL SPACER ON LATCH SIDE OF GATE AS GATE STOP AND LATCH FOR PANIC BAR.
  - PROVIDE A 1" CROWN AT TOP OF ALL POST FOOTINGS
  - CONCRETE PAVING.
  - CONCRETE FOOTING, SEE DETAIL, THIS SHEET.
  - 90% RELATIVE COMPACTED SUBGRADE

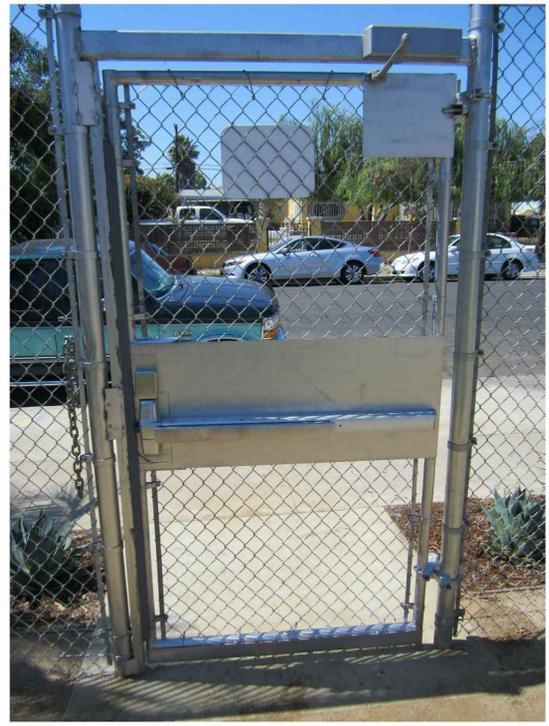
**10' HIGH X 5' WIDE CHAIN LINK SINGLE LEAF GATE WITH TRILOGY LOCK**



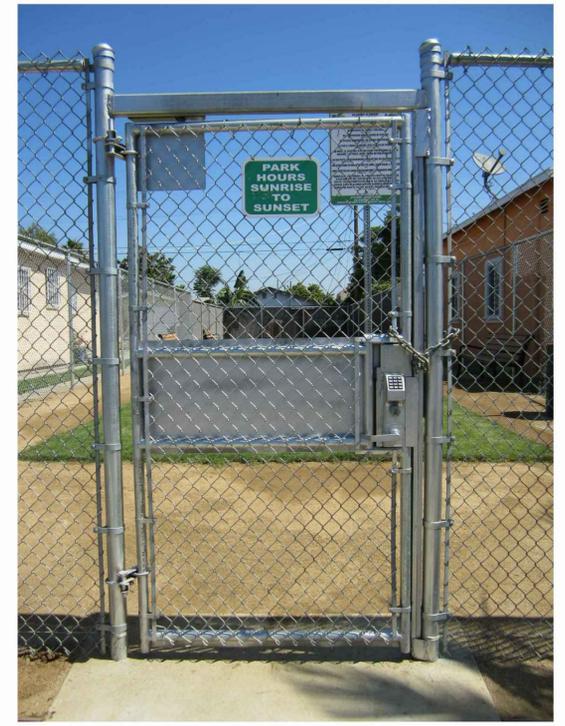
PANIC BAR ASSEMBLY



LATCH SIDE ELEVATION



INTERIOR ELEVATION



EXTERIOR ELEVATION

REVISION DATE: 6/16/2015 9:26 AM FILE: C:\IN-HOUSE\DESIGN\LANDSCAPE SECTION\GUILLEMOCKEN MALLORY SYN. SOCCER FIELD PROJECT\CD3406 TRILOGY LOCK CHAIN LINK GATE.DWG

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

**BUREAU OF ENGINEERING**

**ENGINEERING**

CITY OF LOS ANGELES

DATE: BY:

NO. REVISIONS:

**AS-BUILTS**

BUILDING NO. XXXXX

INDEX NO. -

**LANDSCAPE ARCHITECT**

LIC. NO. 3940

SIGNATURE: 10-1-15

RENEWAL DATE: 2008

CITY OF CALIFORNIA

**DEPARTMENT OF PUBLIC WORKS**

**GARY LEE MOORE, PE, ENV SP.**

CITY ENGINEER

ARCHITECTURAL DIVISION

LIC. NO. 3940

ARCHITECT: JANE ADRIAN

DESIGNED BY: GUILLERMO BARRAGAN

DRAWN BY: GUILLERMO BARRAGAN

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD VARMAZADEH, A.I.A., PRINCIPAL ARCHITECT

CLIENT: RECREATION AND PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: TRILOGY LOCK KIT CHAIN LINK GATE DETAILS

PROJECT: KEN MALLORY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT

ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90070

WORK ORDER NO. E170384A

TRAP PRJ20761

DRAWING NO.

**L405**

SHEET 17 OF 24 SHEETS

PLOTTED: 1/30/2018 10:55 AM

16. SYNTHETIC TURF AND SUB-BASE DRAINAGE

Sub-Grade Foundation and Drainage

PART I: GENERAL

A. DEFINITION

This section defines requirements for the materials, installation, and operating performance of a sub-grade foundation and drainage system needed for professional-grade synthetic turf field.

B. STANDARDS

All specifications listed are defined per applicable ASTM standard test methods, unless no ASTM standard exists. All other specifications and tolerances listed shall be defined under standard ANSI and/or ISO drawing and specification rules.

Note: This specification requires installation of a continuous foundation-grade concrete curb around the entire perimeter of the athletic field.

PART II: MATERIALS

A. FIELD SOIL ISOLATION FABRIC

The prepared soil subsurface shall be isolated from the installed field and drainage system above it with the specified soil isolation fabric. The soil isolation fabric is a woven polyurethane-based material with a minimum gage of 12 mils in thickness.

B. TRENCH SOIL ISOLATION FABRIC

The soil isolation fabric is a polypropylene-based material with a minimum gage weight of five (5) Oz/yd2. Minimum permeability is 130 gallons/minute/square foot.

C. PERIMETER DRAINAGE COLLECTOR PIPE

Drainage piping is a perforated HDPE pipe, diameter specified on plans.

D. PERIMETER CURB

A continuous foundation grade curbing of 3000 psi concrete shall be installed along the entire perimeter of the synthetic field.

SECTION B: STABILIZED SOIL BASE COURSE

PART I: GENERAL

A. DESCRIPTION OF WORK

Extent: It shall be the responsibility of Contractor to provide all labor, materials, equipment and tools necessary for the complete installation of a cement dust stabilized sub-grade in the specified area as shown on the Drawings.

B. REQUIRED CONTRACTOR EXPERIENCE

The Contractor shall demonstrate experience on at least two (2) sub-grade stabilization projects of the type herein specified.

PART II: MATERIALS

A. Portland Cement Dust

Type-II cement shall conform to the requirements of ASTM C150.

PART III: EXECUTION

A. BASE CONSTRUCTION

The Contractor shall approve, in writing, the cross-sectional detail for construction.

B. STABILIZATION OF SUB-GRADE

Apply 10% by volume Portland Cement dust to treatment area and mix in with pulverizing machine. Water shall be as needed to allow setting up of soil cement.

- Bomag pulverization machine
high speed tiller
plowing disc
rototiller

All work in a designated portion of the field area shall be completed, including fine grading, within 24 hours. Cure time of the material is 24 to 72 hours without rain.

Roller. Compact with double drum roller.

1. The aggregate shall be checked by a registered geotechnical engineer from a sample of the aggregate sieve prior to shipping the rock to the site.

C. QUALITY ASSURANCE

1. Testing:

a. The permeability of the sub-base stabilized material shall be checked by a registered geotechnical engineer from a sampling of the aggregate sieve prior to placing the liner on the base.

b. Testing shall occur after installation and final rolling of the base installation at 10,000 square feet intervals.

c. The Contractor is responsible to meet this performance specification, before proceeding with installation of the any stone leveling course, and shall bear the cost of the on-site testing and the cost of any additional work necessary to achieve compliance with the specification.

d. All test results shall be logged and documented by the Owner's Technical Representative or Geotechnical Engineer. If at any time the stabilized stone base does not meet specifications, it shall be the Contractor's responsibility to restore, at his expense, the processed stone base to the required grade, cross-section and density.

e. After the contractor has independently confirmed compliance with all the above tolerances (planarity and elevation verified by a licensed surveyor and compaction, gradation, & permeability verified by Geotechnical Engineer), he shall notify the appropriate party and schedule a final inspection for approval.

f. All testing fees shall be paid for by the Contractor.

SECTION C: PERIMETER COLLECTOR DRAINAGE

PART I: GENERAL

This work consist of the perimeter perforated pipe and drain rock installed in the perimeter trench.

PART II: MATERIALS

The aggregate shall be checked by a registered geotechnical engineer from a sample of the aggregate sieve prior to shipping the rock to the site.

Table with 2 columns: Mesh size, % Passing. Values range from 3/4" (100%) to #200 (0-3%).

PART III: QUALITY ASSURANCE

The permeability of the aggregate shall be checked by a registered geotechnical engineer from a sample of the aggregate sieve prior to shipping the rock to the site. In addition, tests shall be coordinated through the Project Manager to test the rock in 600 ton...

All testing fees shall be paid for by the Contractor.

The Contractor shall notify the Project Manager and designated City inspector to schedule a final inspection for approval of base and subgrade prior to installing the synthetic turf.

C. METHODS

1. UNDERLYING SOIL

Prior to preparing the site for subgrade foundation and drainage installation, all surface turf and vegetation shall be removed and properly disposed of off-site.

2. SOIL PREPARATION

The native soil shall be sufficiently irrigated and strated as required to meet the final conditions set forth below. Field Contour - Overall surface contour after final grading and compaction shall be as indicated in the Construction Documents.

3. SUBGRADE AND BASE COMPACTION

After final contouring and rolling, the subgrade soil compaction: a. The soil compaction shall be greater than 95% on average, with no measurement less than 95%, in accordance with ASTM D-698, based on eight (8) samples taken at reasonably spaced (pseudo-random locations across the field surface location).

4. SUBGRADE AND BASE PLANARITY

a. Local soil contour after final compaction and grading shall not have deviations in... b. Verticality: The synthetic turf shall be installed on a level surface.

5. PERIMETER COLLECTOR DRAINAGE PIPE INSTALLATION

a. Perimeter drainage system shall be coupled with a main drain exit, see Construction Drawings. b. The perimeter drainage trench is nominally placed 4' inboard of the perimeter curbing. c. Surface contour between the drainage trench and perimeter concrete curb should be counter-sloped to the field at a minimum of 1% for surrounding infiltration or as specified in the provided Construction Drawings.

SECTION D: PERIMETER CURBING AND TURF ATTACHMENT

PART I: GENERAL

A. DESCRIPTION OF WORK:

A continuous foundation grade curbing shall be installed around the entire perimeter of the synthetic field. Curbing shall be primarily composed of foundation grade concrete, with an additional polymer composite lumber nailer that will serve as the attachment surface for the turf.

PART II: QUALITY ASSURANCE / APPROVALS

It is required that the subsurface be properly installed, inspected and approved prior to turf installation by the turf company and by the designated City inspector. Finished synthetic base installation workmanship shall be approved in advance by the turf manufacturer.

PART III: INSTALLATION COMPLETION

Upon completion, the base installer will conduct a thorough inspection and walk-through with the City's Project Manager, Bureau of Construction Administration Inspector and Landscape Architect. See inspection requirement in the General Conditions and General Requirements of the Contract Documents.

SECTION E: SYNTHETIC TURF SECTION

PART I: GENERAL

A. DESCRIPTION OF WORK

The work under this section includes but is not limited to the installation of the geotextile membrane, new synthetic grass system, in-fill materials, in-laid markings, perimeter termination and maintenance equipment.

B. SUBMITTALS

Installation Qualifications: The synthetic grass sub/contractor shall demonstrate experience on at least five (5) installations of the proposed material in the last year. The synthetic grass manufacturer shall certify the designated supervisory personnel on the project.

The Contractor is required under this guarantee to supply and install all in-fill materials and synthetic grass to maintain the performance levels of this guarantee.

Testing and Quality Control: Submit to the Project Manager a copy of the results certified by an independent testing laboratory for the following tests performed on the synthetic grass system.

Fiber shall be Parallel Slit Film with nylon monofilament thatch layer.

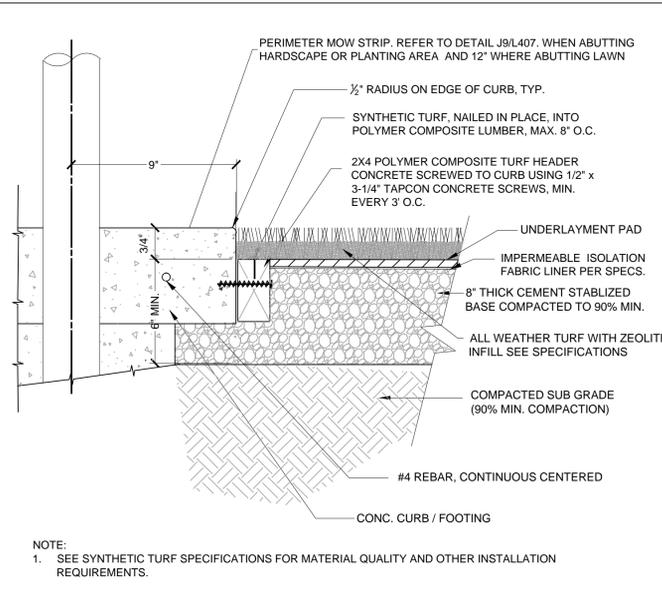
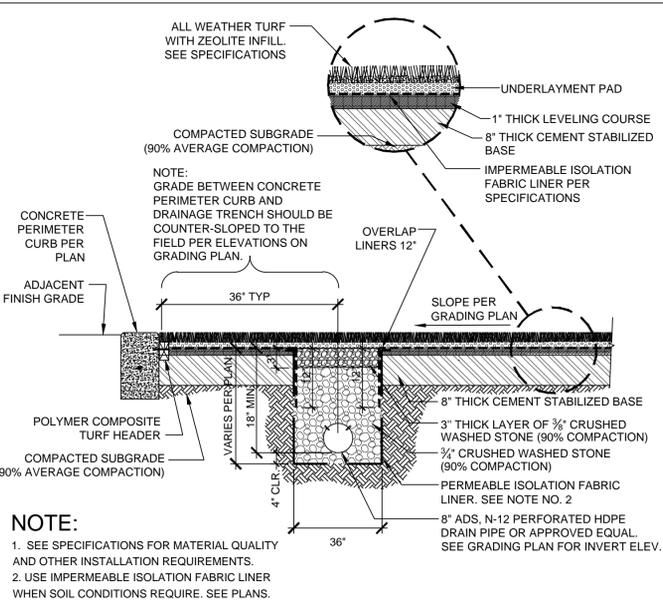
All material shall be constructed using the C-8 resin technology.

Pile Yarn Type: 62oz. Slit Film, with 18% nylon monofilament fiber thatch layer.

Table with 2 columns: Test Name, ASTM Reference. Includes Yarn Denier (ASTM D-1577), Yarn Breaking Strength (ASTM D-2256), Yarn Melting Point (ASTM D-789), etc.

\*\*FTIR Lisport Test: Pile composition (this is not necessary and would take 14 days to perform. The fibers have already been tested. So we can request this test at the time of submittals

Maintenance and Operating Data: Submit to the Project Manager a copy of maintenance and operating data for the synthetic grass system. Provide descriptions of all equipment recommended for the maintenance, repair, citing turf and activities not recommended relative to the warranty.



A1 TYPICAL TURF PROFILE AND PERIMETER DRAINAGE

A5 SYNTHETIC TURF CONNECTION AND EXPOSED CURB

Vertical sidebar containing engineering stamps, project information (AS-BUILTS, RP 300089), and contact details for Gary Lee Moore, PE, ENV SP.

REVISION DATE: 1/26/2018 1:43 PM FILE: Q:\INHOUSE-DESIGN\LANDSCAPE SECTIONS\BUILTS\KEN MALLOY SYN. SOCCER FIELD PROJECT\COS\AS-BUILTS 2017\1406.DWG



M L K J I H G F E D C B A

**G. INSTALLATION OF IN-FILL**

- In-fill material shall consist of and 2 LBS. per square foot Zeolite. Zeolite must be approved by the city's third party inspector prior to installation.
- The in-fill material shall be installed to a depth that results, after finish brushing, in an exposed fiber length of not less than 3/4".
- This contractor shall be required to return to the site after not less than 30 days to inspect and add in-fill materials as needed.
- No in-fill materials shall be installed until the turf system is fully installed with all lines and markings.
- The entire synthetic turf installation shall be thoroughly brushed with a minimum of 10 passes to remove any wrinkles and defibrillate the slit film prior to the installation of the in-fill material.
- The in-fill materials shall be installed in layers not to exceed 0.375 pound per square foot per layer.
- The turf shall remain free draining at all times: before, during and after the in-fill materials are installed.

**H. GENERAL CLEANUP**

- The site shall be kept clean and free of debris throughout the installation. Empty barrels, sacks, bags and remnant materials shall be appropriately and stored or legally stored or disposed of daily.
- After completion of the entire project, all debris remaining that is not a part of the final project shall be removed from the site.

**SECTION F: WARRANTY AND GUARANTEE**

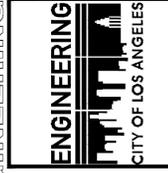
**PART I: SYNTHETIC TURF SYSTEM:**

**A. GENERAL**

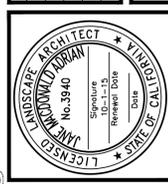
- The Contractor shall be required to issue a non-prorated guarantee for 100% of all labor, materials, workmanship and services for the Synthetic Surface and Markings for:
  - Synthetic Grass System for a period of eight (8) years. This warranty will be not be subject to pro-rating of the surface for any failure due to installation or materials. The surface wear will be determined by an independent consultant acceptable to all parties.
  - The guarantee for the surface systems shall remain in force for a period of not less than eight (8) Years specified from the date of written acceptance of the work.
    - The Owner will notify the contractor in writing of any issues that require remedial work on the field area.
    - The Contractor shall respond to the notification within 48 hours of receipt and schedule any major defect or repair within 72 hours or as weather permits.
    - The warranty requires that the contractor shall be required to perform all required repairs in a permanent and suitable manner as deemed necessary to maintain a safe playing condition at all times.
    - The warranty requires that in case of any major repair or replacement, the contractor is to schedule such work as to not interfere with the Owner's primary use or schedule.
    - Any replacement or repair area shall match (as close as possible) the appearance of the existing turf.
    - Failure to service the requirements of this warranty will be charge to the contractor.
  - Any defects caused by delamination, peeling, normal abrasion or raveling that is not in original conformance with the testing specifications shall be repaired or replaced at no cost to the City of Los Angeles Department of Recreation and Parks during this guarantee period.
    - In addition to the Contractor's warranty, the contractor shall be required to submit the following documents in regard to the guarantee:
      - Provide a EIGHT (8) year warranty for the turf product from the manufacturer for all work performed under this contract.
      - Provide a EIGHT (8) year warranty for the fibers from the fiber manufacturer for all work performed under this contract.
      - Provide a EIGHT (8) year surfacing manufacturer and installer written guarantee for the synthetic grass.
      - Provide a EIGHT (8) year third party insured warranty issued by a company licensed to do business in the State of California. This company shall have a Best rating of A- or more. The limits of the policy shall not be less than \$5,000,000.00 per year with a single limit of not less than \$500,000.00 per field (not site).
      - The City of Los Angeles shall be listed as additionally insured.
      - There will be no a deductible allowance for this policy.
      - Documents shall be submitted to the City of Los Angeles District Department of Recreation and Parks prior to final payment.
- The Contractor will be responsible for all tests that fail the specification. The City of Los Angeles reserves the right to submit the surface to the above tests at any time during the length of the guarantee. Consideration will be given to the time and use of the surface.
- This warranty does not cover excessive wear of the surface caused by misuse. The City of Los Angeles will be given an instructions and caretaking procedures before final acceptance. This is to follow the maintenance guidelines as specified by the surfacing manufacturer.

**END OF SECTION: SYNTHETIC TURF**

CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING



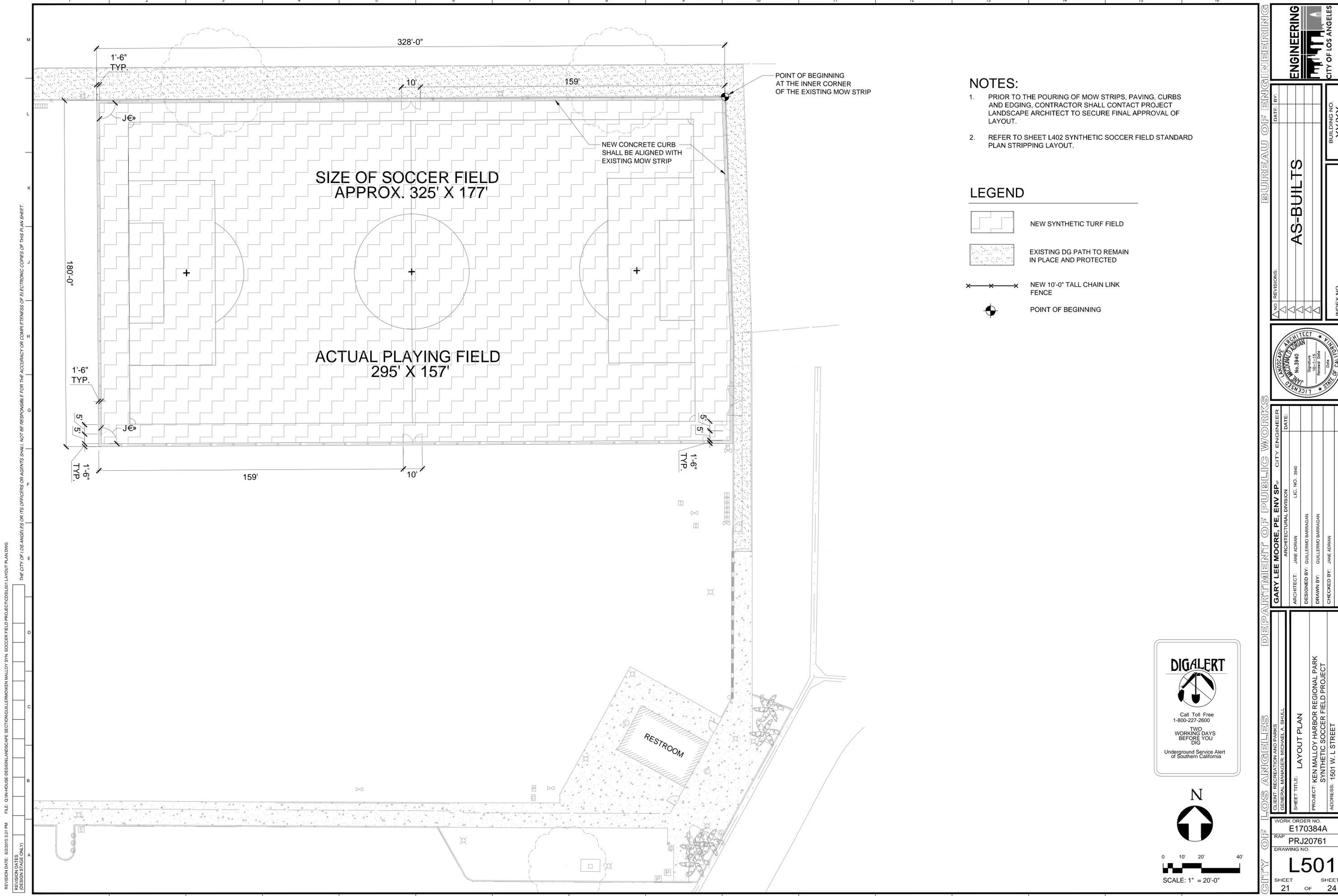
DATE BY:	
NO. REVISIONS	
<b>AS-BUILTS</b>	
INDEX NO. -	BUILDING NO. XX/XX



<b>GARY LEE MOORE, PE, ENV SP.</b>	CITY ENGINEER
ARCHITECTURAL DIVISION	DATE
ARCHITECT: JANE ADRIAN	LIC. NO.: 3940
DESIGNED BY: GUILLERMO BARRAGAN	
DRAWN BY: GUILLERMO BARRAGAN	
CHECKED BY: JANE ADRIAN	
APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT	

CLIENT: RECREATION AND PARKS GENERAL MANAGER: MICHAEL A. SHULL
SHEET TITLE: SYNTHETIC TURF SPECIFICATION, SHEET 3
PROJECT: KEN MALLOY HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT
ADDRESS: 1501 W. L STREET LOS ANGELES, CA 90710

WORK ORDER NO. E170384A
RAP PRJ20761
DRAWING NO. <b>L408</b>
SHEET 20 OF 24 SHEETS



- NOTES:**
1. PRIOR TO THE POURING OF MOW STRIPS, PAVING, CURBS AND EDGING, CONTRACTOR SHALL CONTACT PROJECT LANDSCAPE ARCHITECT TO SECURE FINAL APPROVAL OF LAYOUT.
  2. REFER TO SHEET L402 SYNTHETIC SOCCER FIELD STANDARD PLAN STRIPPING LAYOUT.

**LEGEND**

- NEW SYNTHETIC TURF FIELD
- EXISTING DG PATH TO REMAIN IN PLACE AND PROTECTED
- NEW 10'-0" TALL CHAIN LINK FENCE
- POINT OF BEGINNING

**DIGALERT**

Call Toll Free  
1-800-227-2600

TWO  
WORKING DAYS  
BEFORE YOU  
DIG

Underground Service Alert  
of Southern California

**N**

0 10' 20' 40'

SCALE: 1" = 20'-0"

REVISION DATE: 02/20/15 3:21 PM FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTIONS\GUILLERMALLOJ SYN. SOCCER FIELD PROJECT\GDSLSL501 LAYOUT PLANDWG  
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**CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS**

**BUREAU OF ENGINEERING**

**ENGINEERING CITY OF LOS ANGELES**

DATE: BY:

NO. REVISIONS:

**AS-BUILTS**

BUILDING NO. XX/XX

INDEX NO. -

ARCHITECT: JANE ADRIAN CITY ENGINEER DATE:

DESIGNED BY: GUILLERMALLOJ L.C. NO. 3940

DRAWN BY: GUILLERMALLOJ

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

CLIENT: RECREATION AND PARKS

GENERAL MANAGER: MICHAEL A. SHULL

SHEET TITLE: LAYOUT PLAN

PROJECT: KEN MALLOJ HARBOR REGIONAL PARK SYNTHETIC SOCCER FIELD PROJECT

ADDRESS: 1501 W. I. STREET LOS ANGELES, CA 90710

WORK ORDER NO. E170384A

DRAWING NO. PRJ20761

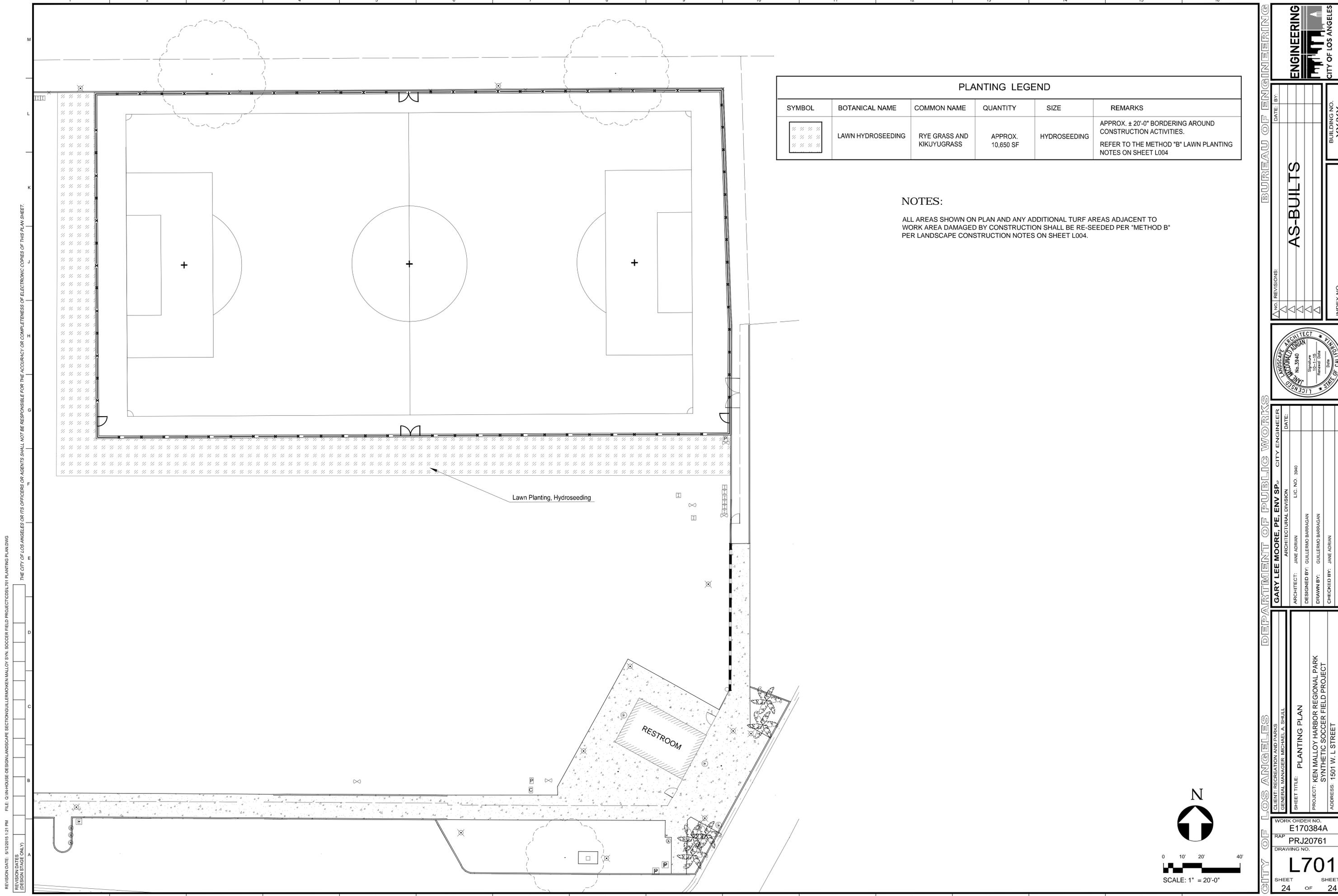
**L501**

SHEET 21 OF SHEETS 24

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PLANTING LEGEND					
SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	REMARKS
	LAWN HYDROSEEDING	RYE GRASS AND KIKUYUGRASS	APPROX. 10,650 SF	HYDROSEEDING	APPROX. ± 20'-0" BORDERING AROUND CONSTRUCTION ACTIVITIES. REFER TO THE METHOD "B" LAWN PLANTING NOTES ON SHEET L004

**NOTES:**  
 ALL AREAS SHOWN ON PLAN AND ANY ADDITIONAL TURF AREAS ADJACENT TO WORK AREA DAMAGED BY CONSTRUCTION SHALL BE RE-SEEDED PER "METHOD B" PER LANDSCAPE CONSTRUCTION NOTES ON SHEET L004.

REVISION DATE: 9/2/2015 1:21 PM FILE: Q:\IN-HOUSE-DESIGN\LANDSCAPE SECTIONS\GUILLEMOEN\MALLOY SYN. SOCCER FIELD PROJECT\CD\SL701 PLANTING PLAN.DWG  
 REVISION DATES (DESIGN STAGE ONLY)  
 THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

**CITY OF LOS ANGELES**
**DEPARTMENT OF PUBLIC WORKS**
**BUREAU OF ENGINEERING**

CLIENT: RECREATION AND PARKS  
 GENERAL MANAGER: MICHAEL A. SHULL

ARCHITECT: JANE ADRIAN  
 ARCHITECTURAL DIVISION LIC. NO. 3940

DESIGNED BY: GUILLERMO BARRAGAN

DRAWN BY: GUILLERMO BARRAGAN

CHECKED BY: JANE ADRIAN

APPROVED BY: MAHMOOD KARIMZADEH, A.I.A., PRINCIPAL ARCHITECT

WORK ORDER NO.  
**E170384A**

RAP  
**PRJ20761**

DRAWING NO.  
**L701**

SHEET **24** OF **24** SHEETS

**AS-BUILTS**

DATE: \_\_\_\_\_

NO. REVISIONS: \_\_\_\_\_

INDEX NO. - \_\_\_\_\_

BUILDING NO. **XX/XX**

**ENGINEERING**  
CITY OF LOS ANGELES

**CO & CO Request Log: Ken Malloy Synthetic Soccer Field**  
**W.O.No.: E170384**

CO No	CO Req	DESCRIPTIONS	PCO ECO Date	GC Prop Amount	Proposal Date	CMD Est Amount	Apprvd Amount	Apprvd Date	Change Order Status	FCO Date	C.O. Type	Pymt Type	Cal. Days Req.	Apv'd Comp Cal Days	Apv'd Non Comp Cal Days	REMARKS
001	001	Damaged electrical conduits T&M		\$ 7,441.53	12/08/16	\$ 7,315.00	\$ 7,315.00	02/03/17	Executed	02/08/17	U	LS	0	0	0	
006		Curb revisions at north and east side		\$ 38,351.92	12/09/16	\$ 27,834.00	\$ 27,834.00	03/10/17	Executed	03/10/17	E	LS	0	0	0	RFI #1; PC #2
002		Chain link Fence Main Gate		\$ 1,362.74	12/09/16	\$ 1,425.00	\$ 1,425.00	02/03/17	Executed	02/08/17	E	LS	0	0	0	
003		Soccer Goals Locking Devices		\$ 4,234.47	12/09/16	\$ 3,028.00	\$ 3,446.00	02/01/17	Executed	02/24/17	E	LS	0	0	0	
004		Fence Cap		\$ 3,677.41	12/08/16	\$ 3,945.00	\$ 3,945.00	02/01/17	Executed	02/24/17	E	LS	0	0	0	
005		youth soccer Goals		\$ 14,752.16	02/01/17	\$ 13,013.00	\$ 13,013.00	02/01/17	Executed	02/24/17	S	LS	0	0	0	
Original Contract Price			#REF!									\$ 7,315.00	13 %	Executed Change Orders		
Original Contingency			#REF!									\$ 36,650.00	64 %	6	\$ 56,978.00	
<b>Σ (Executed Change Orders)</b>			\$	<b>56,978.00</b>								\$ 13,013.00	23 %	Forecasted Change Orders		
Revised Contract Price			#REF!									Change Order		0		\$ -
Outstanding Contingency			#REF!									Percentage		Canceled Change Orders		
Num. Of Approved Days			0 Cal. Days									CAN: Canceled		#REF!		0

**Footnotes**  
 1. Percentages of Change Order Types are based on approved dollar amounts.  
 2. Forecasted Change Orders = Unresolved + Negotiated