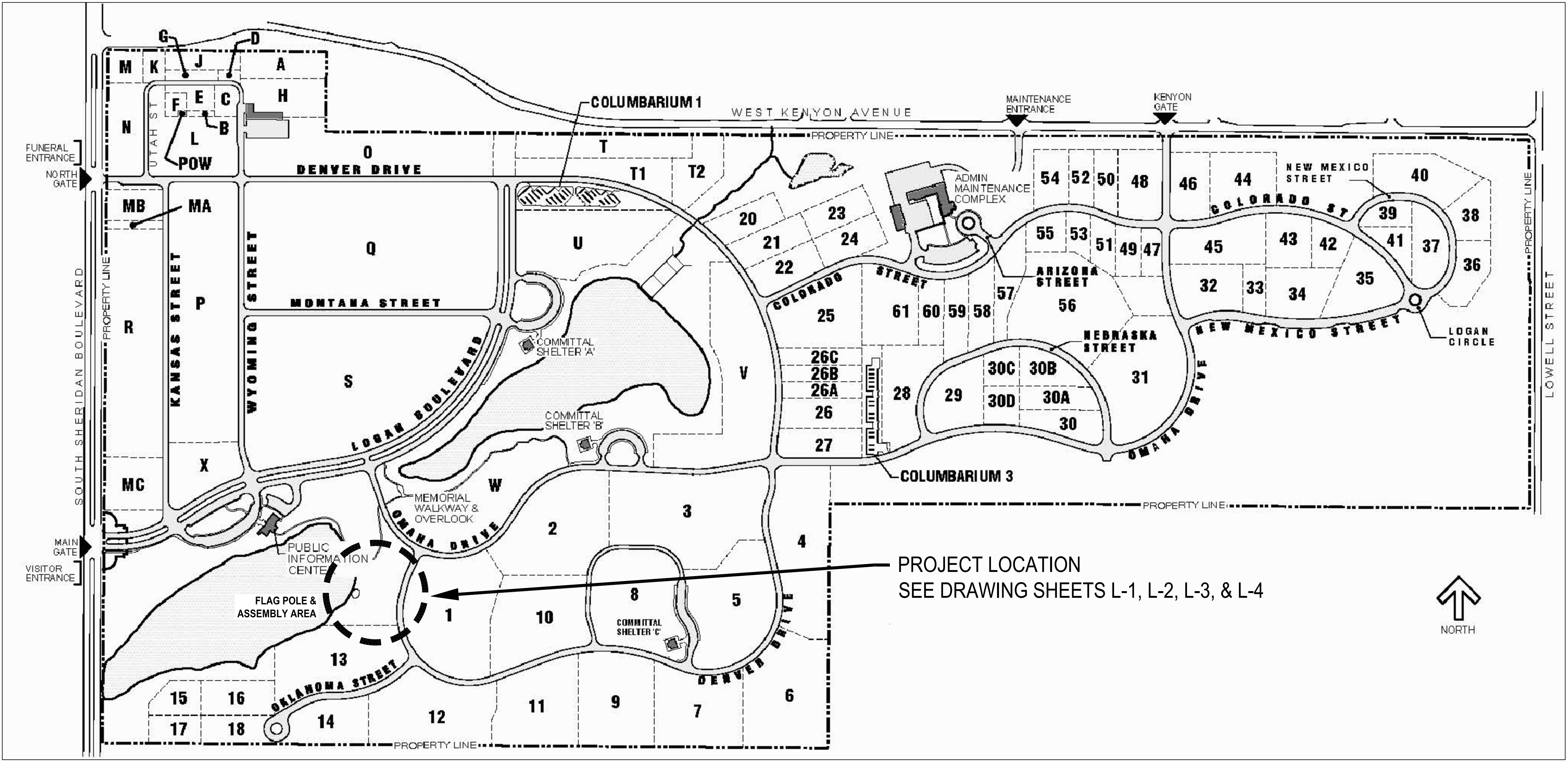


Department Of  
Veterans Affairs

FORT LOGAN NATIONAL CEMETERY  
DENVER, COLORADO

NEW SIDEWALK AND TURFGRASS RENOVATION

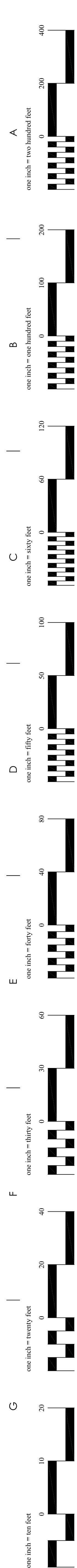


2G SITE PLAN - FORT LOGAN NATIONAL CEMETERY  
L-1 NTS

SHEET INDEX:	
X - 1	COVER SHEET & SHEET INDEX
L - 1	GENERAL NOTES, SITE PLAN, AND EXISTING CONDITIONS
L - 2	NEW SIDEWALK - SITE PLAN AND DETAILS
L - 3	NEW SIDEWALK - PLAN, PROFILE, AND ELEVATION VIEWS
L - 4	TURFGRASS RENOVATION - SITE AND GRADING PLANS
L - 5	FLAGPOLE ASSEMBLY AREA - REPLACEMENT OF STONE SURFACE

Revisions		Date	NATIONAL CEMETERY ADMINISTRATION		Drawing Title <b>COVER SHEET &amp; SHEET INDEX</b>	Project Title <b>NEW SIDEWALK &amp; TURFGRASS RENOVATION</b>	Date <b>05/25/2016</b>
Approved: Division Chief			Approved: Service Director		Building Number *****	Checked .	Drawn <b>RLD</b>
Location <b>FORT LOGAN NATIONAL CEMETERY</b>			Dwg. 1 Of 6		DRAWING NO. <b>X-1</b>		





LAKE

APPROXIMATE LOCATION OF UTILITIES,  
IRRIGATION SYSTEM PIPING, SPRINKLER  
HEADS, AND IRRIGATION VALVE BOXES.

CONTRACTOR TO FIELD VERIFY ALL THE  
LOCATIONS OF ALL UNDERGROUND UTILITIES  
AND IRRIGATION SYSTEM COMPONENTS.

**1G** SITE PLAN - EXISTING CONDITIONS AND UTILITIES  
**L-1** SCALE: 20:1

**GENERAL NOTES:**

**GENERAL REQUIREMENTS:**

- ALL CONSTRUCTION WITHIN FORT LOGAN NATIONAL CEMETERY SHALL BE CONDUCTED WITH THE EMPHASIS ON PROPER CEMETERY ETIQUETTE AS THIS IS AN ACTIVE CEMETERY. NO DISRESPECTFUL ACTIVITY WILL BE TOLERATED.
- COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE CEMETERY DIRECTOR TO AVOID CONFLICTS AND DISRUPTIONS OF SCHEDULED CEREMONIES AND DAILY CEMETERY OPERATIONS. SEQUENCE WORK AS NECESSARY TO ENSURE DAILY CEMETERY OPERATIONS REMAIN UNINTERRUPTED DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN PROPER SIGNS, BARRICADES, CONES, AND FENCES TO PROPERLY PROTECT THE PUBLIC AND CEMETERY STAFF FROM INJURY. WORK AREAS SHALL BE BARRICADED OFF DURING NON-WORKING HOURS AND WHEN THERE IS NO ACTIVE CONSTRUCTION AT THE SITE.
- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SIGNAGE AND CONES AT THE LIMITS OF ALL WORK AREAS SHOWING 'DETOUR' AND POINTING VISITOR TRAFFIC AROUND THE CONSTRUCTION ZONE(S). ONE LANE OF TRAFFIC INBOUND AND OUTBOUND SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING THE EXISTING STORM DRAINAGE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT RESULTING FROM THIS PROJECT FROM THE STORM DRAINAGE STRUCTURES AND SYSTEM.
- ANY DAMAGE INCURRED TO EXISTING UTILITIES, IRRIGATION SYSTEM COMPONENTS, INSIDE AND OUTSIDE THE LIMITS OF WORK DUE TO CONTRACT OPERATIONS INCLUDING DAMAGE TO PAVEMENT, CURB AND GUTTER, SIDEWALKS AND OTHER STRUCTURES BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE GOVERNMENT, IF ANY EXISTING UTILITIES, UTILITY STRUCTURES, OR IRRIGATION SYSTEM COMPONENTS ARE UNCOVERED OR ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE, AND SUPPORTED AS NECESSARY.
- ALL AREAS ADJACENT TO THE SITE SHALL BE MAINTAINED IN A CLEAN CONDITION, MUD AND DUST FREE AT ALL TIMES. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ON TO CEMETERY AND PUBLIC STREETS.
- AREAS OUTSIDE OF THE CONSTRUCTION LIMITS IMPACTED BY OPERATIONS OF THE CONTRACTOR SHALL BE RETURNED TO THE STATE IT WAS FOUND PRIOR TO NEW CONSTRUCTION, EXCEPT WHERE NEW WORK IS SHOWN.
- ALL TREES SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS.
- ALL DEBRIS, EXCESS SOIL, CONCRETE, ASPHALT, ETC. SHALL BE REMOVED OFF CEMETERY PROPERTY AND PROPERLY DISPOSED OF AT AN APPROVED WASTE DISPOSAL SITE.
- THOROUGHLY CLEAN UP THE WORK AREA AT THE END OF EACH DAY'S WORK, AND AT COMPLETION OF THE PROJECT. LEAVE PREMISES CLEAN AND FREE OF WASTE, SCRAP, USED EQUIPMENT, OR OTHER MATERIAL INTENTIONALLY OR INCIDENTALLY DELIVERED TO THE SITE BY CONTRACTOR OR CONTRACTOR'S PERSONNEL.
- SURVEY, EVALUATE, DETERMINE, AND VERIFY THE EXISTING CONDITIONS WITHIN THE DESIGNATED PROJECT WORK AREA. VERIFY THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES, STORM DRAINAGE PIPING, STORM DRAINAGE MANHOLE(S), STRUCTURES, TREES AND LANDSCAPE BEDS ALONG WITH ALL EXISTING IRRIGATION PIPING, SPRINKLERS, VALVES, CONTROL WIRING, AND OTHER IRRIGATION COMPONENTS. CONTRACTOR'S LICENSED PROFESSIONAL LAND SURVEYOR OR CIVIL ENGINEER SHALL SURVEY, LAYOUT, AND STAKE THE PATH OF THE NEW SIDEWALK AND THE PERIMETER OF THE TURFGRASS REPLACEMENT AREA WITH FINAL APPROVAL BY THE COR PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
- THE ELEVATIONS AND DIMENSIONS SHOWN ARE REFERENCED FROM DRAWINGS OF THE LATEST AS-BUILT CONDITIONS AND ARE TO BE VERIFIED AND CORRECTED IN THE FIELD PRIOR TO STARTING WORK. ACTUAL ELEVATIONS AND DIMENSIONS ARE TO BE DETERMINED BY SURVEY AND THE SIDEWALK PROFILE ADJUSTED TO NOT EXCEED THE MAXIMUM SLOPE REQUIREMENTS AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE A REVISED DRAWING STAMPED BY A REGISTERED PROFESSIONAL LAND SURVEYOR SHOWING THE ACTUAL SITE CONDITIONS AND A FINAL SIDEWALK LAYOUT TO THE COR FOR FINAL APPROVAL BEFORE PROCEEDING WITH THE CONSTRUCTION OF THE SIDEWALK.
- NEW SIDEWALK WORK:**
  - THE CONTRACTOR'S REGISTERED PROFESSIONAL LAND SURVEYOR SHALL ESTABLISH AND CONTROL THE SIDEWALK ALIGNMENT, GRADES, ELEVATIONS, AND CROSS SECTIONS. TOP OF SIDEWALK ELEVATION SHALL MATCH THE ADJACENT TOP OF SLAB ELEVATION AT THE FLAGPOLE AT THE WEST END AND AT THE HANDICAP ACCESS RAMP AT THE STREET (DENVER DRIVE) AT THE EAST END. WHERE CONTROL ELEVATIONS INDICATED ON THE DRAWINGS DO NOT MATCH OR COORDINATE WITH THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL FIELD ADJUST THE SIDEWALK ELEVATIONS AND GRADES TO ENSURE THE SIDEWALK SLOPES ARE NO GREATER THAN 5%. ADJUST THE LENGTH OF THE MIDDLE LANDING IN THE SIDEWALK TO ACCOMMODATE FOR FIELD ADJUSTMENTS.
  - INSTALL THE NEW REINFORCED CONCRETE WALKWAY IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS. PLACE 4000 PSI CONCRETE, 6" MINIMUM THICKNESS, WITH 6" X 6" W2.9 X W2.9 WELDED WIRE FABRIC (WWF), EXPANSION JOINTS, CONTROL JOINTS, AND A LIGHT BROOM FINISHED SURFACE. BROOM FINISH SHALL BE PARALLEL TO THE EXPANSION CONTROL JOINTS.
  - CONTROL JOINTS SHALL BE HAND TOOLED AT 5 FEET ON CENTER UNLESS SHOWN OTHERWISE ON THE PLAN. WHEN CONCRETE HAS CURED, CONTRACTOR SHALL SAW CUT ALL CONTROL JOINTS TO A DEPTH OF 1".
  - EXPANSION JOINTS SHALL BE 1/2" BITUMINOUS IMPREGNATED EXPANSION MATERIAL.
  - REMOVE EXISTING TURFGRASS AND EXCAVATE FOR THE PLACEMENT OF THE NEW SIDEWALK. RE-ROUTE AND ADJUST IRRIGATION PIPING AND SPRINKLER HEADS TO ACCOMMODATE THE NEW SIDEWALK AS NECESSARY. INSTALL NEW PIPING SLEEVES FOR ALL IRRIGATION PIPING LOCATED UNDER THE NEW SIDEWALK. COORDINATE ALL IRRIGATION CHANGES AND MODIFICATIONS WITH THE COR.
  - RE-COMPACT THE EXCAVATED EXISTING SUBGRADE TO 95% COMPACTION IN PREPARATION FOR THE PLACEMENT OF CRUSHED AGGREGATE BASE MATERIAL AND NEW CONCRETE. IN AREAS WHERE THE SUBGRADE SOIL CANNOT REACH 95% COMPACTION, OVER-EXCAVATE THE AREA(S) TO REMOVE THE UNSUITABLE MATERIAL AND BACKFILL THE EXCAVATION WITH ENGINEERED FILL COMPACTED TO 95%.
  - INSTALL 4" OF CRUSHED AGGREGATE BASE MATERIAL COMPACTED TO 95% PRIOR TO INSTALLING THE NEW REINFORCED CONCRETE WALKWAY IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
  - AFTER NEW CONCRETE HAS CURED A MINIMUM OF 7 DAYS, APPLY JOINT SEALER ON ALL NEW EXPANSION JOINTS AND CONTROL JOINTS. JOINT SEALANT COLOR SHALL MATCH CONCRETE COLOR.
- TURFGRASS REPLACEMENT WORK:**
  - THE CONTRACTOR SHALL REMOVE THE EXISTING CEMETERY TURFGRASS AND REPLACE WITH NEW TURFGRASS SOD IN DESIGNATED AREAS AS SHOWN ON THE CONTRACT DRAWINGS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
  - TURFGRASS REPLACEMENT BOUNDARY FOLLOWS EXISTING STRUCTURES, CURBS, AND LANDSCAPE BED CURBING. WHERE NO HARDSCAPE, STRUCTURES, OR LANDSCAPE BED CURBING EXISTS, THE BOUNDARY SHALL BE PLACED AT THE OUTSIDE EDGE OF DRIP LINE OF THE EXISTING TREES.
  - ROUGH AND FINAL GRADING: PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SURVEYED ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES AND TO MATCH NEW/EXISTING WORK. AVOID RIDGES AND DEPRESSIONS. CONTRACTOR SHALL LAYOUT AND CONSTRUCT ALL NEW WORK TO ENSURE FULL AND COMPLETE SIDEWALK AND TURFGRASS DRAINAGE WITH NO EVIDENCE OF PONDING OR BIRD BATH AREAS. COR SHALL APPROVE FINAL GRADE OF TOPSOIL PRIOR TO INSTALLATION OF TURFGRASS SOD.
  - ESTABLISHING NEW TURFGRASS SOD IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
  - RE-ROUTE AND ADJUST IRRIGATION PIPING AND SPRINKLER HEADS TO ACCOMMODATE THE NEW GRADING AND THE TURFGRASS RENOVATION AS NECESSARY. COORDINATE ALL IRRIGATION CHANGES AND MODIFICATIONS WITH THE COR.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF SPRINKLER HEADS AT FINISH GRADE, ENSURING ALL IRRIGATION LINES AND HEADS ARE FREE OF FOREIGN MATTER AND OPERATING PROPERLY. PERFORM OPERATIONAL TEST IN COORDINATION WITH COR AND MAKE NECESSARY ADJUSTMENTS TO SPRINKLER HEADS TO PROVIDE FULL COVERAGE AND BEST DISTRIBUTION UNIFORMITY.
- ASSEMBLY AREA FLAGSTONE REPLACEMENT WORK:**
  - REMOVE THE EXISTING FLAGSTONE AND MORTAR BED AND REPLACE WITH A NEW CONCRETE OVERLAY/TOPPING SLAB IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AND DRAWINGS.
- THE FOLLOWING SCHEDULE IS PROVIDED AS A CONVENIENCE TO THE BIDDER AND SHALL NOT BE INTERPRETED TO IMPLY A UNIT PRICE CONTRACT, NOR QUANTITIES IN THEIR ENTIRETY. ALL ACTUAL QUANTITIES ARE TO BE FIELD VERIFIED AND ARE THE RESPONSIBILITY OF THE BIDDER.

SCHEDULE OF QUANTITIES	
ITEM	QUANTITIES
6" THICK, 6" WIDE, REINFORCED CONCRETE SIDEWALK	APPROX. 135 LIN. FT.
TURFGRASS RENOVATION AREA	APPROX. 42,000 SQ. FT.

Revisions		Date	Project Title <b>GENERAL NOTES, SITE PLAN, AND EXISTING CONDITIONS</b>		Date <b>05/25/2016</b>
			Project Title <b>NEW SIDEWALK &amp; TURFGRASS RENOVATION</b>		Project No. <b>789CM3916</b>
			Approved: Division Chief	Building Number ----	Checked .
			Approved: Service Director	Location <b>FORT LOGAN NATIONAL CEMETERY</b>	Drawn <b>RLD</b>
					DRAWING NO. <b>L-1</b>
					Dwg. 2 Of 6



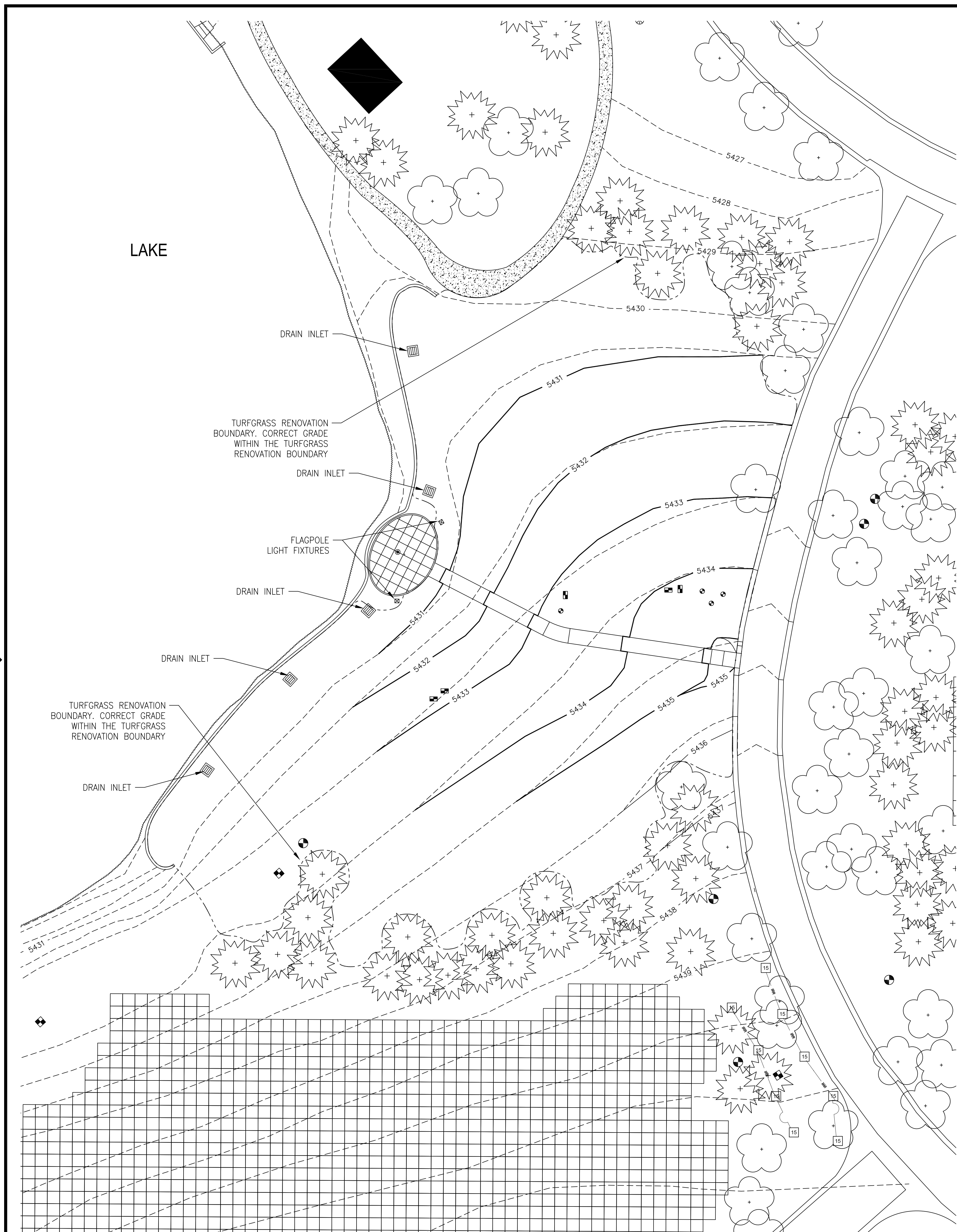
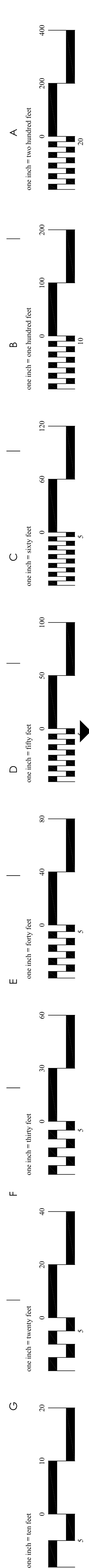
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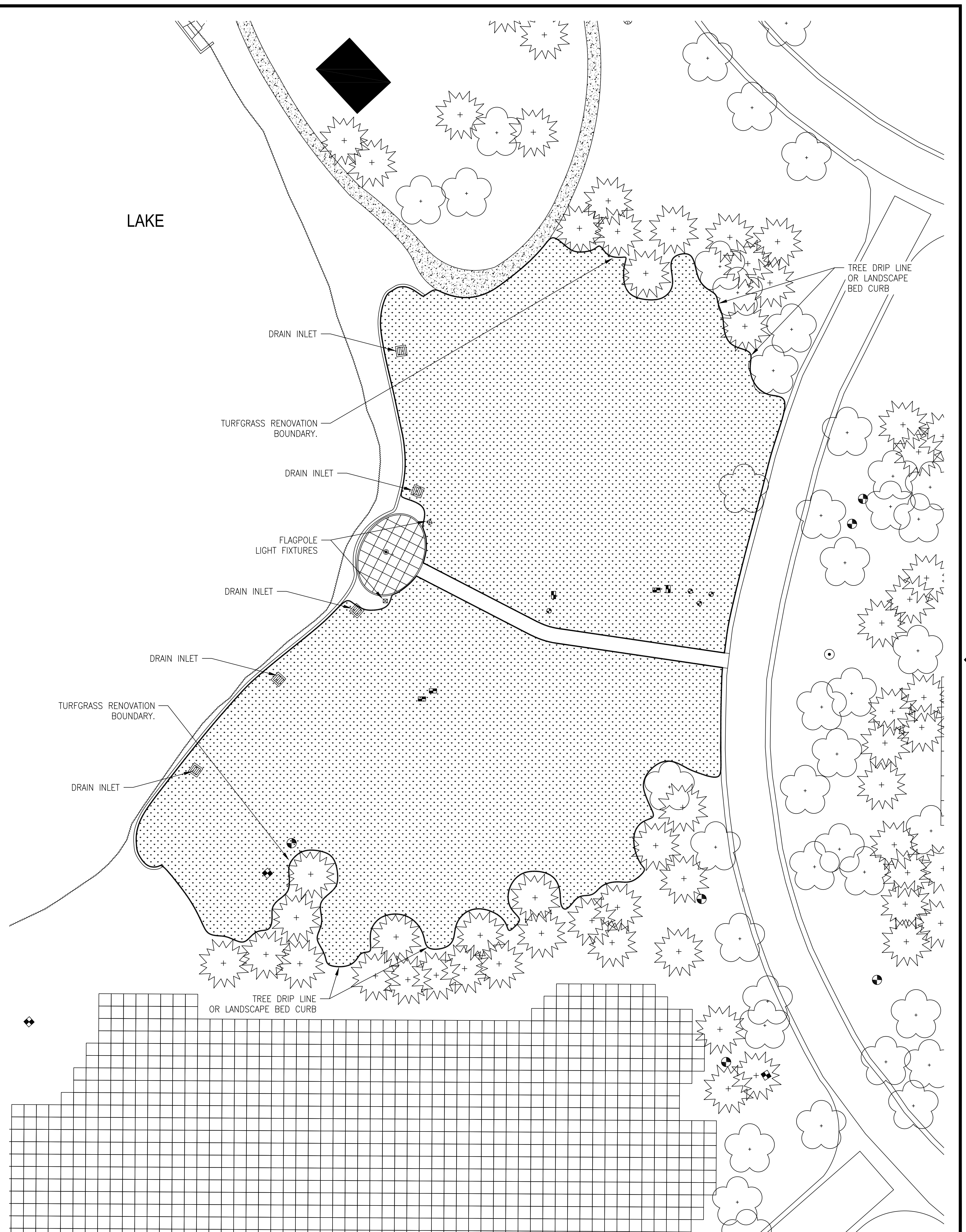








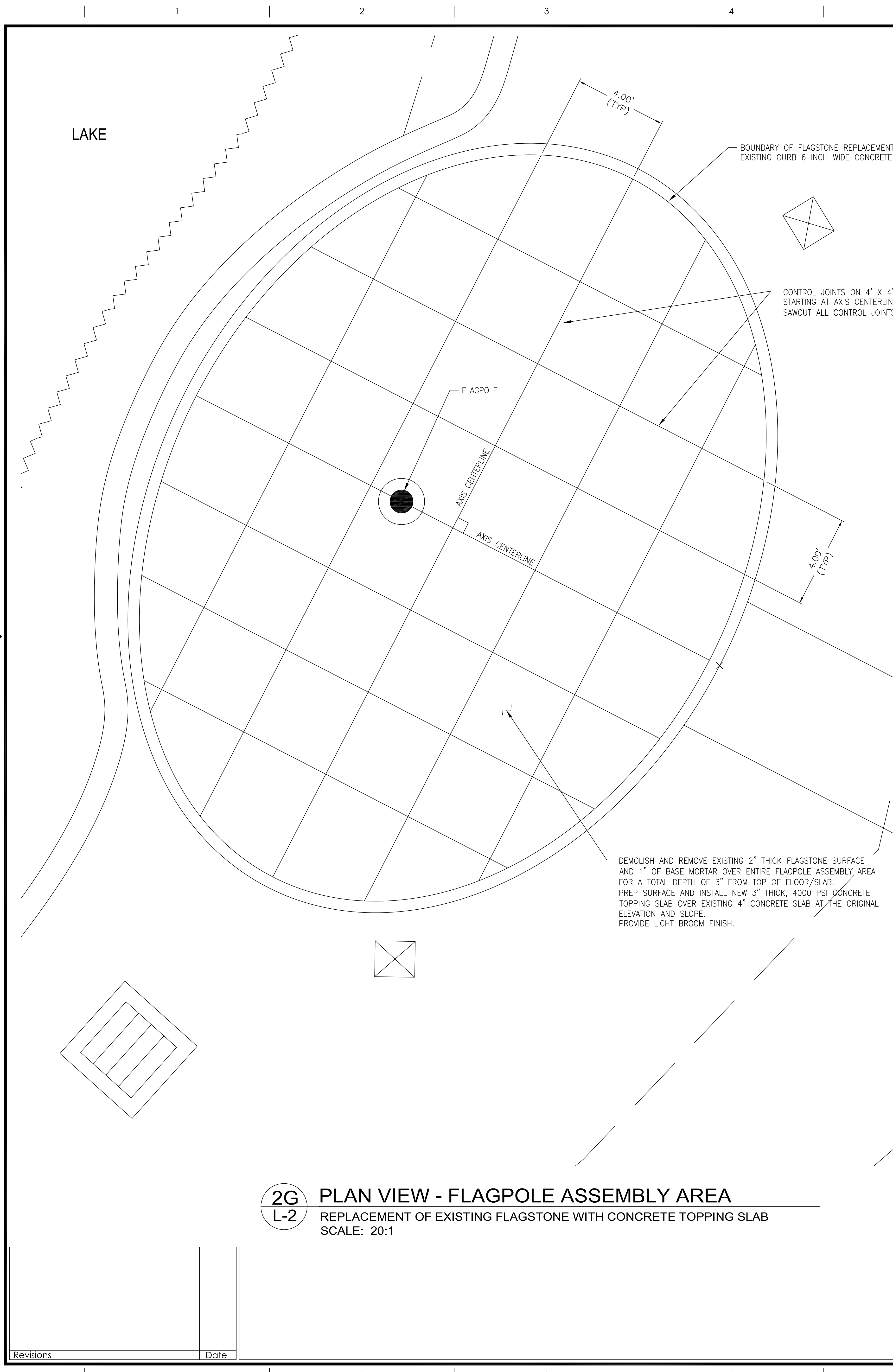
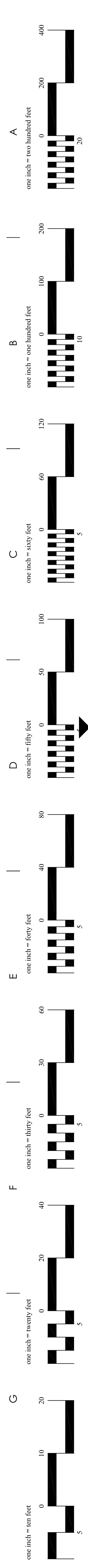
**2G** **SITE PLAN - NEW GRADING PLAN**  
**L-4** SCALE: 20:1



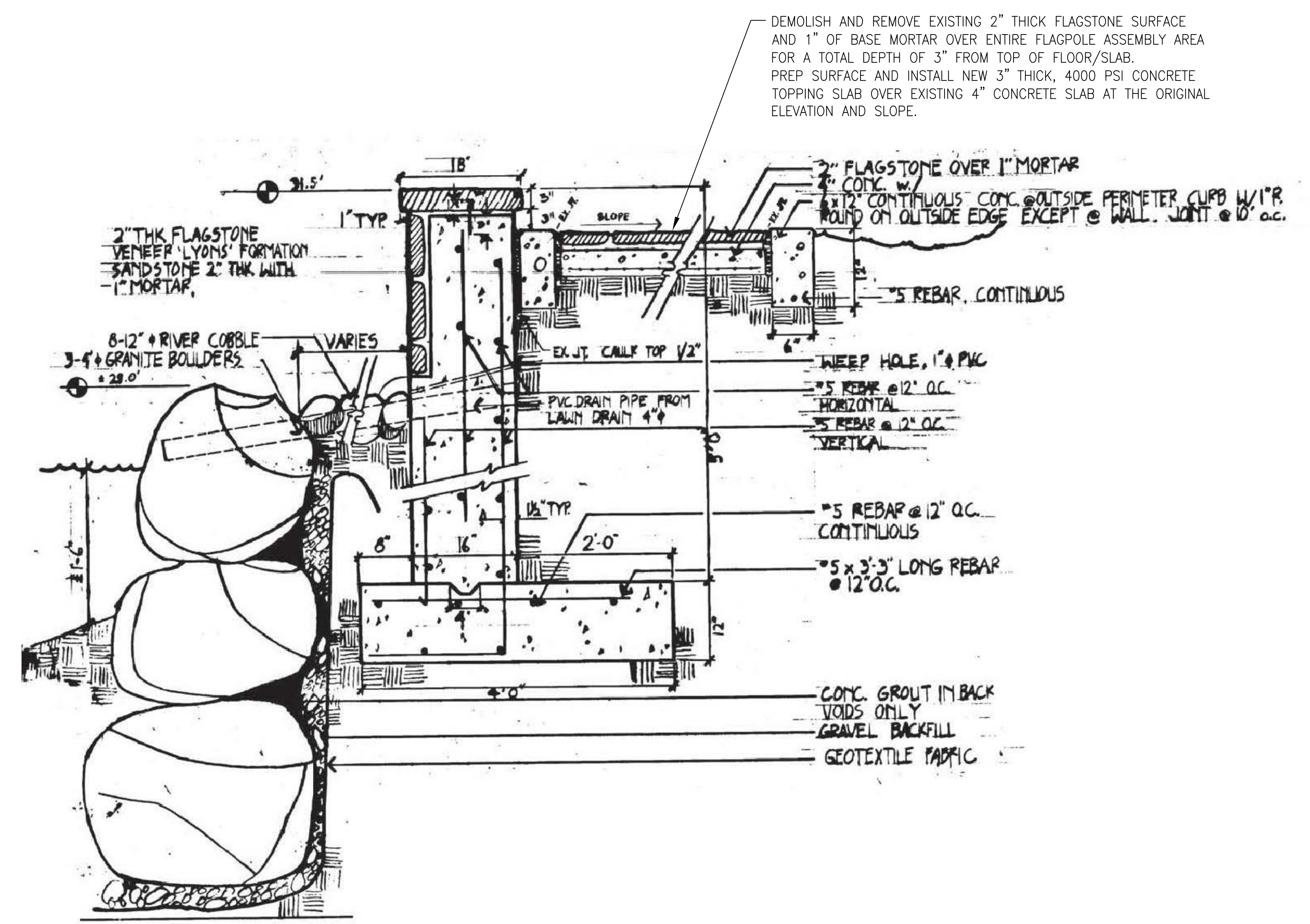
**6G** **SITE PLAN - TURFGRASS RENOVATION AREA**  
**L-4** SCALE: 20:1

<b>LEGEND:</b> TURFGRASS REMOVAL AND REPLACEMENT AREA		NATIONAL CEMETERY ADMINISTRATION		<b>TURFGRASS RENOVATION - SITE AND GRADING PLANS</b> Approved: Division Chief Approved: Service Director		<b>NEW SIDEWALK &amp; TURFGRASS RENOVATION</b> Building Number: ***** Checked: * Drawn: RLD		Date: 05/25/2016 Project No. 789CM3916 DRAWING NO. <b>L-4</b> Dwg. 5 Of 6	
Revisions		Date				Location: <b>FORT LOGAN NATIONAL CEMETERY</b>			

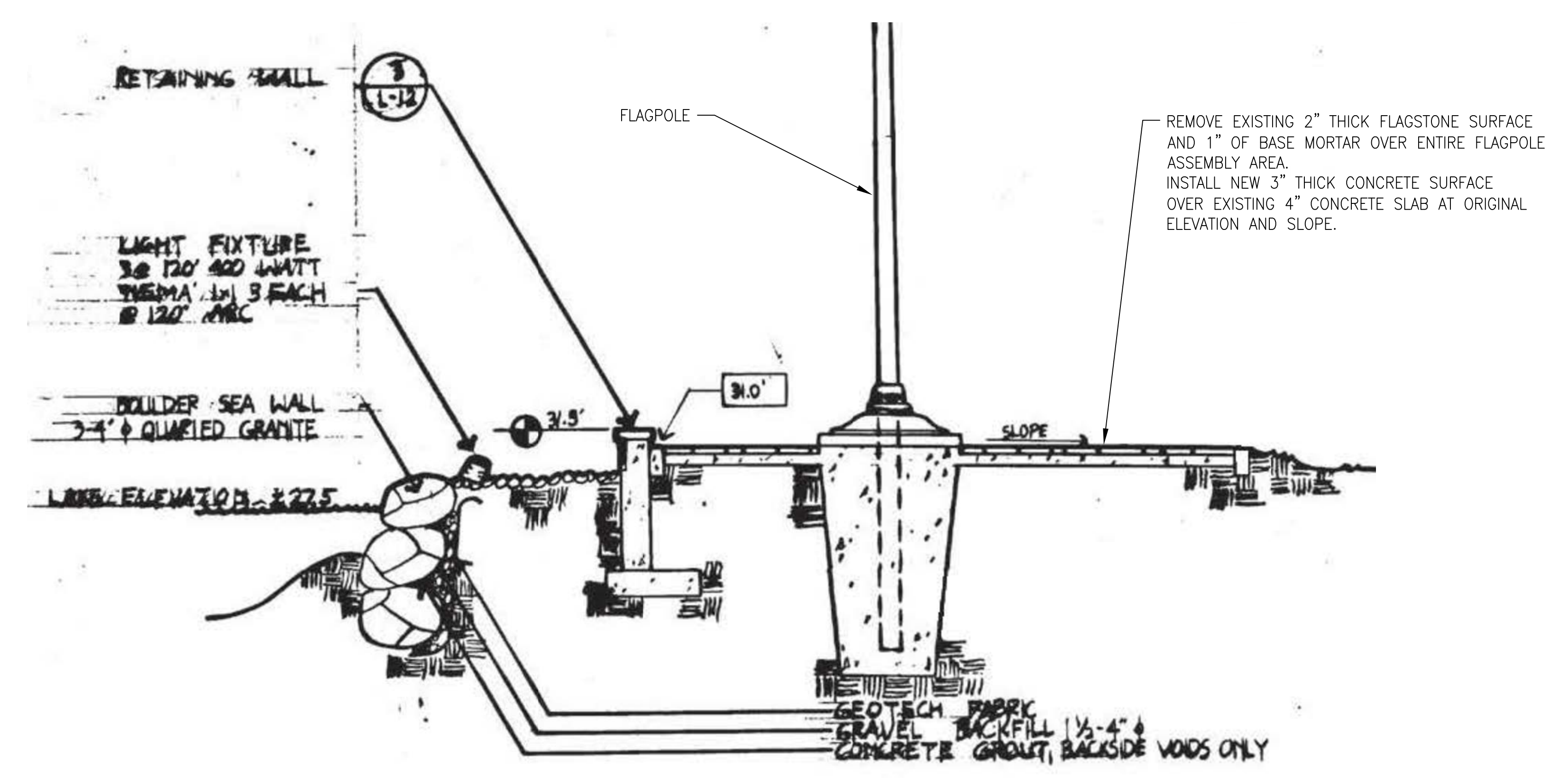




**2G**  
**L-2** **PLAN VIEW - FLAGPOLE ASSEMBLY AREA**  
REPLACEMENT OF EXISTING FLAGSTONE WITH CONCRETE TOPPING SLAB  
SCALE: 20:1



**6D**  
**L-5** **ENLARGED SECTION - FLAGPOLE ASSEMBLY AREA**  
ORIGINAL CONSTRUCTION DRAWING SECTION VIEW  
NTS



**7G**  
**L-5** **SECTION - FLAGPOLE ASSEMBLY AREA**  
ORIGINAL CONSTRUCTION DRAWING SECTION VIEW  
NTS

		 <div>NATIONAL CEMETERY ADMINISTRATION</div>	Drawing Title <b>FLAGPOLE ASSEMBLY AREA - REPLACEMENT OF STONE SURFACE</b>		Project Title <b>NEW SIDEWALK &amp; TURFGRASS RENOVATION</b>		Date <b>05/25/2016</b>
			Approved: Division Chief	Building Number <b>*****</b>	Checked <b>.</b>	Drawn <b>RLD</b>	Project No. <b>789CM3916</b>
			Approved: Service Director	Location <b>FORT LOGAN NATIONAL CEMETERY</b>		DRAWING NO. <b>L-5</b> Dwg. <b>6</b> Of <b>6</b>	
Revisions			Date				